

Using Interactive Data for Business Reporting

Greg Zegarowski

Financial Leadership Corporation, USA

gregz@financialleadership.com

Executive Summary

One of the buzz words since the Enron scandal has been transparency. There have been increased calls from investors, regulators, employees, and lenders for more comprehensive and faster communication of financial information. The drumbeat for change has been accompanied by voices outside the hallowed halls of accounting and finance. Environmental groups and non-governmental organizations are promoting non-financial metrics such as carbon footprint or compliance with child labor laws in emerging markets. Transparency is being embedded in the set of expectations of all corporate stakeholders.

Interactive data technologies based on eXtensible Business Reporting Language (XBRL) provide a way to improve the timeliness, accuracy, and accessibility of business information. XBRL is an international standard for the tagging of business information in machine-readable formats. The Securities and Exchange Commission and other regulators around the world are launching initiatives to promote reporting in XBRL. The value proposition to corporations is that as business reporting improves, there will be concomitant improvements in corporate performance, corporate value, and capital markets.

Introduction

Since the fall of Enron and the other high-profile corporate scandals, the issue of trust in U.S. businesses and capital markets has been paramount in government and corporate boardrooms. In 2002, the U.S. Congress passed the Public Company Accounting Reform and Investor Protection Act of 2002 (most generally known by its abbreviated name, Sarbanes-Oxley). As the title of the Act suggests, a major focus of Congress was investor protection.

At about the same time that Sarbanes-Oxley (SOX) was hitting Wall St., a small team of visionaries was working on the development of a revolutionary way of communicating business information. Initial development of eXtensible Business Reporting Language (XBRL) began under the aegis of the American Institute of Certified Public Accountants. In 2002, PriceWaterhouseCoopers, NASDAQ, and Microsoft launched a trial of using XBRL for publicly reported data.

While certainly bringing efficiencies to the capital market, XBRL was quickly seen as a partial answer to the whole problem of transparency and trust in business. The theory is that as business information gets reported in a timelier, richer, and more accurate manner, the investing public and other stakeholders will benefit by knowing more about the reporting companies. This increased knowledge and transparency will provide a nourishing environment for trust to grow.

The XBRL International consortium which is fomenting the usage of XBRL has a current membership of over 450 companies and organizations around the world. Members include, for example, Morgan Stanley, Hitachi, General Electric, Microsoft, Deutsche Bank, Fujitsu, Moody's, Reuters Group, major accounting and consulting firms, educators, and many others.

In the spirit of the ubiquitous mantra “think globally, act locally”, XBRL is being promoted and implemented internationally and also locally through approved and provisional jurisdictions. The following is a list of where XBRL is being “localized”:

Established XBRL Jurisdictions:

Australia, Belgium, Canada, Germany, Ireland, Japan, Korea, Netherlands, New Zealand, Spain, United Kingdom, United States, International Accounting Standards Board

Provisional XBRL Jurisdictions:

Denmark, France, Poland, South Africa, Sweden, United Arab Emirates

This paper will describe how XBRL works, its relationship to the term “interactive data”, and how transparency and trust in business may increase as a result of its use. Mention will also be made of the related developments of the “Semantic Web” and blogs.

Transparency and Trust in Business – The Critical Need

The Corporate Communications Institute Communications Practices and Trends Study 2005 (CCI, 2005) identified major trends in corporate communications. Among the findings of the study was that transparency is becoming a best practice strategy for reputation management. As noted above, XBRL may be seen as tool to increase the transparency of companies.

Currently, the promotion of XBRL is dominated by financial professionals, software developers, and regulators. XBRL or “interactive data” should also occupy a key spot on the task lists of communication specialists and managers. Business information will be increasing in richness and accessibility with the use of XBRL. As a result, companies and organizations can benefit by properly managing that communication process. According to Michael Goodman (Goodman, 2005) writing in the *Journal of Business Strategy*, “The company communication officers should make sure that investors receive complete, accurate, and timely information about the company.” Improving transparency must be a joint effort by complimentary parts of a company such as Finance and Corporate Communications.

