DATA INTEGRATION & BUSINESS ANALYTICS FOR CANADIAN CREDIT UNIONS

A CELERO WHITE PAPER

March 2017

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INTRODUCTION

By 2018, over half of all large organizations will compete using advanced predictive and prescriptive analytics and proprietary algorithms, causing the disruption of entire industries.[1]

Chief information officers ranked analytics as a top investment priority for 2017 in Gartner's annual CIO Agenda survey.[2]

Recent research by Digital Banking Report indicates that 50% of global financial services leaders ranked enhanced data analytics capabilities as a top-three priority for 2017. And, credit unions were the most likely to mention data analytics as a strategic priority compared with other financial services organizations.[3]

Analytics is changing industries, including the financial services industry, and credit unions are not sheltered from this rapidly evolving environment. Credit unions must harness the power of analytics to better understand the motivation and sentiment of members along their credit union journey: from initial contact, through the process of onboarding, purchasing products and services and maintaining a long-term relationship.

Personalized member service and community focus have always been the credit union difference. By combining that service orientation with the power of data, credit unions can create a significant competitive advantage. Credit unions can differentiate themselves by offering a member-centric experience like no other.

Data integration and analysis underpins this transformation.

By unlocking data captured in operational and financial systems and converting it into useful, relevant insights, credit unions can understand critical issues, opportunities, and trends. Everyone across the credit union can be empowered to use this information to serve members better and strengthen member relationships, increase operational efficiency, and ultimately, improve profitability.

While becoming a data-driven credit union is a big change, it is a necessary one if credit unions want to compete and thrive in a digital world.

While credit unions have a wealth of information available to them, they typically lag in adopting analytics, which implies a significant untapped opportunity.

In this paper, we examine the critical role business analytics can play in the context of the Canadian credit union industry. The paper focuses on:

- Where analytics can play a role
- The challenges credit unions face in adopting analytics
- The stages in moving to a data-driven credit union
- The analytics solution Celero has developed to address the unique needs of Canadian credit unions

[1] Gartner.com

[2] Gartner 2017 CIO Agenda

[3] 2017 Retail Banking Trends and Predictions, Digital Bank Report

INDUSTRY CHALLENGES DRIVE NEED FOR GREATER INSIGHT

Credit unions are facing challenging market conditions. Members' demographics and expectations are evolving. Digital competition is increasing. Cost pressures are rising. Revenue and profit sources are shifting, and global regulations are increasing. For credit unions to succeed in this environment, they need to gain greater insight into three key areas — member engagement and differentiation, effective operations, and risk management and regulatory compliance.

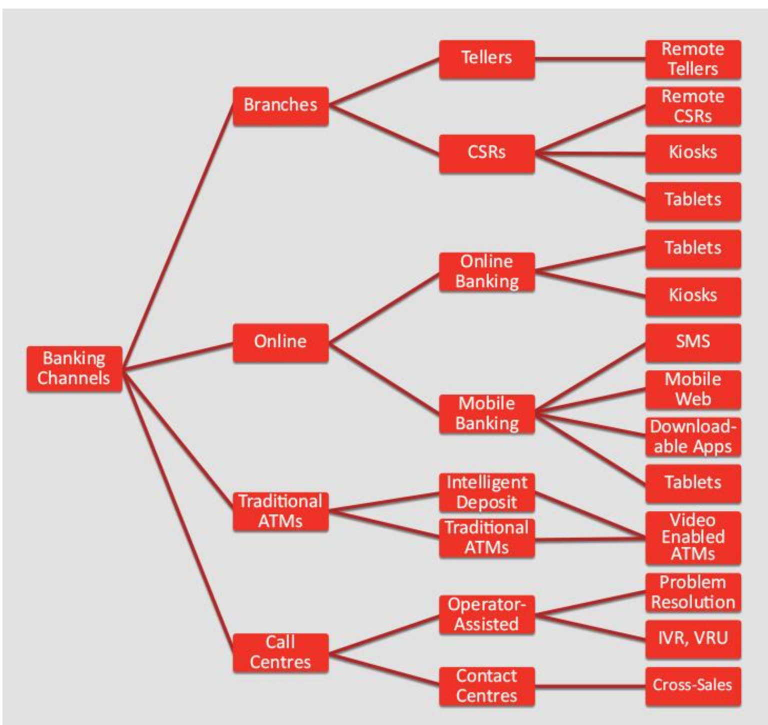
A NEW MODEL FOR MEMBER ENGAGEMENT AND DIFFERENTIATION

In this era of digital transformation, members' expectations of credit unions have changed.

