

# Extensible Business Reporting Language (XBRL)

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## Preview

The Extensible Business Reporting Language (XBRL) is a new XML format with the potential to revolutionize the way in which data is reported, routed, and analyzed. While early-stage XBRL has primarily been used by banks for regulatory reporting purposes, the format's innate flexibility allows it to encompass any form of structured data. Thus, XBRL can make it simpler to derive and exchange extremely accurate data pertaining to a wide range of business activities - whether financial, operational, or transactional in scope. Employing XBRL properly can therefore enable a business to obtain a precise financial view of itself and of its ecosystem, and to customize this view for any internal or external audience.

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## Executive Summary

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The **eX**tensible **B**usiness **R**eporting **L**anguage (XBRL) is a language for the electronic communication of business data.

XBRL offers major benefits at all stages of business reporting and analysis: lowering the costs of capturing business data; improving data quality; enabling data reuse; automating the exchange of data; compressing the time needed to publish data; and providing for flexible, *extensible*, and comprehensive data collection. In short, "XBRL promises to be for business reporting what the Universal Product Code (UPC) has become for retailers - a means of standardizing, managing and simplifying processes."<sup>1</sup>

XBRL is being developed by XBRL International (XII), a not-for-profit consortium operating in 19 jurisdictions worldwide - all working together to build the XBRL language, and promote and support its adoption. Members of XBRL International include:

- Professional Services and Consulting Companies;
- Financial Services and Information Providers;
- Software and other Technology Providers;
- Government and Not-for-Profit Organizations; and
- Accounting and Trade Organizations.

XBRL activity is currently concentrated in the financial sector, where governmental authorities, like the US Securities and Exchange Commission (SEC) and the US Federal Financial Institutions Examination Council (FFIEC), have embraced the language as a means for facilitating financial reporting and financial industry regulation.

## Description

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XBRL allows software vendors, programmers, intermediaries in the preparation and distribution process, and end users who adopt it as a specification to enhance the creation, exchange, and comparison of business reporting data. Business reporting data includes, but is not limited to:

- Financial statements;
- Financial information;
- Non-financial information;
- General ledger transactions; and
- Regulatory filings, such as annual and quarterly reports.

The current specification for XBRL is version 2.1 (XBRL 2.1), which is available for free download at the XBRL International website ([www.xbrl.org](http://www.xbrl.org)).

The concept behind the eXtensible Business Reporting Language is simple. Instead of treating business or financial data as a block of text, XBRL provides each individual data item with an identifying, computer-readable tag. Thus, an item like "company net profit" has its own unique tag. XBRL tags enable the automated processing of business data by computers, which can:

- Recognize the data in a XBRL document;
- Select it;
- Analyze it;

- Store it;
- Exchange it with other computers; and
- Present it automatically in a variety of formats to accommodate a variety of users.

XBRL expedites the processing of business or financial data, reduces processing errors, and permits automatic data validation.

## **XBRL and Financial Data**

XBRL benefits all participants in the financial data *supply chain*, whether producers or consumers.

### **Data Collection and Reporting**

"By using XBRL, companies and other producers of financial data and business reports can automate the processes of data collection. For example, data from different company divisions with different accounting systems can be assembled quickly, cheaply, and efficiently if the sources of information have been upgraded to using XBRL. Once data is gathered in XBRL, different types of reports using varying subsets of the data can be produced with minimum effort. A company finance division, for example, could quickly and reliably generate internal management reports, financial statements for publication, tax and other regulatory filings, as well as credit reports for lenders. Not only can data handling be automated, removing time-consuming, error-prone processes, but the data can be checked by software for accuracy. Small businesses can benefit alongside large ones by standardizing and simplifying their assembly and filing of information to the authorities."<sup>2</sup>

### **Data Consumption and Analysis**

"Users of data which is received electronically in XBRL can automate its handling, cutting out time-consuming and costly collation and re-entry of information. Software can also immediately validate the data, highlighting errors and gaps which can immediately be addressed. It can also help in analyzing, selecting, and processing the data for reuse. Human effort can switch to higher, more value-added aspects of analysis, review, reporting and decision-making. In this way, investment analysts can save effort, greatly simplify the selection and comparison of data, and deepen their company analysis. Lenders can save costs and speed up their dealings with borrowers. Regulators and government departments can assemble, validate and review data much more efficiently and usefully than they have [in the past]."<sup>3</sup>

XBRL promises to make business and financial transactions more transparent by improving the ability of auditors to select and examine relevant data, thus helping to avert the type of business and financial irregularities that have spurred today's global economic recession.

