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Web-Enabled Business Reporting

For The Banking Industry

SEPTEMBER 2002

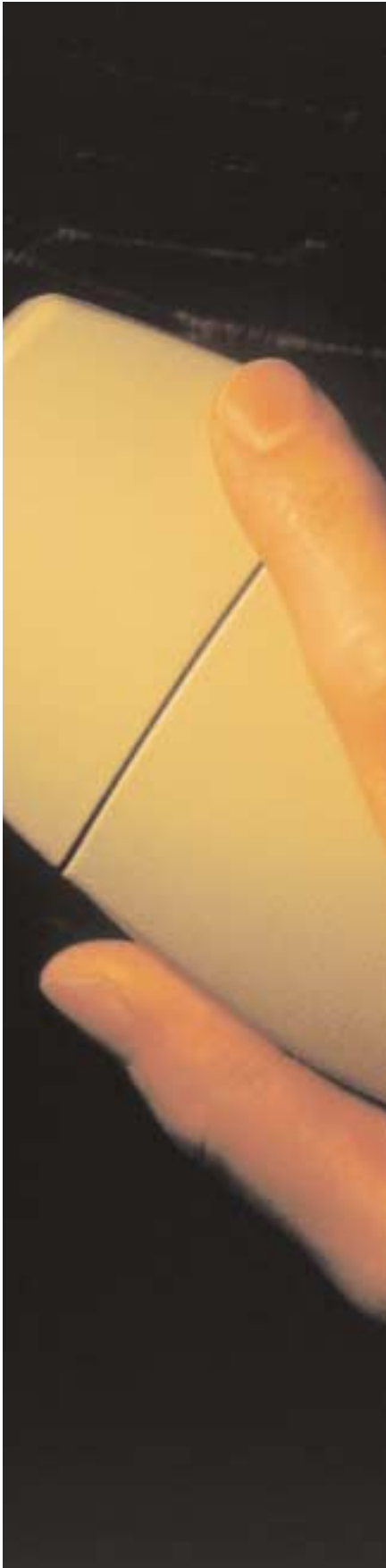


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Purpose

This whitepaper was developed in order to contribute to the current market dialogue on identifying best practices to improve the business reporting environment. Ernst & Young, Morgan Stanley, and the Federal Deposit Insurance Corporation are members of the not-for-profit XBRL consortium (XBRL.org).

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Foreword

Management today needs to reassess its business reporting processes in light of recent market changes. Increased economic, market and regulatory pressures are requiring companies to accumulate and publish information to a myriad of internal and external stakeholders in greater frequency, detail, and variety of electronic formats. These ever-increasing demands on the reporting process are placing additional stress on a business decision environment that can be based on outdated data, incomplete (even sometimes inaccurate) information, and expensive and cumbersome proprietary reporting structures.

Organizations today are looking at how the Internet can bring the long-heralded promises of ‘better, faster and cheaper’ to business decision making and specifically, business reporting. An emerging technology standard, Extensible Business Reporting Language (XBRL), promises to web-enable the business reporting process for report preparers and users. A business-reporting document becomes machine readable (i.e., a computer can read the data, search for information, or perform calculations) by attaching an identifying XBRL tag to each piece of data. The adoption of XBRL promises to help companies make faster and better decisions. Additionally, widespread adoption of XBRL will permit financial analysts, investors, accountants, government agencies, internal users, and other interested parties to access, compare, and analyze data in ways that currently are not practical or even possible. This will lead to more efficient capital markets that, in turn, may reduce capital costs.

Although the market adoption of XBRL as a standard faces various technical, regulatory and administrative hurdles, and its widespread usage may take several years to establish, now is the time to understand XBRL. Early XBRL adopters will realize economic benefits by participating in the creation of this new software-readable standard. Forward-thinking organizations looking to gain competitive advantage are already leveraging their efforts in pilot projects inside their organizations. For public companies, the timing couldn’t be better. As a result of the Sarbanes-Oxley Act of 2002 and accelerated SEC filing deadlines for Forms 10-K and 10-Q, many organizations are currently re-examining their financial reporting disclosure processes and controls.