According to research by Accenture, members are calling for a new service proposition; they want their financial institutions to help make their lives easier and enable them to manage their money more effectively, and they want to strengthen their overall relationship with their financial institutions.[4]

Members are growing used to co-creating value with brands and retailers. The Millennial segment in particular — one that many credit unions are struggling to retain — expect reciprocal relationships with brands and a personal, seamless, digital experience online and through smartphone apps. They want to choose how and by what method they conduct their banking and to receive the same experience regardless of the method.

As Jim Marous from the Financial Brand suggests, "As members continue to change their channel usage patterns, credit unions must focus on delivering a consistent and seamless experience across various touch points." Today, a member accesses credit union services from a myriad of available connection points.



Source: Mercator Advisory Group

[4] North America Consumer Banking Survey 2015: Banking Shaped by the Customer, Accenture

Omnichannel banking is an opportunity to deliver bottom line results by gaining insight into the channel preferences and behaviors of members. Analytics is one of the catalysts to unlock the potential of an omnichannel service delivery strategy. It is also, through cognitive computing analysis, an effective method for predicting and influencing future member behaviour.

Further compelling credit unions to meet member expectations is the need to compete with new players in the market and traditional big banks — both of which use data to compete in their space. Members now have more options than ever before, and other providers are eager to come up with ways to provide the seamless, convenient digital experience consumers want.

Credit unions need to be proactive and reinvent how they attract and retain members to remain competitive.

If we take a lesson from Amazon, Apple, or Facebook, they determined that value is derived from customer transactions, sentiments, and behaviours. Every time a customer clicks on a page, stays on a page for a period of time, purchases a product, or revisits a product, these retail giants learn more about the individual and treat him/her uniquely based on these interactions.

Similarly, credit unions have exceptional transactional data, so they have the same ability to create the experience members want — delivery of personalized, contextual interactions in real-time to assist with their daily financial needs. Credit unions also have the ability to use analytics-based cues to identify new lines of business or service opportunities to offer members and further grow their business.

Analytics can help credit unions create a 360-degree view of their members to gain greater visibility into the overall member experience and enable continuous improvements in member service.

Specifically, credit unions can use analytics to:

UNDERSTAND FACTORS INFLUENCING A MEMBER'S DECISION TO LEAVE OR BECOME INACTIVE

Advanced computational models predict which members are most likely to leave and what factors may be influencing their decision.

PREDICT PRODUCTS AND SERVICES MEMBERS MAY NEED

Analytics can be used to develop a profile of a credit union's best members to seek out other members who "look like" them, but who are missing a key product or service. This provides a targeted list of members most likely to be interested in a particular product.

REWARD MEMBERS BASED ON THEIR RELATIONSHIP AND ENGAGEMENT WITH THE CREDIT UNION

Analytics can be used to identify members who have the best relationships with the credit union and offer variable pricing and other rewards.

LAUNCH NEW PRODUCT OFFERINGS THAT ARE IN LINE WITH MEMBER EXPECTATIONS

Using life-stage and household analysis, credit unions can recommend personalized products based on where a member is in their life-stage, and what products they most likely need.

PROVIDE MEMBERS WITH TIMELY RECOMMENDATIONS BASED ON LIFESTYLE INDICATORS

Advanced recommendation engines can be developed to provide timely advisory services based on lifestyle preferences. For example, if a member is identified as a traveler and an avid golfer, next time the member buys an airline ticket to Phoenix to golf, a mortgage offer for a vacation property can be proactively offered. These are the types of marketing alerts members want to receive.

Members expect an experience that reflects their desires and needs, and credit unions have an excellent opportunity to take advantage of the insights of analytics to design programs that delight and keep members. Ultimately, credit unions must offer a total experience their member cannot get anywhere else.

A MORE EFFICIENT OPERATING MODEL

With a persistent low-interest rate environment, slow growth, price-conscious members, and a tightening regulatory environment, credit unions are trying to reduce costs, streamline operations, and fundamentally pivot their business model. And, new fintech start-ups that operate online only, without the cost of branch locations, are further pressuring credit unions to create a more efficient operating model.

Research by McKinsey & Company indicates that digital innovators and non-bank technology companies are focusing on the highest return-on-equity segments of the value chain and are offering highly targeted, inexpensive, and or convenient services.[5] They are attracting members and taking the profitable pieces.

Identifying key operating model efficiencies — specifically, improving branch channel efficiency and effectiveness, increasing marketing return on investment (ROI), and improving processes — all require analytics.