Improved transparency also engenders trust. This connection was made by Michael Deaver, Vice Chairman, Edelman in a press release about the Edelman Annual Trust Barometer 2006: “Trust is the key objective for global companies today because it underpins corporate reputation and gives them license to operate. To build trust, companies need to localize communications, be transparent, and engage multiple stakeholders continuously as advocates across a broad array of communications channels” (Edelman, 2006).

The connection between transparency and trust has also been highlighted by Jack Welch, former head of General Electric and a management icon. In his regular *Business Week* column, Welch stated, “The first rule is that when it comes to communicating financial information to investors, analysts, and the media, public companies can’t be transparent enough. Every piece of data disclosed increases the market’s insight and, ultimately, builds trust.” (Welch, 2007)

The benefits of engendering trust can also extend beyond the individual companies or organizations. As noted in a Group of Eight Declaration, “Trust and confidence are key ingredients of a well-functioning market economy” (G8, 2003). When the business reporting

community is wired for rich and timely communication, the overall capital markets and economic environment are the beneficiaries.

What are XBRL and Interactive Data?

XBRL is one of a family of Extensible Markup Languages ("XML") which is becoming a standard means of communicating business information on the Internet. There are other XML-based languages being used in the financial community. For example:

- Financial Information eXchange (FIX) Protocol: a messaging standard developed specifically for the real-time electronic exchange of securities transactions
- Interactive Financial Exchange (IFX): a specification for financial transactions such as bill presentment and payment, business to business and consumer to business banking, payments and automated teller machine (ATM) communications
- Open Financial Exchange (OFX): a specification for the electronic exchange of financial data between financial institutions, business and consumers via the Internet

XBRL is being developed by an international non-profit consortium of approximately 450 major companies, organizations and government agencies. It is an open standard, free of license fees. XBRL can handle data in different languages and accounting standards. It can flexibly be adapted to meet different requirements and uses.

Rather than treating financial information as a block of text - as in a standard printed document - XBRL provides an identifying tag for each individual item of data. These tags are computer readable. Some have likened tagging to "bar-coding" the information. For example, the business concepts of sales, total assets, and net profit each have their own unique tags. However, XBRL does more than just assign a name to a piece of business data. Concepts such as net profit are contextualized in XBRL by the inclusion of information such as the specific reporting period, accounting principles used, company name and more.

According to XBRL International, "The introduction of XBRL tags enables automated processing of business information by computer software, cutting out laborious and costly processes of manual re-entry and comparison. Computers can treat XBRL data "intelligently": they can recognize the information in a XBRL document, select it, analyze it, store it, exchange it with other computers and present it automatically in a variety of ways for users. XBRL greatly increases the speed of handling of financial data, reduces the chance of error and permits automatic checking of information." (XBRL, 2007)

One of the core concepts underlying XBRL is having agreed upon taxonomies. XBRL taxonomies are dictionaries of business concepts and their corresponding tags. Taxonomies are built for specific uses, for example, U.S. Generally Accepted Accounting Principles, or International Financial Reporting Standards. There are numerous initiatives underway to expand the number of approved taxonomies for the business community. More will be mentioned later about the specific U.S. efforts in this regard.

So what does XBRL "look" like? Below is an excerpt from a sample data point tagged in XBRL. There are additional XBRL files that are necessary for a software program to properly "read" and render this data point to a user. However, this example provides an indication of the look and feel of XBRL:

<ifrs-gp:ProfitLossBeforeTax contextRef="Current_ForPeriod" unitRef="U-Euros" decimals="0">661000</ifrs-gp:ProfitLossBeforeTax>

The above string refers to a sample company's Profit and Loss Before Tax for the Current Period amounting to 661,000 Euros reported in accordance with International Financial Reporting Standards (IFRS).

Unfortunately, the term XBRL is not a user-friendly acronym. A popular alternative description has been promoted by the Securities and Exchange Commission. When the SEC launched a major initiative to restructure their reporting system based on XBRL, they encouraged companies to join a pilot program to use "interactive data" in their financial statement filings. The initiative has been touted as a way for investors to immediately extract data from official filings, compare results to other companies and industry averages, and "slice and dice" the data as necessary. Currently, a number of companies are participating in the SEC's Voluntary Filing Program such as 3M, Adobe, Brazilian Petroleum, Ford Motor, PepsiCo, and Pfizer.