We encourage you to evaluate how your organization can utilize XBRL in external and internal business reporting activities in order to bring the promised productivity benefits to both the market as a whole and to your organization.



What is XBRL?

XBRL, the financial and operational business reporting offshoot of the Extensible Markup Language (XML), is a freely licensable open technology standard which makes it possible to store and/or transfer data along with the complex hierarchies, data-processing rules and descriptions that enable analysis and distribution.

Before XBRL, reported data—whether in online digital formats such as the hypertext markup language (HTML) for web pages, as attachments (e.g., Adobe Acrobat or Microsoft Word), or on paper—was little more than a photocopy. That is, the data could be read by humans, but not easily or quickly incorporated into other electronic mediums. However, with XBRL, it makes data “smart.” It determines how information is stored and how software presents, manipulates, and exchanges that information using a set of standards and a family of taxonomies (dictionaries of terms). Therefore, recipients know all of the pertinent context of the data—for example, whether the information is segment information, part of an audited statement, or another type of business data.

For more information on XBRL and the XBRL International Consortium, please visit xbrl.org.



How XBRL Will Transform Business Reporting: Use Cases

As systems and software applications become XBRL-enabled, the efficiency and effectiveness of all business reporting processes is very likely to improve—including external data distributions/transfers aimed at investors, analysts, borrowers, tax agencies, regulators, the general public and intra-organizational transfers of financial and operational information.

As XBRL is being positioned to become the primary format for delivering business-reporting content over the Internet, XBRL will likely be used in four important business reporting areas by the banking industry:

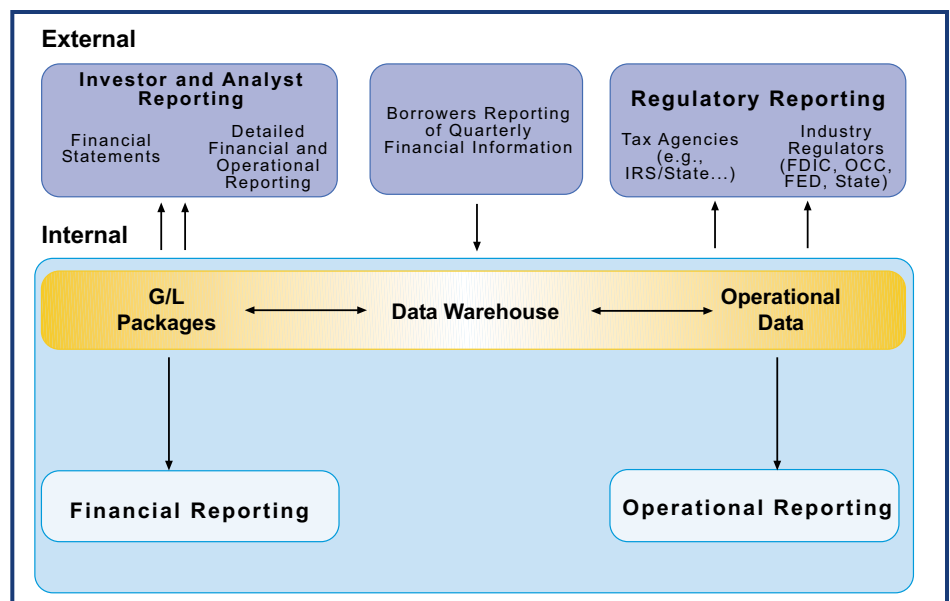
- 1 *Borrowers Reporting* – Borrowers submitting financial information to lenders.
- 1 *Investors Reporting* – Banks reporting their financial statements and other operational information to investors and analysts.
- 1 *Regulatory Reporting* – Regulators processing filings such as quarterly Call Reports.
- 1 *Internal Reporting* – Dissemination of periodic company performance.

It is also likely that once depository institutions XBRL-enable their systems, they will seek to further leverage their investments for internal management reporting of financial and operational information and analysis of borrower financial information for risk-management and other purposes.

Bank Industry Use Cases

The Banking Industry was selected to articulate the expected uses and value of XBRL because of the numerous characteristics which make this industry ideal to benefit from web-enabled business reporting. However, most of the uses and benefits discussed apply to other industries as well.