## **Current View**

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XBRL is rapidly gaining acceptance worldwide. "The primary drivers of XBRL's adoption as the

standard for business information have been regulatory bodies:

- "By 2011 every listed company in China, Japan, and the US will have to report to its securities regulator, and on to the markets, using XBRL.
- "A very significant number of financial institutions in EU member states must report in XBRL for supervisory purposes.
- "Stock exchanges around the world are adopting XBRL for company disclosures, including those in India and South Africa.
- "Every company in Spain, Belgium, Singapore, and Denmark either produces its annual accounts in XBRL or will do so by 2011.
- "Within the next 12 months, every business in Australia and the Netherlands will be able to file its tax, statistics, and accounting returns in XBRL.
- "In 2011, every UK company will file its financial statements to the tax regulator using Inline XBRL.
  
- "The International Accounting Standards Committee Foundation (IASCF) has made XBRL taxonomies available for the accounting standards that are approved for use in 110-120 countries."<sup>4</sup>

## United States

In the U.S., the Securities & Exchange Commission (SEC) approved a mandate requiring all companies and mutual funds to use XBRL technology when filing financial reports.<sup>5</sup>

According to then SEC Chairman Christopher Cox, "Interactive [or XBRL] data will help provide investors with the information they need, rather than just a warehouse of forms on which they can try to find it. Interactive data will enable new analysis tools to put key information at every investor's fingertips within seconds, exactly as the investor wishes to see it."

The SEC mandated the use of XBRL for public company reporting and other reporting applications:

- Public Company Reporting – All public companies must file in XBRL format; companies with worldwide public float greater than \$5 billion to comply first starting with period ending June 2009; all other large accelerated filers to comply next starting with period ending June 2010; all other public companies comply with period ending June 2011.
- Risk Return Summary portion of Mutual Fund Prospectus – Mutual funds must begin publishing the risk return summary portion of their prospectuses in XBRL format starting January 1, 2011.
- Credit Rating Agencies – Must begin reporting all ratings actions (initial rating, upgrades, downgrades, etc.) in XBRL format starting in August 2009 (180 days after publishing in Federal register).

## Outlook

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XBRL's clear value proposition and demonstrated history of success combine to indicate a bright future for the framework. It is likely that not only financial institutions but also most enterprises will embrace XBRL, meaning an ongoing increase in the number of XBRL members and in the popularity of XBRL training programs of the kind currently offered by KPMG and Ernst & Young. Accordingly, special familiarity with XBRL will become a necessary accounting and technology expertise in the same way that general familiarity with XML is currently necessary for such functions as enterprise Web development and trading partner management purposes.

The general outlook for XBRL is a transformation from the mandated instances dominant today to voluntary and creative uses of the technology. Companies that use XBRL to improve internal efficiencies and create innovative processes will become more agile and gain competitive advantage. An excellent example of this kind of strategic use of XBRL comes from Deutsche Bank, which uses XBRL to import financial data into a risk analysis system. This project has mitigated Deutsche Bank's risk exposure - a very valuable outcome given that many financial services companies have recently experienced catastrophic breakdowns in risk management.

Companies that act on information faster than their peers win competitive business battles against less agile peers. Finding and sorting that information is a matter for business intelligence, and XBRL has become the framework with the most potential for speeding up the discovery and delivery of financial data in all kinds of contexts. Accordingly, XBRL can be expected to augment the processes not only of companies involved in financial reporting but also of companies looking to obtain competitive advantage based on business intelligence sophistication.

Finally, there is every indication that metadata - data about data, parsed in a way that facilitates easy exchange between systems - is becoming almost as important as data itself. In an age of e-business, data that comes without tags that tell systems where to send that data, and what to do with it, is of dwindling value to the enterprise, since it is manifestly inefficient to have human beings sort through mountains of data. Metadata's importance in financial data, which has to be consumed by audiences ranging from regulators to individual investors, cannot be overstated. From the finance organization's perspective, XBRL-tagged data will be a viable defense against the incomplete, inaccurate reporting that can doom a company with regulators, and cause investors to lose confidence.

