

# Catching the Next Wave of the BI Movement

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## Presentation Information

- **Author: Stephanie Lyon**
- **Company: Lyon Technologies, Inc.**
- **Track session title**
  - **Catching the Next Wave of the BI Movement**
- **Track session description**
  - Each and every day, organizations are increasing their use of business intelligence to improve performance and reduce costs. BI systems are no longer nice to have, but are essential to business success. These systems are being used not only for strategic planning, but also for driving day-to-day business operations. To keep your BI knowledge up to date, come explore three specific emerging technologies in the BI industry: XBRL, XMLA, and RDL. Gain an understanding of these technologies and their value propositions, and hear about other trends appearing at many "early-adopter" companies today that are likely to become mainstream in the future.

## Topics

- An overview of XBRL
- Q&A
- An introduction to XMLA
- Q&A
- The details of RDL
- Q&A
- Open discussion

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## An Overview of XBRL

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### *The problem*

- **Most businesses interact with a wide range of internal, external entities**
  - Individuals or organizations with an interest in the financial management of the business
- **To name a few**
  - Bank regulators, insurance regulators, stock exchange regulators, statistics bureaus, stock exchanges, tax offices, commercial Lending banks, credit insurance and financial information providers, corporate reporting, accounting firms, healthcare organizations, application software companies



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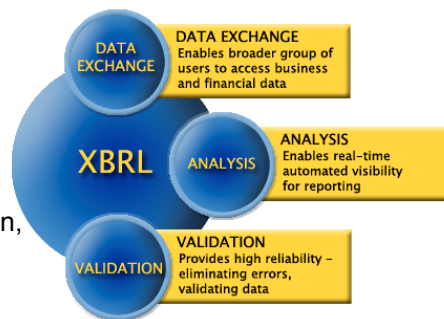


## The problem

- **Most financial analytic software has assumed that the delivery of a financial report is the end rather than the beginning of a process**
  - Report outputs need to be aggregated
  - Report data needs to be formatted into specific layout
- **Financial community is consistently frustrated by inefficient reporting processes**
  - Lots of manual re-entry
  - Extensive cost in time and effort of manipulating report data

## The solution

- **XBRL (extensible business reporting language)**
- **Definition**
  - A royalty-free, open specification that uses XML data tags to describe financial information
  - An XML-based standard that describes financial data and facilitates the creation, distribution, and reuse of business reports



## *XBRL International*

- **Purpose**
  - Promote business reporting language standardization with XBRL and its application all over the world
  - More than 250 members including International Accounting Standards Board (IASB) and other entities in the financial information supply chain
- **Membership**
  - American Institute of Certified Public Accountants; Aucent Corporation; BDO Seidman; Cisco Systems; Cognos Incorporated; Deloitte & Touche; EDGAR Online, Inc.; Ernst & Young, LLP; Federal Deposit Insurance Corporation; Fujitsu Limited; Hitachi America, Ltd ; Hyperion Solutions Corp; iLumen; Informatica Corporation; KPMG, LLP; Microsoft Corporation; Moody's KMV; Morgan Stanley; National Association of State Auditors, Comptrollers and Treasurers; Oracle Corporation; Peoplesoft, Inc.; PricewaterhouseCoopers, LLP; RIA; RR Donnelley; SAS Institute Inc.; Thomson Financial; Thomson-PPC

## *Advantages and benefits*

- **Accountants**
  - Obtain more rapid and reliable data on company financial performance
  - Greatly reduce effort and costs in gathering and analyzing data
  - Simplify and automate tasks
  - Focus effort on analysis and value-added work
  - Make better use of software to improve efficiency and speed
- **XBRL can reduce effort, speed up, and increase reliability in accounting and auditing tasks**



### *Advantages and benefits*

- **Banking, loan and credit management**

- Obtain data quickly and reliably via automated reporting
- Reduce costs in processing data
- Compare and analyze financial information much more reliably and effectively using automated processes
- Track financial performance more quickly and efficiently
- Reach decisions more confidently and provide a quicker response to clients



### *Advantages and benefits*

- **Companies**

- Save costs by preparing data in one form and generating many outputs quickly and automatically
- Avoid re-keying of data and other manual tasks
- Consolidate results across divisions and subsidiaries
- Improve accuracy and reliability
- Focus on analysis, forecasting, and decision making rather than laborious tasks such as compiling and preparing data
- Simplify process and reduce the costs involved in regulatory reporting



### *Advantages and benefits*

- **Financial information companies**

- Obtain company financial data in a standardized form
- Reduce costs by automating aspects of the gathering and storage of financial data
- Switch efforts from routine data gathering to analysis
- Provide a faster, clearer, deeper, and more accurate view of company financial performance
- Produce richer and more usable products