Banks Business Reporting Processes



Use Case #1—Borrower Reporting: Improving the Collection and Use of Borrower Financial Reporting

Over the years, banks have instituted significant business processes around the collection, normalization and analysis of borrowers' financial information. This analysis begins at the time a loan is initiated and continues over the life of the loan as the bank monitors a borrower's credit worthiness. Over time, however, these processes typically are plagued with technical difficulties and bureaucratic inefficiencies. XBRL promises to break down these barriers.

Today's Processes and Problems

Typically, banks employ a process that includes the following steps:

- 1 Borrowers' systems generate quarterly financial information, which is then converted into a standard format as necessary.
- 1 Borrowers' quarterly information is sent to depository institutions via postal service or e-mail.
- 1 Banks receive financial information in many formats (Word, Excel, PDF) and, in most cases, manually rekey the data into its databases.
- 1 An analytical software tool (e.g., Moody's KMV) reads data from the bank's database.
- 1 Banks evaluate and act on the information.

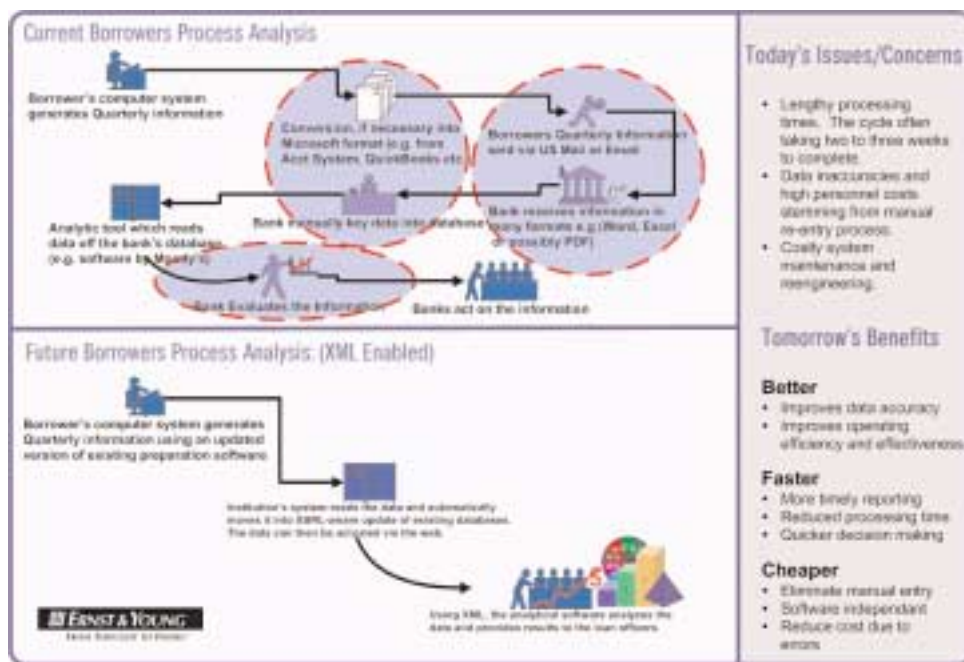
This complex and time-consuming process creates difficulties at every turn, forcing institutions to grapple with:

- 1 Lengthy decision-making, since processing often takes two to three weeks to complete.
- 1 Data inaccuracies and considerable personnel costs stemming from manual re-entry processes.
- 1 Costly system maintenance and reengineering requirements.

Tomorrow's Processes and Benefits

XBRL will allow stakeholder institutions to significantly improve the efficiency and effectiveness of their key business-reporting processes:

- 1 Borrowers' systems generate quarterly XBRL-tagged data using an updated version of its existing accounting software.
- 1 XBRL data is submitted to the institution via the Internet.
- 1 Banks' systems read the data and automatically move it into an XBRL-enabled update of its existing database.
- 1 Using XBRL, banks' analytical software analyzes the data and provides results to loan officers.





With XBRL, **key business reporting processes improve** because the technology:

- 1 Improves quality and accuracy of data obtained from borrowers and enhances banks' decision-making effectiveness.
- 1 Enables machine transfers of reporting information.
- 1 Allows reporting to be interactively prepared and used more frequently.

