



Taming Big Data in the Credit Union

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“Big data” has become a popular buzzword. It generally means an amount of data so large, varied, and complex that it’s difficult to handle – information that stretches the limits of traditional relational database management systems. Although the phrase has been used to describe the enormous data sets in scientific fields like physics or astronomy, it often refers to the massive amount of information flooding through industry and business.

Big data is created in commerce and finance when streams of information flow in from a variety of sources: sales, inventory, customer behavior (online, phone, social media, and in-person), customer geospatial location, and local, national, and global economic trends. Some of this data is completely unstructured and difficult to frame. The quantity, variability, and speed of change in information today is like nothing seen before. Meanwhile, rapidly growing computer memory capacity ensures that everything can be stored.

There are competitive advantages for organizations that can successfully integrate this data. The ability to visualize and analyze disparate facts and see the big picture can provide a competitive advantage by helping gauge customer needs and business trends. In fact, institutions can lose out if they don’t take control. Strategic decisions based only on historical experience, or on insufficient information, can cost a credit union time, money, and resources.

Good Tools for Good Analysis

If there is something comparable to big data in the credit union, that would be the information in the core processor and in third-party data stores that can be connected to the processor. Examples of third-party data include CRM, imaging, and loan data. There is a growing collection of details about member accounts and activity, services, products, risks, compliance, and processes. The facts change quickly because technology advances, member needs change, and regulatory requirements expand.

Embedded in this mine of information are key performance indicators and other valuable statistics. The ability to rapidly examine the data in a clear and useful format provides guidance in critical decision-making. To achieve this goal, good data analysis software ought to provide these essential features:

- A data warehouse that holds all information in a single location – this avoids fragmentation, ensures consistency, and reduces the burden on the core processor.
- The capacity to provide intelligent grouping of data stores, and to create reports with dependable, structured data showing meaningful relationships between the groups.
- The ability to automatically extract, transform, and load (ETL) information when moving from one data store to the main data warehouse.
- Prebuilt, out-of-the-box reports that track a variety of common business indicators.
- The ability to freeze moments in time and show a situation from a given date in the past.
- The ability to present high-level data aggregates and also enable drilling down to specifics.

Beyond the software, credit unions should be offered adequate documentation and training to facilitate maximum value for its investment. If the above features are not provided for you, it would take considerable time, expense, and programming expertise to develop and use the necessary tools.

The Benefits of Harnessing Data

What value can the big data of the credit union world provide, given the analytic abilities described above? One of the most important features is that by congregating all data, it offers a “single version of the truth.” Rather than having records in numerous silos, there is a single consistent and non-redundant storehouse. But there’s much more than that. When the data is appropriately analyzed, institutions should pick up the important, useful gems that might otherwise be invisible. In terms of credit management, one should easily get annualized growth, weighted averages, and a variety of segmentation group reports, including daily, month-to-date, and year-to-date changes per group. In addition, there should be charge-off, past due, and overdraft metrics. Intelligent tracking and analysis provides branch performance, including growth analysis and trending.

Portfolio management data should be at the fingertips of staff members who need it. There will be growth analysis by line of business, maturity reporting, new business and closed business reporting, as well as charge off and recovery reporting. Clear analysis software provides both high-level and detailed information sorted by member segment, with many segmentation choices. Transaction reporting should provide multiple options, including daily, month-to-date, year-to-date, and year-over-year figures. There will be teller-specific reports, ATM transaction reports, and fee comparisons from period to period. Automated alerts can be set to notify managers when performance indicators are above or below expectations.

To sum up; when meaningful relationships appear between groups of data, the result is actionable intelligence.

Case in Point – Grow Financial Federal Credit Union

Grow Financial FCU is a \$2 billion institution headquartered in Tampa, Florida. Its management recognizes the need for standardized reporting across the organization and has an Analytic Services department to provide it. Emily Nichols, Vice President of Analytic Services, explains that this department is the central source for data analytics. “As an organization, we recognize the vital need of providing data and analytics to make informed business decisions,” says Nichols.

Nichols reports that when this department began, the first priority was to implement a data warehouse. Grow Financial uses Symitar’s Advanced Reporting for Credit Unions™ (ARCU) to consolidate and analyze data. “The most valuable aspect of ARCU for our group,” Nichols says, “is the ability to combine multiple data sources into one location to allow for start-to-end reporting.”