### *Advantages and benefits*

- **Investment analysis / stock exchanges**

- Much greater transparency, clarity, and consistency in financial data
- Ability to handle and compare a range of companies and deeper set of information
- Use more powerful software tools for analysis, comparison, and benchmarking
- More efficient means of finding specific company data
- Ability to select data from a variety of companies within seconds for comparison and analysis



- **XBRL can help the analyst community provide quicker and better quality investment advice and decisions**

### *Advantages and benefits*

- **Regulators**

- Data can be entered automatically into systems without re-keying, reformatting or other "translation" effort
- Reduce costs by automating routine tasks
- Quickly and automatically identify problems with filings
- Analyze and compare data much more quickly, efficiently, and reliably
- Monitor data and reach judgments with greater speed and confidence
- Focus effort on analysis, decision-making, and dealing with counterparties rather than on data manipulation
- Provide faster and focused responses



### *Advantages and benefits*

- **Software companies**

- Adopt data standard for transferring business and financial information, avoiding the commercial conflicts caused by competing proprietary standards
- Create software to support the preparation, publication, and collection of data in XBRL
- Create software to select, compare, and analyze financial data in XBRL



## XML projects around the world

- **North America**

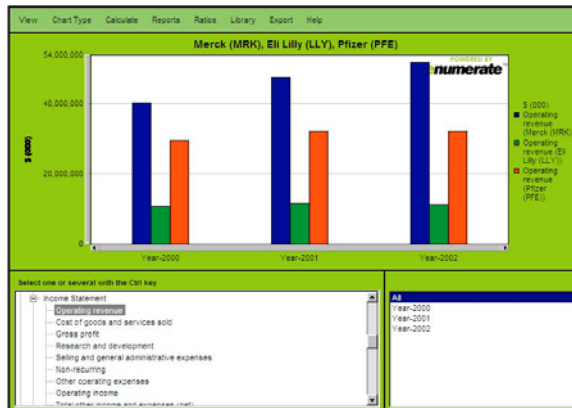
- Regulatory reporting by US banks
- SEC assessing benefits of XBRL filings
- Microsoft Office Tool for XBRL provides the ability to download, view, and perform some limited analysis of XBRL documents in Excel
- UBmatrix™: Automator XBRL automates the exchange, analysis and validation of business and financial information
- Enumerate®: application allows customers to compare and analyze data using XBRL



## XML projects around the world

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### *XML projects around the world*

- **Europe**

- The UK Financial Services Authority, responsible for regulating all financial services companies in the country, is adopting XBRL for all regulatory reporting
- DecisionSoft: DecisionSoft's XBRL Toolkit is a suite of tools enabling the rapid development of high-level XBRL applications

- **Asia and Pacific**

- KOSDAQ Stock Market pilot project has led to the creation of an innovative web service through which investors and others can analyze the performance of companies listed on KOSDAQ
- Fujitsu: Interstage XBRL Processor is an application development and runtime environment for building and deploying full-feature, industrial strength XBRL applications

### *Current status*

- **Specification**

- Version 2.1 was published at the end of 2003

- **Usage**

- XBRL remains in the early adopter section of the technology utilization curve but the income statements, balance sheets, and cash flow statements of more than 12,000 public companies are already available in XBRL format online
- Not all business applications output financial data in XBRL format
- Analytic solutions that manipulate XBRL data are few

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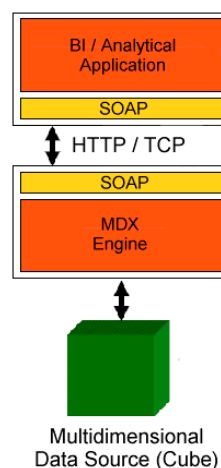
## The problem

- **Limited options for querying multidimensional engines**
  - Developers have been able to use a variety of vendor APIs or Microsoft's OLE DB for OLAP (ODBO)
  - ODBO is only available on Win32
  - Java version of MD-API was never accepted by server or client vendors, so non-Win32 application servers haven't had any multivendor APIs at all



## The solution

- **XMLA (XML for Analysis)**
- **Definition**
  - A Simple Object Access Protocol (SOAP)-based XML API designed to standardize the data access interaction between a client application and a data provider on the web
  - Allows corporate developers, third-party tool vendors, and other partners to query analytical data providers in a standard way, as it has been possible to do with SQL-based relational databases