XBRL also helps **lower the cost** of:

- 1 Borrowers' compliance efforts with institutions' data-submission requirements.
- 1 Banks' processing requirements (i.e., banks save time and resources currently spent rekeying borrowers' data).

And finally, XBRL helps **speed**:

- 1 Borrowers' processing times (e.g., developing schedules, distributing data).
- 1 Banks' cycle times related to this process.

Use Case #2—Investor Reporting: Giving End Users What They Want

XBRL promises to transform investor relations by allowing companies to publish and process financial information the way investors, analysts and other stakeholders want to publish and process them (i.e., in a format that can be readily obtained via an investor relations web site) and at a far lower cost than is currently possible.

Essentially, XBRL gives investors, analysts, and other interested parties a standardized method for gaining more transparent access to financial-reporting data, without changing the amount or detail of the information being disclosed by the bank, on a regular basis. This increased transparency—without requiring additional disclosures, rekeying of data and cross-platform formats—should ultimately contribute to a lower cost of capital.

Today's Processes and Problems

Without XBRL (the current state):

- 1 It is difficult for users to review/assimilate/analyze financial data or to extract relevant information, even when data is drawn from reports issued by the same institution.
- 1 Quarterly reporting has become very rigid (e.g., reporting quarterly) instead of being event/risk driven.
- 1 Institutions often have to scale back the extent of the information being presented because of format limitations.
- 1 It is difficult to highlight/emphasize certain information.
- 1 Financial reports frequently exclude marketplace (competitor) comparisons.
- 1 Investors and analysts have difficulty benchmarking results against those of competitors.

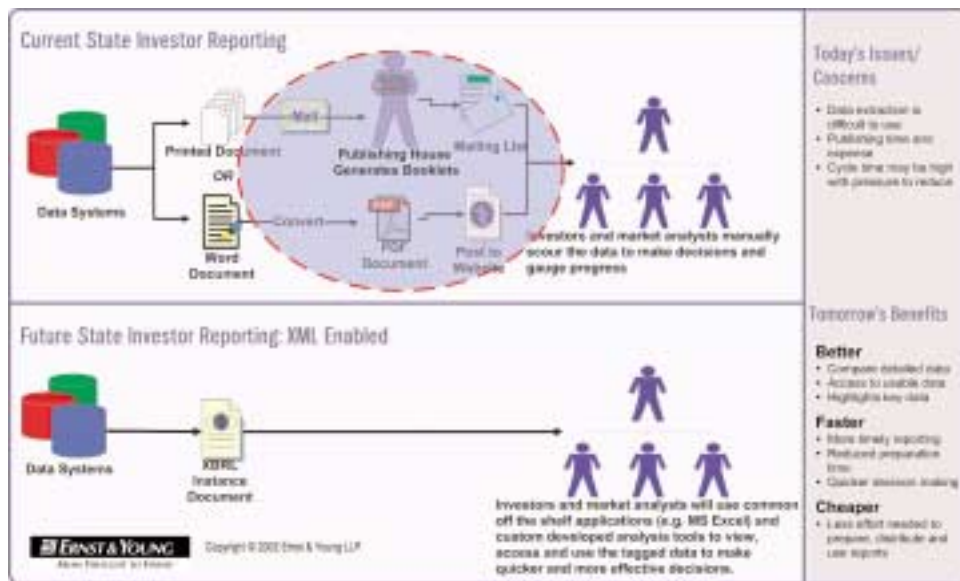
Tomorrow's Processes and Benefits

By contrast, substantial benefits accrue with the introduction of XBRL:

- 1 Users can access the financial results they most want to see, using the productivity tools and data formats they want to use. Results can be compared/benchmarked more easily against data published in prior or future reports, or in those issued by competitors.

“...[financial service] companies can reduce their publishing expenses 46%, by adapting an XML-centric means for document development, assembly, and distribution.”

