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The XBRL-Enabled Company Emerges

XBRL, also known as interactive data, is a global, open standard that was developed for the electronic communication of business and financial information. Hitachi believes the potent forces of globalization, transparency, and competition will induce companies worldwide to adopt XBRL. Interactive data will initially be implemented for financial reporting, compelled by both government fiat and XBRL's commanding advantages. Longer term, the adoption of interactive data in the financial sphere will spur its widespread use in companywide activities like manufacturing, procurement, sales, and human resources.

What Is XBRL?

XBRL (eXtensible Business Reporting Language) is a global, open standard that offers major advantages for the preparation, analysis, and exchange of business information. Its key characteristic is an identifying tag for each data item. This tag is often compared to the barcode now seen on all products.

The tagging of data provides additional information that makes an item much more meaningful. In XBRL, a number isn't simply, say, 1,700,356. It's budgeted sales of $1,700,356 for the North America segment of the Consumer Products division for the third quarter of 2006. In other words, descriptive elements such as currency unit, time period, reporting unit, and status (i.e., budget versus actual) become part and parcel of the item itself.

Thus, with XBRL, there's no confusion between Hong Kong dollars and US dollars. Duplicate names for the same reporting unit – say, Human Resources and Personnel – don't appear in your reports. A fiscal year ended March 30, 2006, isn't referred to as FY2005 in one place and FY2006 in another. And results already reported are always shown as actual, never forecast.

XBRL Offers Extraordinary Advantages

XBRL serves as a Rosetta Stone that allows information to be easily transferred between any internal or external system. Interactive data provides extraordinary benefits for users, including:

- Numerical accuracy, as XBRL can both calculate and verify;
- Much faster, real-time preparation of reports;
- More efficient, accurate, and relevant searches;
- Platform independence, which enhances data interchange;
- Far fewer inconsistencies in terminology and data formatting, substantially reducing manual intervention;
- Information that is entered once but can be delivered in many formats, such as a printed financial statement, an HTML document for a website, or a filing for the SEC's EDGAR system;
- Less expensive and more accurate analysis;
- Free availability and no royalties, both obvious advantages to Enterprise Resource Planning (ERP) and Extract, Transform, and Load (ETL) solutions;
- Time and cost savings from fixing manual audit trails, improving data quality, reducing "spreadsheet sprawl" that introduce error, and avoiding data that is difficult to extract from native applications.

Perhaps the most important, if most mundane, benefit of XBRL is the elimination of data re-keying. With XBRL, a single piece of information never needs to be retyped as it flows through the organization and to external audiences, like regulators and auditors.

Data re-entry is not only a slow, tiresome, unproductive, and unfulfilling task for staff. It also results in a surprisingly high number of errors that significantly impair data integrity.

XBRL Is Attractive to Users at All Levels

The advantages of XBRL are substantial for financial information users at every level. These include U.S. government agencies, governments overseas, large companies, small companies, security analysts, auditors, and individual investors.

U.S. Government

Government agencies have numerous incentives to encourage XBRL implementation. In the wake of the Enron scandal, financial regulators like the SEC have accelerated filing deadlines, decreasing the interval between period-end and submission dates. Agencies are also under pressure to identify more quickly filing errors. Their staffs are being asked to spend more time analyzing data, and less time manipulating it. Under the Sarbanes-Oxley Act (SOX), for example, SEC employees are required to review the financial statements of every public company once every three years.

XBRL adoption by government agencies is gaining momentum. In 2005, the Federal Deposit Insurance Corporation (FDIC) mandated that banks submit their call reports (quarterly financial statement filings) in XBRL. It was the first large-scale adoption of interactive data in the United States.

The results were impressive:

- 100% of the submitted data added up correctly, compared with just 70% previously;
- The case load of each analyst could be increased, from 450-500 to 550-600;
- Agencies received the data sooner and could publish it immediately. Previously, publication took several days;
- In the first quarter of adoption, the number of audit flags dropped dramatically, from 33% to 5%.

  Such successes will encourage other government agencies to adopt interactive data for filing requirements.

Governments Overseas

Interactive data enjoys similar appeal to government entities worldwide. As a global data format, XBRL eliminates the language barriers of international reporting and ensures consistent data, regardless of the country of origin. Thus XBRL is becoming the de facto standard for defining, exchanging, and storing financial information by regulators and stock exchanges in nations as varied as South Africa, Abu Dhabi, and Brazil.

In Europe, central banks are adopting XBRL for Basel II (COREP) reporting, which is used for computing solvency ratios for the Continent's financial institutions. The Dutch Tax Office collaborated with several of the nation's other agencies to find duplicate requests for information and simplify the information demanded of taxpayers. This work resulted in a huge decrease in data points, from 180,000 to 4,000. And in the UK, plans have been announced to make XBRL mandatory for filing of tax returns, which includes full financial statements, from March 2010.