Analytics can help credit unions streamline, standardize, and digitize. Specifically, analytics enables credit unions to:

IMPROVE CHANNEL EFFICIENCY AND EFFECTIVENESS

Analytics provide comprehensive views of channel performance based on both member behavior and transaction mix. By understanding channel profitability and member satisfaction, credit unions can tailor operating models to improve delivery. Analytics also help discover the patterns of channel consumption – what channels members prefer to use to interact with the credit union to complete various steps and transactions – and assist credit unions with developing an effective omnichannel engagement model.

IMPROVE MARKETING ROI

Analytics can be used to segment members to a granular level. By better targeting specific promotions to those who are most likely to act, marketers can improve their ROI, both by reducing marketing expenses as well as achieving better conversion rates for promotions.

DEFINE AND TRACK PRODUCT PERFORMANCE

'What if' scenario models can help credit unions design products and simulate scenarios. For example, price sensitivity models can be run before making business decisions. Once a product is launched, analytics can provide insights into who is buying the product, how they are buying the product, why they are buying the product (or not), and provide information on profitability and performance.

[5] A Digital Crack in Bank's Business Model, McKinsey & Company

Grow revenue by improving pricing strategy

A wealth of historical member data can be deployed by credit unions to implement highly sophisticated relationship pricing never before available.

Retain your most profitable members with an effective retention strategy

Analytics can predict which members are going to leave or disengage with the credit union over the next six months. Attrition and at-risk account modelling analysis look at historical variables surrounding former members who have left and applies those variables to current members. By combining that with the knowledge of which members are the most profitable, credit unions can proactively deal with profitable retention-risk members.

Manage risks and regulatory compliance

We live in an era of constantly changing and evolving risks for all types of businesses, and credit unions are no different. Credit unions are under tremendous pressure to adopt a proactive approach to protect their systems, processes, data, members and their reputation while meeting the changing global regulations. More accurate risk assessments are needed to support forecasting, planning, and decision making.

Credit unions can use analytics to:

Improve stress testing by testing against multiple macroeconomic scenarios

Analytics allows for testing the financial and regulatory impact of multiple scenarios across the credit union while improving return on investment and quality.

Improve fraud prevention

Analytics can be used to pinpoint and highlight suspicious activities, unusual relationships and persons and events of interest.

Better manage credit portfolios

Through analytics, a credit union’s credit portfolio can be monitored more closely and intelligently, finding and resolving problems before accounts become past due, non-performing, or impaired.

Predict delinquency

Using analytics, credit unions can predict which members are going to become delinquent.

Increase credit limits in a risk-controlled manner

Credit unions can use credit limit increase modelling to regularly review credit limits and increase them in a risk-controlled manner.