ZapThink,
March 2002,
Financial Services
XML Report



- 1 Investor relations can publish financial results in a multitude of ways, including interactive Web sites (i.e., enumerate's Numerator! Publish), which will allow them to more effectively communicate pertinent information and analysis to investors and market analysts—and to do it more easily and less expensively than in today's more limited formats.
- 1 Computers can automatically identify and then process the data, reducing the need for all stakeholders to operate on the same platform, or rekey or reformat the data.
- 1 Given the ease with which data can be published and used, more information—and at more frequent intervals—can be made available, thereby enhancing the value derived by the end user.

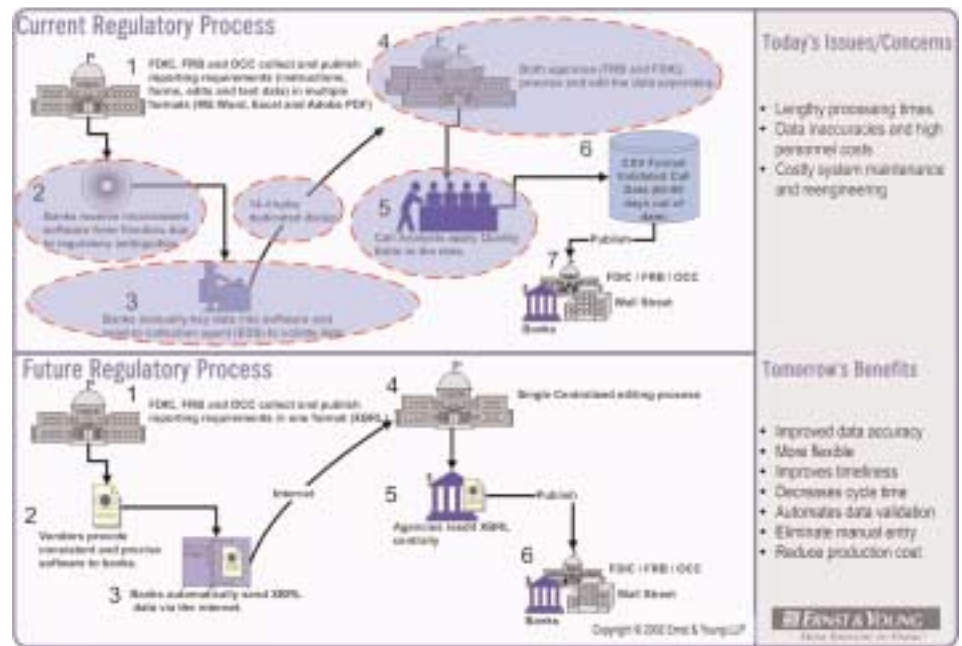
Use Case #3—Regulatory Reporting: Removing Inefficiency

Banks, as well as financial service companies as a whole, spend a significant amount of time reporting to regulators, who in turn are burdened with processing the reported information. Both sides are eager to eliminate any inefficiencies. XBRL promises to improve the efficiency for both sides.

Today's Processes and Problems

Currently, the collection, processing, and distribution of bank regulatory reports are inefficient—in large part because reporting forms, instructions, and edit rules are constructed, collected, and distributed using an unstructured and non-integrated digital format.

Often, reporting forms, instructions, and edit rules are constructed using office-automation products. While these initially offered big improvements over paper collection processes, they do not meet today's business needs—nor do they offer the advantages of XBRL. Under the current arrangement, updated or new schedules are sent to banks and regulatory reporting software vendors in a format that often requires interpretation and manual updating. Financial institutions using the updated software packages often complete the reports manually and upload the results using a dial-up line. Upon receipt by the regulatory agency, the submitted reports are reviewed and uniformly edited for the first time. Financial institutions and bank regulators then converse back and forth until all edits and anomalies are corrected. Once the reports are completely processed, they are distributed to the general public via paper, PDF, web page, or downloadable formats (like CSV). This process does not lend itself to timely, sophisticated analysis.



Many participants in the quarterly financial reporting chain are frustrated with the status quo. Financial institutions invest considerable resources to construct, edit, and analyze financial information, while software vendors make substantial time commitments in updating their products. And because editing is not uniformly done at the point of origin, editing processes contained in the software products are likely to be inconsistently applied.

