

## Credit Union Business Intelligence - Beginning the Journey

*Credit unions are starting to understand the value of Data Warehousing and Business Intelligence.*

*This White Paper outlines the options available to credit unions embarking on the DW/BI journey and identifies one that make the most sense for from a total cost of ownership and value perspective.*

### **Business Intelligence Goes Mainstream in the Credit Union Movement**

Business Intelligence (BI) is gaining popularity in the credit union movement. As BI evolves, it becomes more accessible to mid-sized organizations, a description that fits many credit unions.

### **What is Business Intelligence?**

BI is usually defined set of methodologies, processes, architectures, and technologies that leverage the output of information management processes for analysis, reporting, performance management, and information delivery<sup>1</sup>. More simply stated, BI is the process organizations use to make better use of data to improve decision making quality.

The term Data Warehouse (DW) is frequently associated with the concept of BI. A Data Warehouse is the physical arrangement of an organization's data that optimizes the data for reporting and analysis purposes. The Data Warehouse is the engine that drives the BI process. The acronym DW/BI is used here to refer to the system in which a data warehouse is developed to deliver business intelligence<sup>2</sup>.

### **Why is BI Important for Credit Unions?**

The trend among business organizations has been a growing awareness of the huge potential the data within their own walls. The business press over the past few years has been trumpeting the "Big Data" wave in which very large amounts of internal and external data are processed to support predictive analysis. A key example is Amazon's individualized purchase suggestions based on past buying behavior and buying behavior of similar consumers.

The fact is most credit unions typically have much more basic needs and do not require this level of data analysis sophistication. Yet, many credit unions have been slow to embrace the opportunities available by undertaking even modest BI efforts.

Credit unions and their for-profit brethren, community banks, frequently suffer from poor reporting capabilities of their core systems. Information from these systems frequently is limited to a set of inflexible canned reports. Analyses requiring more complex reporting are difficult and expensive to produce. An additional complication arises if the credit union uses non-core, best-of-breed solutions for particular processes such as mortgage loan servicing. Integrating the data from the core system and the ancillary system is often even more difficult and expensive.

## **Embarking on the DW/BI Journey**

For credit unions that have decided to begin the effort to build a DW/BI capability, there are three options for moving forward:

- Build it with internal resources
- Outsource development to a general DW/BI consulting firm
- Partner with a Credit Union Industry BI specialist

The remainder of this White Paper analyzes the advantages and disadvantages of each alternative with the goal of providing information to help credit union decision makers to make the best choice for their organization.

## **Build With Internal Resources**

### ADVANTAGES

#### *Specific Credit Union Understanding*

Internal resources are intimately familiar with the requirements of the credit union. As a result, specifications for the DW/BI project are more likely to be on target. This is because in-house developers are more likely to understand the vision set forth by the business.

#### *Project Knowledge Stays In- House*

Throughout the project developers gain knowledge about the DW/BI system they are building. Once the project is completed this knowledge is retained. Ongoing maintenance of the system is therefore simplified, faster, and less costly.

### DISADVANTAGES

#### *Internal DW/BI Experience Lacking*

DW/BI projects require specific expertise that does not exist in typical IT departments. In particular, Data Architects and ETL (Extract/Transform/Load) Developers are essential to this type of project but rarely already on staff. As a result, adding FTE positions for these skillsets will add cost to the IT budget.

#### *DW/BI Projects - Complex, Costly, and Risky*

Despite the maturation of the DW/BI discipline over the years, each new project is a “green field” undertaking. Organizations with little or no experience in these projects quickly find the complexities of their own data can be overwhelming. Expectations for fast implementation are frequently disappointed due to overly ambitious large-scope projects.

#### *Expensive To Maintain Custom Code*

Building a custom DW/BI project increases the probability of meeting the specific needs of the credit union. However, maintaining such systems can be more expensive than “off-the-shelf” alternatives. Even with dedicated in-house staff, custom built systems frequently become challenging to maintain over the long term especially if there is turnover among key personnel.

## **Outsourcing to DW/BI Consulting Firm**

### **ADVANTAGES**

#### **Consultants with Extensive DW/BI Experience are Available**

Credit unions typically have many options when it comes to finding a consulting firm or independent consultant with the skills and experience to develop a DW/BI system. As the discipline has matured over the years, an increasing number of practitioners have entered the field.

#### **Able To Bring Many Resources To Bear On The Project**

Competent consultants should be able to provide the range of expertise necessary to execute the project. Also, they need to be able to adjust to changing needs of the client by providing the necessary quality and quantity of resources as appropriate.