## **XBRL 2.1 and Beyond**

"Since the release of XBRL 2.1, [XBRL] specification work has focused on the development of additional modules that enhance XBRL's applications:

- "XBRL Dimensions 1.0, which reached recommendation status in September 2006, allows the authors of XBRL taxonomies to define and restrict dimensional information, such as segments and scenarios, with the benefit of greater reporting consistency and comparability.
- "In June 2009, XII recommended the Formula 1.0 suite of specifications, which provides a syntax for performing calculations, defining assertions and expressing business rules using the data in an XBRL report.
- "Work on Inline XBRL, a standard that allows XBRL instance information to be rendered with the formatting intended by the originator of the information, inside a web page, is approaching recommendation.

- "Work continues on Versioning, a standard that defines the syntax and semantics of a versioning report that lists changes between two different taxonomies, and XBRL GL (XBRL Global Ledger), a module (which is actually a taxonomy) that allows a standardized representation of data typically carried in Ledgers (such as in relational tables)."<sup>6</sup>

## Recommendations

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Within the enterprise, the adoption and use of XBRL requires the commitment of multiple parties at multiple levels.

- **Chief Executive Officer (CEO)** - Move to a data intelligence-oriented paradigm for your enterprise. XBRL is mandated for a few reporting situations, but its entry into the enterprise should be viewed as a chance to alter your entire data intelligence approach. Champion an enterprise environment committed to data speed, data transparency, and data sharing. The age of closed systems and siloed data is over.
- **Chief Information Officer (CIO)** - Whenever your enterprise creates or processes shareable data, ask yourself how you can speed up the process of shuttling this data between your own disparate systems, with business partners, and with regulatory agencies. This may involve global Enterprise Application Integration (EAI) deployments, the tactical use of frameworks such as XBRL, and many other discrete projects. Whatever the exact approach, the point is to make shareability a meta-property of enterprise data.
- **Chief Financial Officer (CFO)** - Map all current reporting processes and create a plan for achieving XBRL compliance within each process, making business report writers responsible for acquiring XBRL expertise. Doing so properly will lessen the traditional pressure of "crunch time" reporting, and transform the practice of financial reporting into a source of business intelligence.
- **Process Owners and Managers** - In highly structured situations, such as call reporting for banks, the path to XBRL compliance is well-trodden. However, there are plenty of other reporting and data sharing processes that will move to easy shareability in the future. Query your software providers as to whether their products can produce XBRL documents, and determine their vision about the future of data sharing, both in the financial domain and beyond. This will help to align your technology partner strategy with the company's overall strategic commitment to data shareability.
- **Finance and IT Employees** - There is an ongoing convergence between line-of-business pursuits (such as finance and accounting) and IT functions designed to support those pursuits. Accordingly, XBRL is a job skill that will be relevant to accounting and finance professionals as well as to dedicated IT workers. Pursuing training and certification in XBRL will allow you to take the front line in deploying mission-critical data reporting and exchange projects.
- **Consultants** - Currently, XBRL-oriented business reporting is a niche practice for consultancies, but the growth of the market will necessitate developing or adding XBRL expertise. As XBRL becomes a foundational finance process, management, IT, and business process outsourcing consultants will all ramp up their XBRL practices. This will improve the career chances of entry-level consultants trained on XBRL.

## References

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<sup>1-3</sup> XBRL International.

<sup>4</sup> "XBRL: Towards a diverse ecosystem." XBRL International Standards Board. February 2010:7.

<sup>5</sup> Melissa Klein Aguilar. "SEC Mandates XBRL Filings by July 2009." Compliance Week. December 23, 2008.

<sup>6</sup> "XBRL: Towards a diverse ecosystem." XBRL International Standards Board. February 2010:6.

## Web Links

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US Securities and Exchange Commission: <http://www.sec.gov/>

XBRL International: <http://www.xbrl.org/>

XBRL US: <http://www.xbrl.us/>

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