Tomorrow's Processes and Benefits

The Federal Deposit Insurance Corporation (FDIC), along with other members of the Federal Financial Institutions Examination Council (FFIEC), is working on a project that will modernize the U.S. Call Report collection process; and XBRL is expected to be a core component. The FDIC estimates that the new process will significantly reduce processing time, primarily through the standardized distribution of data structure, validation criteria, and instructions to banks and software vendors. The FDIC has developed a proof-of-concept product that demonstrates its usage. The Call Report schema, edits, and instructions will be provided to Call Reporting software vendors and banks for incorporation into their products.

Use Case #4—Internal Financial & Operational Reporting: Migrating to e-Reporting

As banks enable their business reporting information for external parties (investors, regulators, market analysts, etc.), it is likely that many of them will seek to leverage the XBRL-enabled data for internal reporting as well. This represents a true migration to e-reporting, with one set of data used to meet all internal and external reporting needs. From the first recording of a transaction, to its payment and clearing through the banking system, data can be stored electronically, located with ease, and selectively displayed.

XBRL will give every company better quality information with which to evaluate its own performance and that of its trading partners; moreover, they will have the information early enough in the business cycle to affect outcomes.

Today's Processes

Currently, most banks use the following internal reporting process:

- 1 Data systems (financial, operational and others) are consolidated in a monthly report.
- 1 E-mail and/or hard copy is sent to senior and mid-level executives.
- 1 Management uses data to make decisions and gauge performance.

The most significant improvement in this process over the last decade has been the advent of e-mail. However, banks still must:

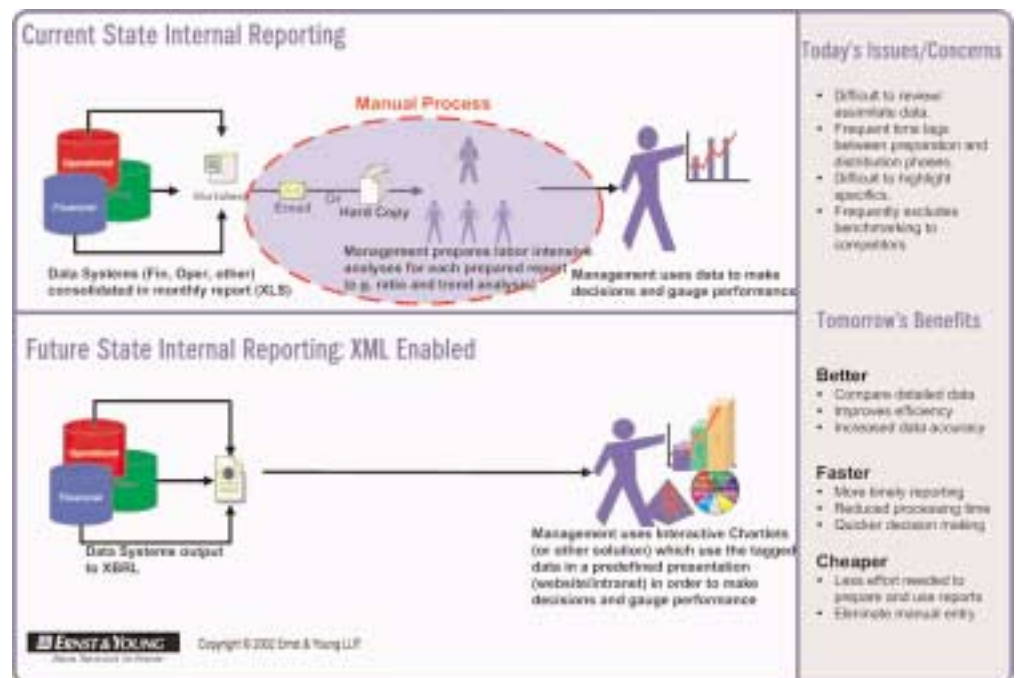
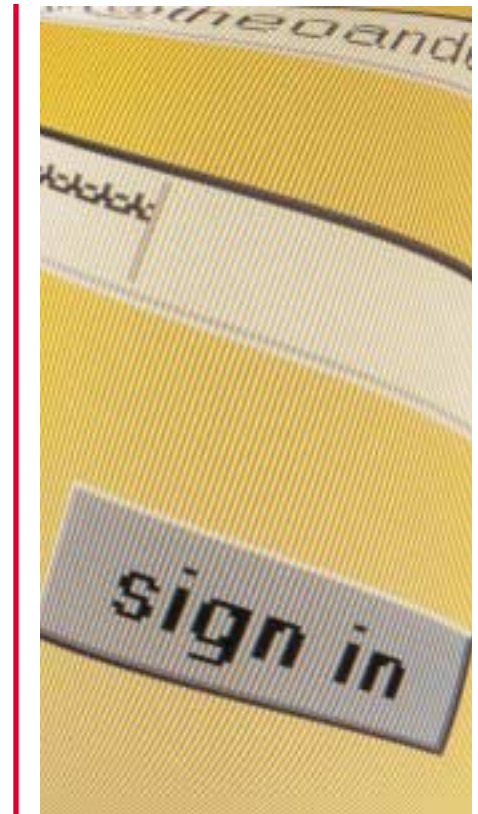
- 1 Review/assimilate/analyze large amounts of financial and operational data to extract relevant information.
- 1 Rely on/transmit outdated information, as reports frequently include information from various sources and are not distributed until all of the information is available.
- 1 Scale back the extent of the information being presented because of format limitations.

