

**XBRL is helping the FDIC,  
member banks, and other agencies share  
data faster and more accurately.**

# MAKING CLEAN DEPOSITS

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**WE ALL EXPERIENCE IT THESE DAYS**—massive amounts of data that flow through our electronic media and clog our computer systems. It doesn't matter whether we work for a corporation, a small company, a government agency, or a nonprofit—managing the data we collect and need to share with others is an almost insurmountable problem. When it comes to financial data, the situation can become critical.

But help is available, and it's called the eXtensible Business Reporting Language, better known as XBRL (see "What Is XBRL?" on p. 27). Around the world, many examples of organizations using XBRL are beginning to appear. In the U.S., the Federal Deposit Insurance Corporation (FDIC), which insures 8,300 U.S. banks, is an excellent example, and we'll share its story in detail. Each quarter, the FDIC collects 2,000 data elements from its member banks and in October 2005 used XBRL to do so. With XBRL, the project team achieved its goal, which was to create access to more accurate data "faster, better, and smarter."

XBRL can help organizations like the FDIC make sense of the ever-growing amount of data by classifying information into computer-readable XML (Extensible Markup Language) code that can be quickly analyzed and reported even if the data is extracted from its native application. The data also carries contextual information that further defines the information, which is like having every significant reportable item carry an identity card wherever it goes. When computers can identify each and every piece in fractions of seconds, massive amounts of data are no problem.

As Michael Bartell, the FDIC CIO, stated recently, “XBRL is the most significant development impacting financial data in the past 10 years.” The FDIC and its sister federal agencies have taken the lead in demonstrating their commitment to collecting, distributing, and providing the most accurate data possible while reducing regulatory burden.

Federal agencies are the ideal candidates for taking a leadership role. After all, some of the largest data collectors in the world are government agencies, and they’re finding that XBRL is well-suited to their needs. XBRL provides a framework for agencies to use to develop a uniform filing methodology that meets the government’s needs while actually reducing the reporting burden on filers. What they find so attractive about XBRL is that it provides a means for filers to check their submissions against business rules before actually filing. This is an extremely significant factor in increasing the quality and timeliness of the data requested. Similar to the way a tax preparation program like TurboTax checks for errors before you send the results to the IRS, the XBRL programs check for errors before the filers submit their forms to the government. The net result? Virtually error-free submissions.

Here’s another major benefit that could occur: If all the agencies could agree on a common way for filers to provide data in a uniform markup language, the amount of data redundancy could be significantly reduced. Once data is marked up in an XML language such as XBRL, it can be processed, analyzed, or reported without ever having to be rekeyed. If the XBRL language becomes a recommended standard for governmental filings, the filers and the government will both be winners.

Government agencies aren’t alone in this data challenge, though. A recent report by the Butler Group, based on a study conducted by U.C. Berkeley’s School of Information and Management, calculated that the amount of electronic data stored worldwide has doubled in the last three years.

Today’s worker is literally drowning in data that’s flowing in electronically. Everywhere we turn, everywhere we move, our behavior and buying habits are being recorded, monitored, and analyzed. Experts also estimate that nearly one-third of all data collected is inaccurate. Though the knowledge workers of today are being swamped by data that’s often inaccurate, they’re attempting to provide management with the best information available.

Now let’s take a closer look at how the FDIC determined XBRL could help make life easier for its 8,300 banks.

### **THE FATEFUL TRIP (OR PHIL AND JON’S EXCELLENT ADVENTURE)**

The FDIC’s journey began five years ago. On a crisp, cold February morning in 2001, Phil Walenga and Jon Wisniewski boarded an airplane in Washington, D.C., bound for London. They both worked for the FDIC’s Banking Technology Committee, whose role is to evaluate the impact new technologies may have on the banks they insure.

They had heard a “buzz” in the industry about a new technology that seemingly held great promise, so they booked their trip to attend the first International XBRL Conference to see for themselves. What they didn’t know as they boarded their plane that morning was that this trip would start a chain of events that would dramatically alter the course of their lives, set in motion a major process-reengineering project impacting several high-profile federal agencies, and accelerate the development and acceptance of a new technology.

As Walenga and Wisniewski began to learn about XBRL from the conference presenters, they started to realize the tremendous promise described in the trade materials, and they saw how their member banks could use XBRL to effect major changes in their reporting processes.

During the latter portion of their trip and on the long plane ride home, they started talking about what they had learned. Phil and Jon were excited about the prospects of what XBRL held for their member banks: It would allow them to greatly streamline their reporting processes and drive operational efficiencies and cost reductions into their businesses. Soon the two discussed the potential for using XBRL at the FDIC to realize the same goals and quickly saw tremendous potential. Once they reached their offices in Washington, D.C., they began to share their vision with some of their colleagues.

### **THE CDR MODERNIZATION PROJECT**

Each quarter the FDIC collects more than 2,000 data ele-

## What Is XBRL?

XBRL, or the eXtensible Business Reporting Language, is a markup language for the electronic communication of business and financial data. XBRL provides a standards-based method to prepare, publish in a variety of formats, reliably extract, and automatically exchange business and financial information. The technology is based on structured markups, or tags, for financial and nonfinancial business reporting data.