In Asia, Japan provides an excellent example of the advance of XBRL. In February 2006, the BOJ introduced a data transfer scheme based on XBRL technology that gathers monthly balance sheet data. The next month, the Financial Services Agency (similar to the SEC) issued a plan that would require disclosure documents filed through EDINET (similar to EDGAR) to be prepared in XBRL beginning in 2008. The following month, the Tokyo Stock Exchange stated its commitment to XBRL and said that it too would introduce an XBRL reporting system.

Securities Analysts

Securities analysts at the big investment houses evaluate thousands of companies in dozens of countries. Research staff must often plow through company PDFs, text files, and even paper to extract financial information, with the substantial possibility of human error.

The corporate scandals of a few years ago have led to the downsizing of equity research departments at these institutions. There are far fewer sell-side analysts, and there's much pressure to streamline operations and reduce data manipulation. When XBRL becomes the international data standard for financial reporting, investment banks will be able to obtain and use data easily for both intra-country and cross-border analysis.

Meanwhile, global fund managers have an ever-expanding universe of stocks to cover, as poor countries become emerging economies and emerging economies become developed nations. But with fewer sell-side analysts, fund managers must depend on in-house staff to do more research on more names. In this environment, portfolio managers are eager to reduce data manipulation and eliminate data re-entry.

Large Multinationals

Several trends point to the increased adoption of XBRL by large multinationals:

- They must deal with enormous amounts of business data, both internally and externally generated.
- Their regulatory burdens are growing. Overseas, demands for transparency and improved corporate governance are raising the regulatory bar. In the U.S., companies must dedicate more resources to the requirements of the regulatory regime dictated by Sarbanes-Oxley.
- Competition from BRIC (Brazil, Russia, India, and China) corporations is mounting. U.S., European, and Japanese firms cannot compete on labor, so they must exploit their advantage in advanced information technology.
- The pace of business is accelerating. Management teams are in desperate need of correct, actionable data as quickly as it becomes available.

Smaller Companies

The downsizing of equity research departments noted earlier has had major ramifications for smaller listed firms. Fewer analysts means fewer companies get covered. The Independent Research Network reports that about 33% of all US public companies with analyst coverage have two or fewer analysts following them, and approximately 42% of all public companies have no analyst coverage at all.

No analyst coverage means lower share prices and less liquidity, which translates into a higher cost of capital. Companies that can reduce the cost to analysts by adopting XBRL will have a better chance of being covered.

Individual Investors

XBRL is the language of financial democracy. The EDGAR system made SEC filings widely available to all investors. Now XBRL promises to make financial statements easy to download and analyze.

These benefits are especially important for the small investor, who has always been at a disadvantage to institutional investors. The dismal economics of sell-side research could easily expand that gap, since big institutions will always have the resources to do the research they need. The easy availability of accurate data that's simple to manipulate makes it much easier for small investors to level the playing field.

XBRL will also make it easier for individuals to buy mutual funds, the preferred investment vehicle of small investors. The prospectuses that lay out all the details and risks are too long and difficult for the average person. In response, the SEC is taking steps to provide one-page summaries of mutual funds' key data in XBRL. These can also be drilled for the more detailed information required by more sophisticated investors and financial professionals.

Auditors

An old joke among auditors is that their CPA credential really stands for "cut, paste, and attach." Even in the computer age, auditors spend an inordinate amount of time getting company data into their work papers and government reports. This is true of some key areas like tax compliance, which is often nominally integrated in the company's systems but frequently demands much manual re-entry.

Moreover, auditors face increased regulatory burdens, such as the SOX requirement that they report on the reliability of management's assessment of internal control. They are therefore eager to spend less time on data manipulation and more time on analysis. Automated data transfer, tailored search, "enter once, format many," and many other advantages of XBRL have special relevance to the audit profession.

XBRL Will Be the Data Standard of Financial Reporting

As we've seen, the adoption of XBRL will initially be in the financial arena, driven by both government fiat and the needs of users ranging from the smallest investor to the largest multinational. This momentum will be greatly accelerated by globalization that encourages universal data standards. In the field of financial reporting, that standard will be XBRL

The XBRL-Enabled Company

Although XBRL is extensible *business* reporting language, it's mostly been used for *financial* reporting. Interestingly, XBRL was originally named eXtensible Financial Reporting Markup Language (XFRML). Early on, however, its proponents recognized that the potential of interactive data extended far beyond 10-K's and call reports, and its name was changed.