### *XMLA Advisory Council*

- **Purpose**
  - Formed in April 2001 to develop and define the XMLA specification
    - Co-chaired by BI platform vendors Hyperion, Microsoft and the SAS Institute
  - Currently has 27 member companies
- **Membership**
  - Angoss, Applied OLAP, Inc., Applix, ArcPlan, Aspirity, Bandwiz, Business Objects®, Cognos, Comshare, Cosworth, Crystal Decisions, DSS Lab, Hyperion, Harmony, INEA, Microsoft, Microstrategy, MIS AG, ProClarity, SAP AG, SAS Institute, Simba Technologies, SPSS, and Temtec

### *Advantages and benefits*

- **Customers**
  - Gain the ability to protect server and tools investments and ensure that new analytical tools will work cooperatively together
- **Developers**
  - Gain the ability to leverage skills and use open access XML-based web services, eliminating the need to program to multiple APIs and query languages
- **Software vendors**
  - Able to reduce complexity and costs for development and maintenance by writing to a single access interface

### *Vendors shipping XMLA-compliant products*

- **Hyperion**
  - Essbase V7 supports XMLA and the MDX query language, enabling power users to conduct more sophisticated analyses
- **DigitalAspects**
  - XMLA Provider allows users to integrate data from any XML for Analysis compliant server into familiar desktop reporting tools
- **Microsoft**
  - The Microsoft® XML for Analysis SDK supports data access to analytical data sources residing on the Web
- **Simba Technologies**
  - Provides an SDK that enables you to build an ODBC Driver, JDBC Driver, or OLE DB Driver for non-relational data access to proprietary data sources

### *Current status and timeline*

- **2000**
  - Microsoft proposes XMLA standard
- **2001**
  - XMLA Specification version 1 published
  - XMLA SDK version 1.0 released by Microsoft
- **2002**
  - SAS Institute becomes XMLA Advisory Council co-chair
  - XMLA Specification version 1.1 published
- **2003**
  - First public demonstration at TDWI's World Conference
- **2004**
  - XMLA SDK version 1.1 released by Microsoft

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- **What's in a report?**

- Data or information on how to obtain the data as well as the structure of the data
- Layout or formatting information that describes how the data is presented
- Properties such as author, parameters, images, etc.



*The problem*

- **Lack of report portability**

- Most vendor applications use a proprietary format for representing the definition of a report
- Vendors that provide a report execution environment usually only support their own design tools
- This means that reports cannot be easily moved between different reporting implementations
- Few options are available for choosing new tools that work with their existing execution environments

### *The solution*

- **RDL (Report Definition Language)**
- **Definition**
  - An XML-based schema for defining report content
- **Goal**
  - Promote the interoperability of commercial reporting products by defining a common schema that allows interchange of report definitions
  - Designed to be output format neutral, e.g., reports defined using RDL should be able to be output to a variety of formats including web and print-ready formats or data-focused formats like XML
- **Developed by**
  - Microsoft

### *Vendors and RDL compliance*

- **Microsoft**
  - Part of SQL Server 2000 Reporting Services
- **MIS AG**
  - Will integrate the RDL standard into MIS PLAIN product
  - “MIS and Microsoft share a common vision of bringing business intelligence to the desktop of every decision-maker. Reporting Services is a major step in implementing this goal. With RDL, Microsoft defines a powerful standard for exchanging reports—and ultimately promoting collaboration—among different applications.”  
—Michael Danninger, CTO, MIS AG, Germany.
- **Cognos and Business Objects**
  - Cognos “will support RDL at some time in the future”
  - Business Objects “considering RDL”  
James Niccolai, ComputerWorld, January 2004

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## Contact Information/Discussion

*Questions? Contact us anytime!*

- **Electronic copy of presentation available on the Business Objects Online Customer Support (OCS) web site and on [www.LyonTechnologies.com](http://www.LyonTechnologies.com)**
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## Need More Information?

- **XBRL**
  - **XBRL International web site**
    - <http://www.xbrl.org>
  - **SEC announcement**
    - <http://www.sec.gov/news/press/2004-97.htm>
  - **Edgar Online**
    - [http://www.edgar-online.com/investor/news/072904\\_1.asp](http://www.edgar-online.com/investor/news/072904_1.asp)
- **XMLA**
  - **XMLA SDK**
    - <http://www.microsoft.com/downloads/details.aspx?FamilyId=7564A3FD-4729-4B09-9EE7-5E71140186EE&displaylang=en>
  - **“The New OLAP APIs”**
    - [http://www.intelligententerprise.com/020917/515feat2\\_1.html](http://www.intelligententerprise.com/020917/515feat2_1.html)
- **RDL specification**
  - <http://download.microsoft.com/download/4/7/d/47d7d117-9f91-49ad-98d5-46aa6f3251a8/RDLDec03.pdf>

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