The markup of business reporting data transforms normal data into interactive data, which gives business-event data the chance to live outside proprietary applications in the form of business reports while maintaining a connection to the event that created it. If a transaction is tagged with a markup language, the resulting data will be enriched with meaningful information that's very useful to the business. For example, the purchase of a ticket for an event is normally recorded in a sales application program. Specifically, it would describe the event, the seat, the method of payment, the sales outlet, the date and time, the customer name (if paid by credit card), etc.

As an open standard, XBRL is free of license fees and continuously developed by a nonprofit international consortium of more than 350 member groups. Consortium working groups review changes to XBRL and then expose them for public comment before any changes are made.

The rules for XBRL are contained in a specification that is available free at [www.xbrl.org](http://www.xbrl.org).

ments from its member banks. The banks submit the data in a Report of Condition and a Report of Income, which are commonly referred to as the Call Report. (The report is referred to as a Call Report because the FDIC would typically have to call the banks to ask them questions about it.)

This report contains all the information that the agency requires to judge the financial health of financial institutions: the balance sheet, statement of operations, cash flows, and details on lending activity and related capital. It contains more than 1,500 rules and edits to ensure data validity and accuracy, which are outlined in almost 400 pages of instructions. Each quarter the FDIC updates these rules, edits, and instructions.

Most of the member banks use an outside vendor to

help collate their information and submit it to the FDIC. The quarterly changes to the reporting requirements force the vendors to continually update their software programs to ensure their clients are in compliance. These software updates are both expensive and time-consuming for the vendors and their clients.

Walenga and Wisnieski began to realize XBRL could address the complexity in the reporting process. Their discussions with colleagues eventually led to the creation of the Federal Financial Institutions Examination Council (FFIEC) Central Data Repository (CDR) Modernization project. This group was tasked with researching the potential for streamlining the quarterly reporting process through XBRL. As we mentioned earlier, the CDR Modernization project's goal is creating access to more accurate data "faster, better, and smarter."

The CDR Modernization project team also realized that other federal agencies were requesting the same information from their member banks. After some research, the team found out that the FDIC, the Federal Reserve Board, and the Office of the Comptroller of the Currency all required the same or similar information from banks. The Federal Reserve Board, referred to as the central bank, monitors and manages the money supply and the overall banking system within the U.S. The Office of the Comptroller of the Currency charters, regulates, and supervises all the banks in the country. The project was expanded to include their reporting requirements as well, creating the FFIEC Call Reporting Agencies in which all agencies would compile one comprehensive set of required data.

In June 2003, a \$39 million contract was awarded to Unisys Corporation for leading the CDR's development and operation. Unisys began working with the federal agencies, outside vendors, and member bank representatives to collaboratively develop the repository. Using XBRL, the CDR was designed as an "integrated metadata repository that will contain the rules, calculations, edits, and instructions for every Call Report quarter beginning with the report date of March 2001."

XBRL allowed the new process to require that all filers complete all edits and perform a data validation when the Call Reports are prepared by the banks (or their vendors), unlike the current practice where some edits are resolved after reports are submitted. Although XBRL doesn't automatically correct errors, it does permit a bank to simulate the exact set of rules and procedures that the FDIC will use to validate the submission. This gives the banks the ability to correct errors and to include explanations for

unusual items that the FDIC normally would question. Any guesswork is now removed from the system, placing the banks and the FDIC on the same page.

Users can submit reports through the Internet. Furthermore, XBRL allows the vendors to update their software in 20 minutes, thereby reducing complexity and operating expenses in the industry.

All member banks were required to submit their third-quarter 2005 reports into the new CDR using XBRL. The early statistics already are offering solid evidence that this project is a great success. One Call Report vendor distributed an old set of data definitions (taxonomy) to its 1,000 client banks. These banks then submitted their information to the vendor, who, in turn, filed incorrect Call Reports to the FDIC. Once this error was discovered and the proper set of data definitions was distributed, the vendor was able to correctly resubmit the reports of all 1,000 banks within six hours. Without XBRL this problem would have taken days and possibly weeks to address.

Furthermore, with 7,913 Call Reports submitted as of this writing, only 110 were rejected, which is almost 2,000 fewer than the FDIC would normally have rejected during the time frame. The new system averaged an 89% "clean rate" on incoming Call Reports compared to a 64% clean rate for the June 2005 cycle. XBRL's flexibility and internal data validation feature has demonstrated why it was the right choice for this project, with real results produced immediately for the FDIC CDR system.

The new CDR stores the Call Report data in an Internet-based XML database, making it easier for the federal agencies and the general public to access. The project provides a single source for authoritative data, collected and published faster, with greater ability to share this information with everyone. The new system also reduces complexity, time, and resources required to file the necessary information, thus reducing regulatory burden on the member banks.