We believe that this vision of XBRL as a business reporting language will be realized, and that XBRL will be widely adopted for everyday company activities. Its use will extend beyond the financial function to encompass sales, manufacturing, procurement, and human resource operations. Both the business and IT cases for the implementation of XBRL throughout the organization are compelling. They are reinforced by the increasing importance of internal control and the expansion of worldwide M&A.

The SOX Effect

Spurring the drive to enterprise-wide adoption of XBRL is an enhanced internal control regimen, as required by SOX and encouraged by the movement toward greater transparency.

Under SOX, CEOs and CFOs are now required to evaluate the adequacy of the company's internal control over financial reporting (ICOFR) using suitable criteria. The SEC specifically mentions the COSO (Committee of Sponsoring Organizations of the Treadway Commission) framework as fulfilling these requirements. Accordingly, COSO has become the de facto standard for assuring ICOFR.

COSO defines internal control as a process that ensures:

- Effectiveness and efficiency of operations.
- Reliability of financial reporting
- Compliance with applicable laws and regulations

Notably, this is the same definition used by CPAs in conducting their attest function in external audits. Although ICOFR itself is not so broadly defined, these objectives are clearly essential to a successful internal control system. They require a broad, integrated, company-wide approach that extends from raw material procurement to revenue recognition.

XBRL Can Improve Internal Control

In the face of these increased burdens, companies are seeking efficiencies that will provide more assurance at lower cost. Where possible, they want to eliminate human intervention, with its costs and possibility for error, in internal control procedures. As companies adopt XBRL to fulfill financial reporting requirements, they will be eager to leverage that investment by applying resources to internal control objectives.

The urgency to upgrade and rationalize the internal control function dovetails with the trend toward business process management (BPM). The primary motivations for BPM are higher profits and greater efficiency, but improved internal control is a key catalyst. The traditional focus of management accounting on cost components like materials and labor atomized information in individual departments. Business processes, as opposed to business functions or specific applications, emphasize information integration.

XBRL is a key component of the Next-Generation Architecture, which includes Service-Oriented Architecture (SOA) and Web Services, that will underpin BPM in the future. SOA provides the overall picture of business processes and workplace flows. Using open standards, Web Services allow web applications to interact with one another for data exchange. They can potentially be used by anybody to access, edit, or validate their data, wherever the data resides and from whatever application it was generated. As an XML language that is not tied to any proprietary application and has the ability to supply supporting data, XBRL is ideally adopted to these emerging technologies.

Interactive Data Is a Boon to M&A

XBRL is especially useful for the exchange of information in large organizations that store data in widely varying formats and degrees of granularity. Interactive data allows vital information to be easily transferred between the disparate internal and external systems that often occur within large organizations. Given these qualities, XBRL will become a vital force in accelerating the M&A consolidation process.

The ability to consolidate acquisitions and integrate business systems have historically presented enormous challenges, reflecting differences in data and account structures. XBRL can substantially reduce the time and effort required to integrate new acquisitions if both acquirer and target use the same data standard. In that preferred state, integration primarily requires consistent classification of the already tagged information. The large information gathering and consolidation effort that have traditionally accompanied business combinations would be unnecessary.

XBRL GL Integrates External and Internal Systems

To gain a greater appreciation of how XBRL can strengthen internal control and facilitate M&A, it's useful to distinguish between two breeds of XBRL. For external users who primarily require summary financial information, the focus is on XBRL FR (for Financial Reporting), which can express only a limited amount of detail, such as the unit of currency, reporting unit, etc. For internal and external users who require highly specific data, the emphasis is XBRL GL, which can express both financial and nonfinancial information at the detail level at all stages of the information supply chain.

The GL in XBRL GL originally stood for General Ledger, and you'll still sometimes see that terminology. But the current, more expansive term of Global Ledger is much more suitable, because XBRL GL isn't simply a place to collect journal entries. It is a single framework for standardizing all information of business reporting systems for both internal and external users. XBRL GL can bring together data from disparate operational, reporting, and accounting systems and consolidate it through Web Services, high bandwidth networks, and petabyte storage systems. It is therefore ideal for system integration, consolidation, data migration, and data archiving.

Since it encompasses both financial and nonfinancial information, XBRL GL can be used for employee timesheets, purchase order processing, invoicing, and all other elements of the manufacturing workflow. It can easily transfer unposted and posted information back and forth from branch offices to consolidating systems. Externally, XBRL GL enables companies to share data on receivables with their bankers, and inventory levels with their suppliers.

ERP Versus XBRL

Why can't the vision we've sketched for easy and universal portability of business information be accomplished through existing ERP systems? The typical ERP system has inherent limitations for assuring easy transfer of data companywide. Many companies use several instances of one vendor's products, or mix together products of different vendors. Importantly, users commonly develop informal spreadsheet-based systems for business needs that develop after ERP implementation and before updates.