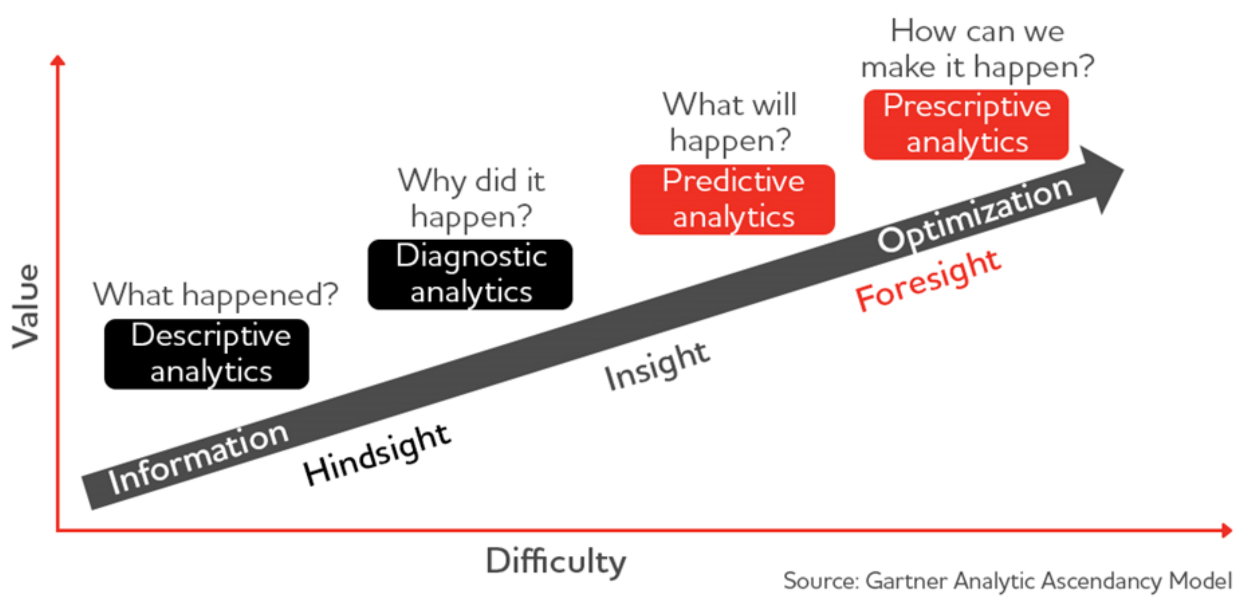
Prioritize receivables management

Analytics can be used to understand the likelihood of a member recovering from a delinquent state by looking at their financial capacity, ability to pay, and probability of repayment based on previous behaviour. Armed with this information, credit unions can avoid the cost of initiating a lawsuit in instances where a debtor is unlikely to repay.

CHALLENGES IN ADOPTING BUSINESS ANALYTICS AMONG CANADIAN CREDIT UNIONS

Credit unions have an abundance of data available to them to help inform their business decisions, but they have been slow to adopt analytics. While many credit unions are using some form of spreadsheets and descriptive analytics, they have not made the jump to more advanced predictive and prescriptive analytics.[6] Based on credit unions traditional closeness to their members, this can be a significant differentiator for their business, if they decide to act on it. The window of time is closing.

When considering analytics, credit unions need to think beyond descriptive analytics and start thinking about the possibilities of prescriptive analytics.



In 2016, Celero went across Canada and consulted with Canadian credit unions about what they need and want from a data analytics solution and some of the challenges standing in their way.

Credit unions have multiple sources of data in disconnected systems. It's difficult to connect all these sources into a single platform. Consequently, the biggest challenge facing credit unions today is the cost of a data warehouse to integrate their disparate systems. It is cost prohibitive for many credit unions to build and maintain an in-house data warehouse and analytics practice.

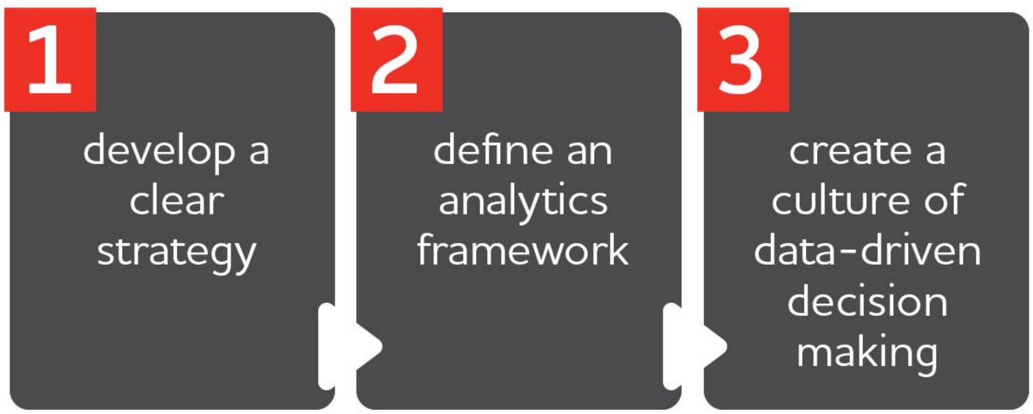
The other challenge facing credit unions is finding, developing, and training the resources needed to have a data-driven credit union. Becoming a data-driven credit union requires the right talent and expertise — people to develop queries and applications, interpret the data and act on it. In some areas of the country, there is a finite amount of expertise available, which requires credit unions to look outside their operational area. Finding a trusted business analytics partner can be a critical decision.

[6] OnApproach.com

Lastly, it can be overwhelming for credit unions to figure out where to start the journey. It requires a solid vision with clear objectives and leadership buy-in. There are many steps involved and many decisions to be made along the way. It's a continuous process of improvement, not a destination.

WHERE TO START THE DATA-DRIVEN JOURNEY

Successful implementation of business analytics involves a series of steps and a continuous cycle of improvement. There are three critical stages to becoming a data-driven organization — develop a clear strategy, define an analytics framework, and create a culture of data-driven decision making.



The first stage in creating an analytics strategy is for credit unions to understand what business goals they are trying to achieve or business problems they need to solve. Credit unions can then ask the question 'How can analytics help us?' Credit unions don't need to 'boil the ocean' to start. Start small, pick one or two goals, and start from there. That is the foundation to a clear strategy.