### **DISADVANTAGES**

#### **Outsourcing Firms Can Be Very Expensive**

While increasingly more available, expertise in the DW/BI area is still relatively scarce. As a result, engaging these resources comes with a high price tag.

#### **Lack of Deep CU Industry Knowledge**

Despite their overall DW/BI experience, it is rare to find consultants with a track record in the credit union industry. At the very least this will increase the time and cost necessary to complete the requirements gathering part of the project. At worst, the lack of knowledge makes the project a minefield of “unknowns” that result in cost and schedule overruns throughout the project.

#### **Ongoing Maintenance Fees Can Be High**

Once the project is complete, the resulting DW/BI system is a “one-of-a-kind” that requires specialized knowledge to maintain. Ideally, knowledge transfer will occur to educate internal staff to support the system. However, ongoing, high cost engagement with the consultant is probably inevitable.

## **Partnering with a CU Industry DW/BI Specialist**

### **ADVANTAGES**

#### **Deep Experience in Credit Union BI Deployments**

A company specializing in credit union DW/BI deployments brings a wealth of experience to the project. Familiarity with the source data greatly reduces time and cost. A CU specialist understands the nuances in the data as the result of many similar projects.

#### **Dedicated to the CU Industry and Know Its Issues**

A CU industry specialist understands the environment in which credit unions operate as well as trends that have occurred over time. This knowledge along with sensitivity for unique culture of the credit union movement makes a partnership with such a vendor extremely effective.

### *Brings Best Practices for Credit Unions to Each Client Relationship*

Credit unions are by their nature part of a cooperative movement. Sharing of ideas is commonplace. A credit union-oriented DW/BI specialist leverages this tendency by bringing learning from past successful DW/BI projects to current engagements.

### *Lower Costs Due to Economies of Scale*

As the result of doing many similar projects, credit union DW/BI specialists gain productivity efficiencies that translate into cost advantages. Lower costs mean clients can get the same or greater value for less cost.

## DISADVANTAGES

### *Fewer Competitive Options*

Companies specializing in credit union DW/BI deployments are rare. The learning curve needed to be knowledgeable in both credit unions and DW/BI is very steep. An organization can only offer such expertise after much investment. Therefore, the downside for credit unions is there is not a long list of potential partners from which to choose.

### *High Demand May Restrict Availability*

Due to their relative rarity, such specialists may be difficult to schedule because of high demand. A long lead time between signing a Statement of Work and the project start date is not uncommon.

## CONCLUSION

DW/BI for credit unions is evolving quickly from being a “nice to have” for big CUs to a necessity for CUs in general. For most credit unions, building an effective BI capability on a “do-it-yourself” basis is very costly and risky. Retaining a conventional DW/BI consultant may get the project done but credit unions need to be prepared to pay dearly and may find that some assumed deliverables just aren’t built in to the final product.

A best-case alternative for many credit unions is to partner with a DW/BI specialist company that can deliver a highly valuable analytical system at an affordable price point.

## References

1. Forrester Research - <http://www.forrester.com/Business-Intelligence>
2. The Data Warehouse Lifecycle Toolkit, 2<sup>nd</sup> Edition, 2009 Ralph Kimball, Margy Ross

## ABOUT ONAPPROACH

OnApproach is a CUSO that is focused on giving credit unions the power to use data as a competitive advantage through the use of OnApproach M360™, a revolutionary data warehouse solution designed specifically for credit unions. M360™ is a system agnostic platform product that enables credit unions to take full advantage of the data warehouse through a series of customizable “out of the box” analytic applications. These applications not only provide unlimited information about members but also provide analytics on all of the other operational and risk aspects of the business. M360™ is highly scalable allowing the credit union to continually integrate disparate sources of data as its needs grow.

Advantages/Disadvantages Summary

	ADVANTAGES	DISADVANTAGES
<b>Build With Internal Resources</b>	Specific Credit Union Understanding	Internal DW/BI Experience Lacking
	Project Knowledge Stays In-House	DW/BI Projects - Complex, Costly, and Risky
		Expensive To Maintain Custom Code
<b>Outsourcing to DW/BI Consulting Firm</b>	Consultants with Extensive DW/BI Experience are Available	Outsourcing Firms Can Be Very Expensive
	Able To Bring Many Resources to Bear On The Project	Lack of Deep CU Industry Knowledge
		Ongoing Maintenance Fees Can Be High
<b>Partnering with a CU Industry DW/BI Specialist</b>	Deep Experience in Credit Union BI Deployments	Fewer Competitive Options
	Dedicated to the CU Industry and Know Its Issues	High Demand May Restrict Availability
	Brings Best Practices for Credit Unions to Each Client Relationship	
	Lower Costs Due to Economies of Scale	