The motivation for using interactive data is grounded in the SEC's long historical perspective. Speaking to the American Enterprise Institute, SEC Chairman Christopher Cox stated, "Technology has revolutionized almost every aspect of our lives — the way we communicate with one another, the way we listen to music, and even the way we play games. And yet, with one of the most important things we do in life — prepare for the future financially — what do we do? We are still, today, relying on the open-cry pit system of the 1700s and the printed page of the Guttenberg press of the 15th century." (Cox, 2006)

In that same address, Cox described the current assumptions regarding financial data in the market place. "Most people think that the numbers analysts and investment professionals work with come directly from SEC filings. Even some CEOs think this. But it's not true. An entire industry has developed to extract information in the financial statements that companies file with us. The error rate from this process is unacceptably high." Cox goes on to describe that interactive data will make financial statement information much more accurate.

Who is Driving the Development of XBRL?

Financial Executives International has placed XBRL near the top of its list of financial reporting challenges for 2007, saying the standard would gain momentum with increasing voluntary adoption during the year. (FEI, 2007) The impetus for using XBRL has come from multiple segments of the financial reporting supply chain including:

- Governments
- Analysts
- Multinational requirements for cross-border reporting
- Smaller companies seeking better analyst coverage
- Individual and institutional investors
- Auditors
- Non-governmental organizations (NGOs)

With the expanded use of interactive data, there will be a “democratization of data” as it relates to financial information. It will become important for reporting entities using XBRL to accomplish the reporting professionally. The data must be tagged correctly. Businesses must accurately control the data that is being presented to the public. The public will be deciding which data is important and which companies are deserving of increased support or scrutiny.

In September 2006, XBRL – US landed a multi-million dollar contract with the Securities and Exchange Commission (SEC) to develop additional taxonomies that comply with U.S. Generally Accepted Accounting Principles (GAAP). In its official press release regarding the contracts, the SEC stated, “Today’s announcement demonstrates the Commission’s firm commitment to interactive data and represents a significant milestone on the road to achieving that goal,” (SEC, 2006). It is possible to go to the SEC web site and test drive the interactive tools that are being developed (<http://69.56.156.236/viewer>).

The advantages of using XBRL reach beyond publicly-held companies. In the United States and elsewhere, there has been a great deal of media coverage of the huge market power of private equity companies and groups. Notable deals in recent years include private equity stakes in Hertz, Toys R Us, and Harrah’s Entertainment, Inc. Though the required regulatory reporting requirements may be less for such companies, the use of XBRL is still persuasive. For example, XBRL can be used to great advantage for internal reporting and consolidation of information across far-flung enterprises operating on differing accounting software platforms.

Additional Advantages (and Some Limitations) of XBRL

In addition to some of the advantages already cited for using XBRL, the following characteristics provide additional benefit to the users of the tagged information:

- Faster reporting with drill-down capabilities
- Adaptability across major software systems
- Support of multiple spoken languages. Data values can be tagged so that the user can choose to read the financial report in different languages such as German or in English.
- Improved internal controls resulting from seamless audit trails. The need to cut-and-paste financial information from source to use documents is lessened
- Improved benchmarking metrics as XBRL data increases across industries

The use of XBRL is not limited to financial reports. Press releases and various investor relations publications can take advantage of the technology. XBRL has been structured to take advantage of “next generation” architectures such as Service Oriented Architecture (SOA) and Web Services. Searching, compiling, and analyzing business information can have characteristics of the very common “web search” accomplished by virtually all computer users today.

An important characteristic of interactive data is that the data itself is not changing. The data is being exchanged and carries with it a standardized meaning. XBRL does not change accounting principles or the interpretation of those principles. Further, the use of XBRL cannot be seen as a foolproof method to root out fraud in organizations. If business people manipulate data within a company, that misleading data may still be reported in XBRL. However, by contributing to a more transparent environment, XBRL can be part of the solution of rebuilding overall trust in business.

The implementation of XBRL will not happen overnight. The proper tagging of business information is not a one-step, “press the button”, exercise. Selecting the “right” tag for your business data requires professional knowledge and judgment. As companies prepare to launch into their initial XBRL-based communications, proper planning and internal communication will be essential.