Tomorrow's Benefits

As these developments unfold, companies will begin to think of their financial data as intellectual property and will treat it as financial media, making it available with built-in feedback loops to find out more about how the data is being used. With this information in hand, organizations can continuously improve their reporting processes.

As a result:

- 1 Reports can be prepared selectively and/or more frequently. Thus, some reports may be uploaded weekly instead of following the common monthly distribution patterns.
- 1 Users can more easily work with the data. Thus, static graphs can be replaced by interactive charts and tables (i.e., enumerate's Numerator! Publish) and users won't need extensive training or advanced skills to get desired results.
- 1 Operating efficiency and effectiveness is likely to improve as data becomes more accurate; this, in turn, may improve decision-making.
- 1 Users can devote less time to reading, comprehending and analyzing data.
- 1 Preparer processing times for publishing and distributing documents will be reduced.
- 1 Cycle time is shortened, so reports can be disseminated more quickly.
- 1 Banks can expend less effort and fewer resources to meet reporting obligations.





Conclusion

Web-enabling business-reporting processes holds wide promise. We firmly believe that broad adoption of this technology will satisfy the diverse and critical needs of many stakeholders, including borrowers, investors, regulators, analysts and the general public. XBRL will enable banks to remove the heavy weight of their reporting requirements.

Benefits to Business Reporting	Stakeholders		
	Report Users		Report Preparers
	Internal	External	
BETTER: More Effective Use			
Improves Information Quality and Accuracy	√	√	
Improves Operating Efficiency and Effectiveness	√	√	
Improves Ability to Compare Information and Disclosures	√	√	
Information is More Easily Navigated	√	√	
Information is More Accessible	√	√	
FASTER: More Quickly and Often			
Report 'Cycle Times' are Reduced	√	√	
Decisions are Made and Acted Upon More Quickly	√	√	
Reports and Disclosures can be Prepared and Updated More Frequently	√	√	
Efforts to Read, Comprehend and Analyze Data Are Reduced	√	√	
CHEAPER: Less Resources Required			
Less effort is Needed to Use and Prepare Reports	√	√	√
Need to Reformat and Re-Key is Reduced	√	√	√
Software Independent	√	√	√

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What Should I Do?

As XBRL gains acceptance, Banks should:

1. Identify business-reporting areas that could benefit from XBRL.
2. Determine whether your ERP or other financial software applications are yet XBRL-enabled.
3. Assess XBRL-enabling a key reporting process through a pilot program.

For more information, visit www.ey.com/xbrl, www.morganstanley.com/xbrl, or call Paul Penler at (216) 583-8310 or Mark Schnitzer at (212) 761-5190.

As with many innovative technologies, early adopters stand to gain the biggest competitive advantages. And indeed, the industry's leaders are already finding ways to incorporate this new technology into internal processes and operations—even with many technical, regulatory and administrative hurdles still to be cleared. We urge you to begin to consider the ways in which XBRL can impact your organization.

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