In the second stage, the focus is to identify the right data sources, define standard business rules, establish a governance structure and integrate the data into a single source of truth. An analytics platform can then help derive the insights from the underlying data using technology infrastructure that supports complex data processing. The biggest success factor of this stage is having the right skilled resources, such as data architects, data integration and visualization specialists, and data scientists to build a solid foundation that will serve credit unions well as they go forward on their analytics journey. There are several options to establish the necessary foundational infrastructure. The most common are: leveraging vendor solutions, building in-house, and utilizing credit union service organizations' pre-built solutions.

The last stage is for credit unions to develop a culture of fact-based decision making. Strong leadership support is needed. While it starts at the top, it doesn't end there. All levels of the credit union need to learn about and embrace data-driven decisions. Credit unions will need to invest in people and processes that foster a culture of fact-based decision making and continuous evaluation.

A BUSINESS ANALYTICS SOLUTION FOR CANADIAN CREDIT UNIONS

Celero is building a solution in collaboration with our clients to meet the unique needs of Canadian credit unions.

To be a data-driven credit union, a full suite of services is optimal, even if a credit union starts small. Celero has identified the unique requirements of Canadian credit unions and built a team of experts along with the right technology to deliver right-size solutions for credit unions, wherever they are on their analytics journey.

OPEN AND AGNOSTIC PLATFORM FOR INTEGRATING DATA

Celero partnered with OnApproach to provide their M360 platform — specifically built for credit unions. M360 offers an open and agnostic platform, allowing the integration of data from any credit union technology vendor and supporting the integration of multiple disparate sources of data into a single source of truth.

EASY INTEGRATION WITH FINTECH'S AND OTHER OPEN SOURCE BANKING API'S

Since the OnApproach platform is built using Credit Union Financial eXchange (CUFX) standards, a single global standard for data exchange among credit unions, the system easily integrates with third-party fintech solutions and allows for customized app development, providing the speed-to-market that credit unions desire. Credit unions can also benefit from the work of other credit unions and application developers as the platform supports open architecture. For example, if a credit union were to develop an at-risk account model, every other credit union would gain access to it.

LOWER TOTAL COST OF OWNERSHIP

Celero offers analytics in a Software as a Service (SaaS) model. This means there are no hardware or software licensing costs or people and maintenance overhead, thereby reducing the total costs for credit unions to start and maintain a business analytics solution.

BENCHMARK PERFORMANCE WITH PEER COMPARISON ANALYSIS

Celero is in a unique position, in that it has aggregated and anonymized data for over 80 credit unions. Backed by many years of historical data, Celero can offer peer- and industry-based comparative analysis.

BUILD YOUR OWN ENVIRONMENT

Celero understands that credit unions have varying levels of business needs when it comes to deriving insights from their data. Celero's out-of-the-box solution offers a combination of reports, dashboards, and analytics on a subscription basis. A credit union can also connect an analytics or business intelligence tool to the integrated data environment and create their own reports or dashboards. Credit unions can also leverage Celero's sandbox environment to test a data hypothesis they have before embarking on a specific analytics project.

COLLABORATE WITH US

We believe that by using data analytics to exceed member expectations, streamline operations, and manage risks, credit unions will be able to differentiate their member experience effectively and thereby have a significant competitive advantage. We would like to be your partner in the journey.

For more information about Celero's business analytics solution, visit celero.ca or speak to your Celero account executive.

About Celero

We help our customers love their technology by showing them how to get the most out of it. We listen and collaborate, embrace new ideas and approaches, deliver quality solutions and sleep-at-night reliability, and take responsibility for our commitments.

Celero brings a rich history and extensive experience in the co-operative financial services sector. We are consistently ranked in the FinTech Forward Top 100 by American Banker and provide full-service, end-to-end IT, that meets the unique needs of credit unions and financial institutions.

Resources

McKinsey Group, Making Data Analytics Work for you Instead of the Other Way Around

http://www.mckinsey.com/business-functions/digital-mckinsey/our-insights/making-data-analytics-work-for-you-instead-of-the-other-way-around

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Boston Consulting Group, Power of People in Digital Banking Transformation

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Accenture, North America Consumer Banking Survey 2015: Banking Shaped by the Customer

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Accenture, Digital Disruption in Banking

https://www.accenture.com/t20150523T032737__w__/us-en/_acnmedia/Accenture/Conversion-Assets/DotCom/Documents/Global/PDF/Dualpub_6/Accenture-Digital-Disruption-in-Banking-Infographic.pdf

Ideal Credit Union VIP Member Loyalty Program Does Double Duty

http://info.onapproach.com/ideal-credit-union-vip-member-loyalty-program-does-double-duty