Moreover, ERP applications are basically closed systems. They cannot respond to the challenges posed by the new distributed information environment, where data from internal and external systems is constantly exchanged, and thus must be easily accessible and transferable.

XBRL is simply a data standard, and thus XBRL itself is not a replacement for the infrastructure of ERP systems. Open and royalty free, XBRL can be used successfully both in conjunction with ERP and as a means for implementing ERP alternatives.

For example, XBRL permits you to enter data once and deliver it in many formats, which greatly reduces the risk of data error. When you want to generate a report, you just need to worry about the format, not the data itself. With ERP, data is in proprietary formats that must be transformed into management information. With ERP systems producing XBRL code internally or an XBRL conversion program running outside the ERP system, management reports can be created without messy cut-and-paste techniques.

The Technology Advantages of XBRL

What technical features of XBRL will contribute to its adoption as the international data standard for companywide activities?

XBRL is highly extensible, meaning that it can be modified and added to by IT staff and business analysts to suit their specific requirements. XBRL-enabled solutions provide methods for normalizing data (ie, eliminating duplicates) across the organization, yet remain highly interactive with both internal and external systems. With XBRL, developers can build tools that can be used in a wide variety of systems, with no need to customize the interface for the company.

The implementation of XBRL for large organizations enables them to:

- Apply business rules to data from disparate sources;
- Gain greater efficiency in applying changes to either data or analysis;
- Enjoy additional transparency and control over enterprise business rules; and
- Perform analysis with a significantly broader pool of data (both from internal and external sources).

When Will XBRL Be Adopted Companywide in Critical Mass?

It will take several years. For many, the business case for XBRL adoption has not been fully justified from a cost/resource standpoint. In the early stages, this justification will be paramount to motivate a move to XBRL.

Who Will be the Leading Adopters for Company-Wide Activities?

We believe the leading adopters of XBRL will be those companies that:

- Need to reduce their time for financial analysis and reporting;
- Have multiple divisions that are in a merger/acquisition process;
- Trade on foreign or multinational exchanges ;
- Want to be perceived as leaders in technology adoption;
- Share data with entities that don't have access to their ERP system;
- Assuming security requirements are met, outsource functions to external partners who not only need to browse, but also access and edit, the corporate data warehouse.

Hitachi Serves the XBRL-Enabled Company

Hitachi has been a pioneer in the XBRL field. As an interactive data solutions provider, the Company offers products and services that tag existing data to facilitate ever- changing business processes It is the ideal partner to provide diverse solution services, software, and know-how for the adoption of XBRL in any organization.

The Wacoal Experience

Hitachi's worked with Wacoal to adopt XBRL for its accounting system. Our solution demonstrates the potential of using XBRL for data and business integration.

Wacoal is one of Japan's leading manufacturers of women's apparel. Like many companies, its IT systems have been added on an ad hoc, as-needed basis. The upshot is a patchwork of 32 independent legacy systems running on multiple platforms, including mainframes, minicomputers, UNIX, and PC servers. Many of these systems are more than 10 years old, and they are disbursed over 36 subsidiaries worldwide. These 32 different business application systems (e.g. purchasing, sales, payrolls, etc.) provided data to 44 disparate accounting subsystems, also running on multiple platforms.

Wacoal adopted XBRL-GL as a common data format and used Hitachi’s XiRUTE Journalizing Engine to automate the processing of data (e.g. journalizing, tax calculation, validation, etc.) from the business application systems to the accounting subsystems that were consolidated into one system.

Benefits of the New System

The new accounting system was successfully launched in April, 2003, and continues to streamline operations at Wacoal. It is also the first commercial XBRL-GL implementation in the world.

The new system has:

- Introduced flexibility into the IT system;
- Improved data quality significantly because of direct system-to-system feeds;

- By complying with the XBRL standard, enabled XML compatibility with other data sources.

Perhaps most important, implementation time was significantly less than with other alternatives, such as ERP. Because the system tags the data in XBRL-GL, a user can extract data using standard queries and report writers without special training or system expertise. Previously, a question about purchasing would need to be routed to a person who had expertise in extracting data from the purchasing system.

Xinba

Hitachi envisions that XBRL will become the *de facto* standard for financial reporting and will be increasingly adopted for companywide information needs. These implementations demand the development of sophisticated interactive data tools for end-users.

To meet these needs, Hitachi has developed and continually improved Xinba, a Microsoft® Excel® add-in for easy importing of XBRL datasets and advanced XBRL analysis. Xinba provides pre-defined as well as customizable templates, avoiding the tedious productivity killer of cut-and-paste. Xinba also allows you to create customizable reports and Key Performance Indicator charts. As the adoption of XBRL advances, Hitachi will continue to develop new offerings and add functionality to existing products to meet the needs of our customers.

For More Information:

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