Current and Prospective Implementations of XBRL

Any summary of how XBRL is currently being implemented around the world is destined to be outdated as soon as the list is published. However, there are some major initiatives that are worth noting:

- The National Bank of Belgium has published a taxonomy which will be used for the filing of accounts of commercial and industrial companies
- The Tokyo Stock Exchange (TSE) is introducing an XBRL reporting system
- The Spanish Stock Exchange has begun to use XBRL for receiving and distributing public financial reports from more than 3,000 listed companies
- The Financial Institutions Examination Council (United States) has reported that its XBRL-based solution for bank financial reporting has achieved measurable benefits in data cleanliness and accuracy

Global Reporting Initiative (GRI, 2007) has recently announced that it has issued a beta version XBRL taxonomy for reporting in accordance with GRI guidelines. Numerous organizations around the world have issued reports using GRI guidelines covering economic, environmental, and social performance indicators. A list of these participating organizations may be found at <http://www.corporateregister.com/gri/>.

The GRI Framework provides participating companies with reporting guidance on various performance indicators including:

- Environmental
- Labor practices and decent work
- Human rights
- Society
- Product responsibility indicators

Within these GRI guidelines, there are certain metrics that may be of particular importance to corporate communication managers. The following are illustrations of such metrics:

- Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services during their lifecycle, by type of outcomes
- Operations identified as having significant risk for incidents of child labor, and measures taken to contribute to the elimination of child labor
- Total direct and indirect greenhouse gas emissions by weight

The importance of tying XBRL to metrics promulgated by GRI is that it prepares the way for a quantum leap in the richness of corporate disclosures. Currently, the GRI database has over two thousand corporate reports that have been prepared in accordance with the GRI Framework.

These reports carry various names such as Citizenship Report, Sustainability Report, or Corporate Social Responsibility Report.

The strategic importance of such reports was clearly stated in the CCI 2005 Study: “The business case is a simple one -- the license to operate is either granted, or revoked, by the society you are in. This concept is clear for companies in the European Union and the United Kingdom which emphasize sustainability, or the triple bottom line – financial, environmental, and social performance measures. The trend has become a best practice among global corporations -- engage the public, customers, employees, and business partners on the social, financial, and environmental accomplishments and actions of the corporation. A new era of Transparency has created an opportunity for building trust through strategic corporate communication initiatives.”

There is certainly a rich future ahead for the use of interactive data in business reporting. As XBRL taxonomies grow to include all industry groups plus reporting frameworks such as GRI, all corporate stakeholders will benefit.

The Semantic Web – In Search of Meaning

The development of interactive business information using XBRL parallels the emerging construct of what some have called the semantic web or “Web 3.0”. In an article published in Technology Today, author John Borland stated, “Web 1.0 refers to the first generation of the commercial Internet, dominated by content that was only marginally interactive. Web 2.0, characterized by features such as tagging, social networks, and user-created taxonomies of content called “folksonomies,” added a new layer of interactivity, represented by sites such as Flickr, Del.icio.us, and Wikipedia.” (Borland, 2007)

Borland notes that there is an ongoing debate over what can rightly be called Web 3.0. He states that the best currently accepted definition was offered by John Markoff in a New York Times article that described Web 3.0 as “a set of technologies that offer efficient new ways to help computers organize and draw conclusions from online data”.

With respect to XBRL, web surfers will be able to easily access tagged business information for analytical purposes. This expansive and accessible business information will spawn improved metrics such as:

- Profit by business segment at the country or regional level
- Correlation of factory output to environmental impact
- Executive compensation compared to average workers’ wages

Like reconnaissance drones, analytical software will be able to read XBRL tagged data and search for targeted data on the web. The data will be retrieved, downloaded into the user’s software and reports generated for review. It is not critical at this point to locate XBRL precisely along the Web 2.0 – Web 3.0 continuum. The important matter is that there is a wide-spread appetite for meaningful business data. XBRL has the advantage that the world-wide business reporting community has “agreed to agree” and is embedding meaning into the business information that is being tagged.

