

XBRL: The Logistics of Moving Data

BY MARC VAN HILVOORDE & GIANLUCA GARBELLOTO

XBRL is often compared to the barcode to exemplify the benefits generated by embracing a standard, and yet the attention of XBRL adopters both in the user and software vendor communities is focused primarily on its use for external and regulatory reporting. But would

a manufacturing company ever consider implementing barcoding for its end products and not for the materials used to produce them? Obviously not. The earlier that bar coding is used in the supply chain, the greater the benefits it brings. Similarly, the earlier that XBRL data standardization is applied in a corporate information system, the more beneficial its introduction will be. “Earlier” in this case means using XBRL to standardize entries, transactions, documents, subledgers, and ledgers. Apart from being crucial for internal reporting processes, these are also needed for external reporting and regulatory filings.

Most people knowledgeable in XBRL will tell you that it’s about moving data or information from one place to another in an electronic format. To actually understand what this means and translate it into your



own environment, however, you need to know what kind of data we’re talking about and what “place” means in this context.

Let’s start with the second part of the description—the word “place.” There are basically two different approaches to moving data: from system to system or from system to person.

Moving data from system to system. The main purpose of XBRL is to facilitate data communication internally within organizations and externally between organizations. It

uses a standardized syntax so that all XBRL-enabled software can receive and process XBRL documents or files. Internal data communication involves representing documents and transactions from the initial entry as they flow through the various ledgers and subledgers and the trial balance up to some kind of end report for either a single entity or through a consolidation process. External data communication can involve different types of transmission: business to government, business to business (banks), or government to government. Of course, “internal” data also can be exchanged with another entity, such as exchanging AP/AR lists with a bank or payroll information with a service provider. These are all within the scope of XBRL.

Moving data from system to person. The XBRL dogma is that “every receiver gets his or her own report.” A large part of making this a reality lies in the flexibility in presenting the data. Different people can receive similar XBRL documents but use different data from it or present similar data differently. Presentation currently isn’t part of the XBRL standard. Work is under way so that, in the future, the XBRL stan-

Table 1

Type of data	How it's represented in XBRL
Aggregated business data	XBRL FR taxonomies
Transactional data	XBRL GL taxonomies framework
Operational data	XBRL GL taxonomies framework and/or other (domain-specific) standard formats that can be represented with XBRL GL
Unstructured data	Not in scope for XBRL—requires other proprietary formats

dard will contain XBRL document presentation, or rendering, information. This will make it possible for a standardized “view” to be communicated independently from a specific system or vendor. That’s not to say it’s impossible to present XBRL information today; rather it isn’t possible to do so without using technology that isn’t part of the open XBRL standard. Vendors with XBRL-enabled software are able to present XBRL data—or information, if you like—in a proprietary format. Also, because XBRL is based on XML, the broadly adopted open Internet standard for sharing and storing data, it can be used in conjunction with XML data presentation standards such as XSL instead of vendor-based proprietary solutions.

Type of data. Now that we know what “place” means, let’s look at the type of data that can be moved from one place to another with XBRL. Each of the following data types is a necessary component of the business reporting supply cycle:

1. Aggregated business data, such as financial statements, fiscal filings, or regulatory reporting.
2. Transactional data, such as a general ledger posting.
3. Operational data, such as orders and invoices.
4. Unstructured data, such as e-mails or Word and Excel documents.

The first three types are structured and can be represented in XBRL. Typical examples of transactional and operational data are customer order entries, purchase orders, job master files (budget/actual), open payables by job, payroll, employee timesheets, inventory stock status, inventory transactions, accounts payable/vendor management, bank management and check reconciliation, and check reconciliation by account. The fourth type, unstructured data, needs to be properly defined (structured) before it can be communicated in XBRL format. Table 1 shows how the four different types of data can be represented with XBRL.

Very few business reports contain just one of these data types. Even financial statements and regulatory reports often contain transactional and aggregated business data, and a simple movement analysis can contain both aggregated and transactional data. Many business reports used for external or management reporting contain different types in the same report. The assumption that there is a clear distinction between high-level summarized information for external reporting and transactional-level information for internal reporting isn’t true. In fact, external reporting can be based on transactional information, and internal re-

porting in a global operating company contains a lot of summarized information.

Financial people and controllers are well aware that high-level summarized information as well as detailed transaction information can be requested and reported in a single report—or set of reports—for both internal and external uses. Simple examples of hybrid reports that contain more than one data type include AR aging reports, where the totals by maturity are detailed in the single transactions that compose them, or an inventory report, where the roll forward from beginning to end balance of each item is detailed in the “in” and “out” transactions for the period.

As relevant as it is to assess which types of data can be represented in a particular format, it’s equally as important to understand how different types of data—represented in different formats—can be converted into a report. XBRL is able to fully support the whole information chain from transactional level up to higher-level summarized information. The summarized information is typically based on Financial Reporting (FR) taxonomies, while the transactional data is represented in the XBRL GL framework.

Both FR and GL taxonomies represent different, though sometimes

overlapping or connected, information in the business reporting supply chain. Instances based on GL taxonomies represent master files, transactional data, and status reports—the underlying data found in business operational and accounting systems. Instances based on FR taxonomies represent reporting data, which is summarized and aggregated for reporting purposes.

The link between aggregated and summarized reporting data and operational electronic data—often represented by different sector-specific XML standards—is defined by the XBRL Global Ledger standard. As regulators, banks, and other organizations begin to request or require XBRL as the digital reporting standard format, an investment in understanding and adopting XBRL GL is crucial in representing all relevant reporting data. Then, and only then, will SEC Chairman Christopher Cox's prediction that "2008 will be a watershed year for interactive data" for all users and different kinds of reporting become a reality. ■

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item if (1) the treatment of the item on the return is or was supported by substantial authority or (2) facts relevant to the tax treatment of the item were adequately disclosed on the return or on a statement attached to the return and there is a reasonable basis for the tax treatment. Remember, special rules apply to tax shelters.

The provision imposes a penalty on any taxpayer filing an erroneous claim for a refund or credit. The penalty is equal to 20% of the disallowed portion of the claim for refund or credit for which there is no reasonable basis for the claimed tax treatment. The penalty doesn't apply to any portion of the disallowed portion of the claim for refund or credit relating to the earned income credit or any portion of the disallowed portion of the claim for refund or credit that is subject to accuracy-related or fraud penalties.

The Small Business Act provides many tax relief provisions, but it also provides for some "meaty" revenue sources. The important question when evaluating new tax provisions is, "Am I getting more money in my pocket, or am I putting more money in the IRS's pocket?" So which way does the scale tilt for you? ■

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denced by the impressive array of speakers already scheduled to participate. Topping the list is IMA President and CEO Paul A. Sharman, ACMA, who will lead a session on management accounting and financial leadership. Also on the program are senior IMA officials and prominent international executives, including the CFO from China Haier (a global consumer electronics and home appliance company) and a speaker from the World Bank International Finance Corporation.

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As always, I welcome your thoughts at jpollara@imanet.org. ■

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better appreciation of the critical role they play in protecting the public.

Additionally, the SEC should be given the legislative mandate to oversee the activities of the hedge fund industry. When the costs and other effects of market volatility and investment failures clearly extend far beyond the boundaries of the "sophisticated" and "high net-worth" individuals that invest in such products, the SEC should provide oversight. ■

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