No one could have anticipated what a simple trip to London would have triggered. Three federal agencies came together and initiated a major process-reengineering project that has dramatically streamlined the regulatory data collection process for banks. In doing so, they have also demonstrated the effectiveness of XBRL as a viable tool for anyone who is interested in achieving the same results for their respective business and that has, in turn, changed the lives of the project's initiators. Phil Walenga has left the federal government to lend his expertise and support to one of the leading XBRL software vendors. Jon Wisnieski is now working full-time for the FFIEC, devel-

oping and managing the CDR.

## INTERACTIVE DATA AND THE SEC

Other agencies also are actively supporting XBRL. Consider the Securities & Exchange Commission. SEC Chairman Christopher Cox is clearly looking forward to a future enhanced by the addition of interactive data. It has been estimated that the SEC alone receives the equivalent of one million pages of filings from its registrants every business day.

Cox has been a vocal supporter of XBRL. Beginning with the SEC's XBRL Voluntary Filing Program (VFP), which kicked off in March 2005, as well as recent speeches to several organizations, the agency has identified XBRL as the path they're most interested in while preparing for the next generation of interactive data.

In remarks delivered to the Securities Information Association last November, Chairman Cox advocated a sea-change approach to receiving and distributing regulatory financial data. Touting the benefits of interactive data, Cox said: "Once data in SEC-mandated reports is made interactive, the numbers in financial reports will jump off the page. They'll not only be instantly search-

## Where Can I Find out More About XBRL?

IMA's website features XBRL within the technology enablers section of the Centre for Excellence. The technology enablers section features several *Strategic Finance* articles as well as websites for further discovery. Since the year 2000, *Strategic Finance* has published more than 50 articles or columns about XBRL. You can also read more on XBRL International's website at [www.xbrl.org](http://www.xbrl.org).

able and retrievable, but you'll also be able to immediately download them into spreadsheets and an unlimited number of software applications."

Cox also mentioned XBRL as the leading technology in the world of regulatory interactive data. The XBRL Voluntary Filing Program will help test and assess the readiness of XBRL and the SEC for using interactive data. From SEC filers to individual shareholders, the entire business reporting supply chain stands to benefit greatly by any improvements in the speed of producing, distributing, and analyzing the reported data as well as in its accuracy.

Outside the U.S., other agencies are also experiencing the same kind of explosive growth in electronic data. The Netherlands, for example, is using XBRL to transform the way companies report to the government, removing \$500 million in compliance costs for Dutch companies. Pilot programs for reporting company financial data to government agencies have also begun in Japan, Korea, and China.

So what's the secret to success about the use of interactive data? The formula is based on three major premises:

- ◆ If you can agree on how to represent data to any computer platform or program, you can establish a many-to-one-to-many, win-win-win situation.
- ◆ A global, unified approach to marking up business reporting data can provide the basis for universal exchange of data. This will lead to better understanding of world capital markets.
- ◆ Significant costs can be removed from the regulatory data collection system while improving data timeliness and data quality.

## WHAT'S NEXT?

With all the buzz about XBRL on the government side, the next logical question is what value does XBRL hold for the private and public organizations of the world?

There are two opportunities waiting for companies regarding how and when to use XBRL. First, the companies who participate in the SEC's XBRL VFP will learn valuable lessons that could pay big dividends. The Internet has speeded up the natural progression from paper-based filings to interactive data, and, at some point, all required government filings will be in digital formats. The companies who participate in the program today will be in a better position to turn this reporting format into a competitive advantage.

The second opportunity is to investigate how to use interactive data, such as that produced by XBRL GL (see "XBRL GL: The General Ledger Gets Its Groove" in the September 2005 issue of *Strategic Finance*). Deeply tagging business-event data permits the exchange of data between internal applications.

## WARNING

On the other hand, there are several drawbacks to using XBRL internally at this point in time. Although the software community is showing signs of supporting XBRL, the software is still maturing and isn't very easy to work with. The XBRL tags meant to express business reporting information aren't currently robust enough to cover more than 90% to 95% of the elements typically report-

ed to the SEC. This means that companies will look at the exceptions not covered by the XBRL consortium standard set of tags and will have to make up their own extensions to convert normal SEC filings into XBRL. As the software vendors make their products easier and as the XBRL community tackles creating more sets of tags, the process will get much better. This time next year we're very likely to see a much more robust set of software packages to choose from as well as many more industry-standard XBRL tags to choose from. Pioneering companies such as Microsoft, Reuters, EDGAR-Online, and Morgan Stanley are blazing a path to the new world of interactive data.

On balance, though, XBRL is finally showing remarkable signs of life, especially here in the U.S. within the FFIEC's Call Report Modernization program. The benefits to government regulatory agencies are potentially huge. Increased accuracy, timeliness, and potential lessening of regulatory burden are just a few of the real advantages agencies will be seeing compared to filings arriving by fax, couriers, or land mail. Will your company be next? ■

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**XBRL is a topic at IMA's Annual Conference June 17-21.**  
For details, visit [www.imaconference.org](http://www.imaconference.org).