Blogging

In addition to the use of XBRL as a way of creating an interactive data environment, the use of blogs has also created new opportunities for sharing business data. A very interesting exchange recently occurred on one of the most read blogs in the U.S. business community. Jonathon Schwartz is the CEO of Sun Microsystems, a major Silicon Valley company, and Christopher Cox is the Chairman of the Securities and Exchange Commission. It is instructive to quote some key excerpts of the exchanges. (Schwartz, 2006)

From Jonathan Schwartz to Chairman Cox (September 25, 2006):

“Sun Microsystems fully supports and applauds your recognition that the Internet is a "great instrument of national and international communication... [and] also a critical engine of American productivity." ...Our corporate website (www.sun.com) currently receives on average of nearly a million hits per day. My blog is syndicated across the Internet by use of RSS technology; thus, its content is "pushed" to subscribers. This website is a tremendous vehicle for the broad delivery of timely and robust information about our company...We truly believe in the utility of the Internet - as a means of driving transparency throughout all governmental and corporate processes, as well as greater accessibility of health care, education and social services... We encourage you to look to the Internet to achieve the Commission's objectives of greater investor access to information and would welcome the opportunity to further discuss with you our views in this area.”

From Chairman Christopher Cox to Jonathan Schwartz (posted November 2, 2006):

“As you are aware, I believe strongly that the Internet is a powerful tool that can be used effectively by corporations and all market participants to provide information to the market and investors...The Commission has recognized the importance of corporate websites and the Internet in providing important corporate information and developments to the market, both in connection with capital raising and disclosing ongoing corporate developments. I appreciate your thoughts and support for the many actions the Commission has taken to recognize the expanded role the Internet plays and will play under our interactive data initiative, among others, to better inform investors and the market about important corporate developments.”

It remains to be seen what the formal SEC regulatory guidance will be regarding the communication of business information in blogs. It is important for corporate communication specialists to develop management expertise in this relatively new area of communicating business information.

Conclusion - Challenges and Opportunities of Using Interactive Data

The use of interactive data presents challenges to numerous players in the corporate reporting supply chain. Corporate finance staffs will need to review tagged data to assure its accuracy. External auditors will need to develop and perform additional procedures in order to attest to the tagged data. Corporate communication specialists will need to be aware of what corporate data is being tagged in order to enhance the management of the overall communication process. It will be necessary for corporate leadership to receive training about XBRL and how to manage its use within the company.

Interactive data also presents companies and organizations with many and varied opportunities. For example, some companies may want to go beyond current regulatory requirements and provide increased visibility to their sustainability efforts by tagging environmental data in XBRL.

Implementing XBRL can also improve corporate governance by improving the accuracy of business reporting and providing enhanced audit trails of information.

Society expects more of its corporate citizens than ever before. Technological developments have set the stage for interactive data (XBRL) implementations, automatic extraction of meaningful data from a semantic web, and social networks such as blogs that accelerate the sharing of information. When developed and used wisely, all of these forces can enhance the development of transparency and trust both at the corporate level and across the broader marketplace.

References

- Borland J. (2007), "A Smarter Web", *Technology Review*, March/April 2007
- CCI (2005) *Corporate Communication Practices & Trends Study 2005, Final Report*, March 2006
- Cox, C. (2006), Comments by SEC Chairman Christopher Cox to the American Enterprise Institute, May 30, 2006 as reported at <http://www.sec.gov>
- Edelman (2006), "'A Person Like Me' Now Most Credible Spokesperson for Companies", Edelman press release, January 23, 2006
- G8 (2003), G8 Declaration, Evian, France, June 2, 2003 as per <http://www.g8.fr/evian/extras/504.pdf>
- GRI (2007), "New tool for data sharing: XBRL taxonomy for G3 released", as per <http://www.globalreporting.org>
- FEI (2007), "FEI CEO's 2007 Top 10 Financial Reporting Challenges", *Financial Executive magazine*, January/February 2007
- Goodman, M. (2005), "Restoring trust in American business: the struggle to change perception", *Journal of Business Strategy*, Vol. 26 No. 4 2005, page 34
- Schwartz, J. (2006), as per <http://blogs.sun.com/jonathan>
- SEC (2006), "SEC to Rebuild Public Disclosure System to Make it Interactive", Press Release No. 2006-158, September 25, 2006
- Welch, J. (2007), "When to Talk, When to Balk", *Business Week*, April 30, 2007, p. 102
- XBRL (2007), as per <http://www.xbrl.org/WhatIsXBRL>