ARCU is built for Symitar’s Episys® core processor, and Episys fields are pre-mapped to multiple databases. This means that credit union staff don’t need to dig in to the details of Episys data storage. Grow Financial took advantage of this simplicity and developed more than 250 customized reports that are used by its business units. Some examples include reporting that monitors employee productivity, and shows trending of loan and deposit portfolios, balancing and validation reporting, and data feeds into other systems.

Imports of third-party data make for a large store of useful information. “Our third-party sources include our loan origination data, our mortgage information, student loan data, and CRM data,” says Nichols.

There is no doubt in her mind that getting control of data has been a benefit. Nichols says that this reporting and analysis software “... has been extremely important in our ability to monitor and measure our progress as a credit union. We use ARCU on a daily basis to provide data and trending that assists our business units in making informed decisions and monitoring the results of those decisions.”

One benefit is in lending analysis. “We are able to track, on a daily basis, our progress toward monthly loan goals,” Nichols says. “In relation to our membership growth and loan growth, ARCU has provided the tools necessary to expand into other regions both inside and outside of our state. We are able to use ARCU to examine these results and make adjustments as necessary. We have been able to more closely review our loan portfolios to help identify areas of opportunity concerning our pricing and underwriting. We have worked over the past several years to implement a new centralized lending focus, and ARCU has provided the data to determine the success of this new focus.”

Charge-offs are another success story. "As far as charge-offs and delinquency," says Nichols, "we do provide quite a bit of automatic reporting to our collections team to help in the forecasting and monitoring of all accounts. ARCU has been a contributing factor in the success of each of these areas because the accessibility to our data allows us to make informed decisions with the agility necessary to be proactive in our business."

Case in Point – Technology Credit Union

Technology Credit Union is a \$2 billion institution based in San Jose, California. Kim Do, Data Warehouse Manager, explains the need for and uses of large-scale data analysis. "We need a central repository for data from different systems," says Do. "We need a reporting tool that will allow us to automate our reporting processes, so that we can spend more time doing analysis."

Technology Credit Union also uses ARCU. "We are able to produce meaningful reports for management to help with strategic planning," Do says. "We create views so that our advanced users can access the data from Excel for ad-hoc reporting. We take advantage of the email subscription feature to send critical metrics to managers and account alerts to risk management." They also use it for trending transactions, identifying patterns of different transaction types and channels over time.

The institution feeds third-party data into its data warehouse as well. "Since we service loans in other systems such as FICS and SilverLake, it is critical that we bring those data sources into ARCU for loan portfolio reporting," says Do. "Akcelant, Synapsys®, and Avista are other sources that we have successfully integrated with ARCU. By integrating these different data sources, we are able to automate loan pipeline reports and sales/referral reports."

To sum up some of benefits of data warehousing and analysis, Do says, "Through the automation of reports, we are able to save time on some of our daily reconciliation processes. Our users no longer need to go to different systems to gather data. We are able to integrate all the different data sources such as ATM, Symitar, and GL data into one report."

Intelligence-Driven Decisions

As we've seen in these examples, credit unions don't need to drown in data. A tool such as ARCU has prebuilt data structures and logical relationships that make it easier to put the pieces together and provide a comprehensive view of the entire organization. Well-constructed visualization graphics enable users to absorb large quantities of data.

Enlightening data from branches, transactions, loans, interest rates, and much more can all come alive in comprehensible charts. Preformatted Excel® spreadsheets offer PowerPivots, mapping, and graphics designed specifically for credit unions. This facilitates a focus on subjects that need attention. Managers spend less time interpreting data and more time acting on it.

A software program cannot, of course, do all the work. Credit union management teams must decide what the most valuable metrics are for their situations. What exactly do they want to measure and how much detail is needed for maximum value? How exactly will information be applied to marketing, compliance, operations, and so on? Management must be certain that the analytics are focused on actionable metrics.

Making a priority of these issues is a necessity as business decisions are increasingly data driven. This is the time for institutions to pay close attention to data warehousing and analysis, and that includes finding the best tools for organizing and presenting data. Among other benefits, data analytics will boost confidence in how to react as the business environment changes. In the face of an information deluge, institutions don't need, and can't afford, to use guesswork.

For additional information, email askus@symitar.com. A product brief about ARCU is available on the www.symitar.com site.