Workshop on XBRL

Presented at –
WIRC – ICAI, Mumbai
By –
IRIS Business Services Ltd.
Objective

- To get introduced to the concept of XBRL
- To understand working of XBRL
- To identify the role of professionals in XBRL supply chain
Workshop structure

Macro View
- A Quick Technology Tour
- Introduction to XBRL

Inside the specification
- Taxonomy
- Instance document

Creation and Usage
- Creating instance document
- Rendering Information Captured in XBRL
Session 1

INTRODUCTION TO XBRL
Use of IT in financial and business reporting

- Spreadsheets revolutionized data analysis
- Documents / PDFs – Creating reports and reviewing
- Databases – Storing and deep querying

- Internet / HTML – Data exchange and collaboration
- XML – Storage and exchange of data

Shift from proprietary systems to standards based, intelligent data driven systems
Sample text file separated “I”
Sample “XML” file

```xml
<?xml version="1.0" encoding="utf-8" ?>
<ShareHoldingPattern>
  <Identifiers>
    <ScripCode>654321</ScripCode>
    <NSESymbol>TEST</NSESymbol>
    <Company>
      <![CDATA[ TEST COMPANY ]]>  
    </Company>
    <DateBegin>31-Dec-2006</DateBegin>
    <DateEnd>31-Mar-2007</DateEnd>
    <QtrCode>0</QtrCode>
    <SystemDateTime>25-10-2007 10:52:56</SystemDateTime>
    <FileName>N</FileName>
  </Identifiers>
  <StatementShareholdingPattern>
    <ShareholdingPromoterPromoterGroup HeadLine_Type="M" Category_ID="A_1" HeadLine_ID="4">
      Record_ID_Category_Of_Shareholder="18" Record_ID_CategoryCode="17" Record_ID_NumberShareholders="19"
      Record_ID_TotalNumberShares="20" Record_ID_NumberSharesDematerializedForm="21"
      Record_ID_TotalNumberSharesPercentagAB="23" Record_ID_TotalShareholdingPercentageTotalNumberSharesPercentagABC="24"
    </ShareholdingPromoterPromoterGroup>
    <Indian Label="Indian" Record_ID_Category_Of_Shareholder="18" Category_ID="A_2" CategoryCode="(I)">
      Record_ID_CategoryCode="17" NumberShareholders="" Record_ID_NumberShareholders="19" TotalNumberShares=""
      Record_ID_TotalNumberShares="20" NumberSharesDematerializedForm="" Record_ID_TotalShareholdingPercentageTotalNumberSharesPercentagABC=""
      Record_ID_TotalNumberSharesPercentagAB="23" TotalShareholdingPercentageTotalNumberSharesPercentagABC="" Record_ID_TotalShareholdingPercentageTotalNumberSharesPercentagABC="24"
    </Indian>
    <IndividualsHinduUndividedFamily Label="Individuals / Hindu Undivided Family" Record_ID_Category_Of_Shareholder="18">
      Category_ID="A_3" CategoryCode="(a)" Record_ID_CategoryCode="17" NumberShareholders="4542"
      Record_ID_NumberShareholders="19" TotalNumberShares="4542" Record_ID_TotalNumberShares="20"
      NumberSharesDematerializedForm="4542" Record_ID_NumberSharesDematerializedForm="21"
      TotalShareholdingPercentageTotalNumberSharesPercentagAB="35.837146914944" Record_ID_TotalNumberSharesPercentagAB="23"
      TotalShareholdingPercentageTotalNumberSharesPercentagABC="35.6823002592505"
    </IndividualsHinduUndividedFamily>
  </StatementShareholdingPattern>
</ShareHoldingPattern>
```
Advantages of XML

- Data driven
- Data is stored in simple easy to use xml files
- Additional information about the data can be stored
- Allows data to be stored in a hierarchy
Extending XML to XBRL

- XBRL combines hierarchical xml data with relationships and references between the data points.
- It links the data xml files with various other files containing definitions, presentation, calculation, references relationships.
- XBRL data files are a set of xml and xsd files.
Move towards standardization

Convergence can be

✓ Across standards
✓ Across regulators and agencies
✓ Across reports within an agency
✓ Across information within an organization

Trend towards moving to common rules and principles
# Issues in Current Financial Reporting

<table>
<thead>
<tr>
<th>Company</th>
<th>Property, Plant and Equipment</th>
<th>Sales</th>
<th>Cost of Goods Sold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tata</td>
<td>Total property and equipment</td>
<td>Sales</td>
<td>Cost of goods sold and occupancy costs</td>
</tr>
<tr>
<td>Reliance Industries</td>
<td>Property, plant, and equipment, at cost, less accumulated depreciation</td>
<td>Total revenue and other income</td>
<td>Crude oil and product purchases</td>
</tr>
<tr>
<td>Wipro</td>
<td>Property, plant and equipment, net</td>
<td>Net revenue</td>
<td>Cost of sales</td>
</tr>
<tr>
<td>Infosys</td>
<td>Fixed assets, net</td>
<td>Net sales</td>
<td>Cost of sales</td>
</tr>
<tr>
<td>L &amp; T</td>
<td>Plant, rental machines and other property</td>
<td>Total revenue</td>
<td>Total cost</td>
</tr>
<tr>
<td>M &amp; M</td>
<td>Property and equipment, net</td>
<td>Net sales</td>
<td>Cost of sales</td>
</tr>
</tbody>
</table>
Issues in Current Financial Reporting

sources
Financial systems
Explanatory Disclosure
Other information

formats
XLS
Doc
PDF
Paper format
Proprietary methods

receivers
Investors
Analysts
Lenders
Regulators
Rating agencies

XBRL Solutions
Myiris.com study:

Inconsistency in the values reported in main statement and their respective schedule in 210 “audited” annual reports, includes:

- A large bank
- A large PSU

• How was it found – using XBRL
“XBRL is perhaps the most revolutionary change in financial reporting since the first general ledger”
- Accounting Today

“A Breakthrough Idea”

Harvard Business Review

The HBR List

Breakthrough Ideas for 2007

Our annual survey of emerging ideas considers how nanotechnology will affect commerce, what role hope plays in leadership, and why, in an age that practically enshrines accountability, we need to beware of “accountablist.”
XBRL in Nutshell...

An information standard

**eXtensible**

**Business Reporting**

**Language**

- Allows customization of concepts
- Uniquely defined concepts
- Computer understandable language

XBRL - The “Bar Code” for Business Reporting World
HOW does XBRL work?

ABC Ltd.

<table>
<thead>
<tr>
<th>Balance sheet</th>
<th>31st March 2011 (in 000’s INR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>8000</td>
</tr>
<tr>
<td>Debtors</td>
<td>2000</td>
</tr>
<tr>
<td>Current Assets</td>
<td>10000</td>
</tr>
</tbody>
</table>

ABC Ltd. [31-03-2011]

In Thousand INRs

Cash appears in balance sheet under Current assets

Cash defined as per Accounting Std 3, Para 2

Cash > 0

English : Cash

Hindi : नक़द स्र्पया

Normal Data

Powered with XBRL
Key Benefits

Generation
Enter data once, Render in many forms Standardized, yet extensible
✓ Reduce costs by automating tasks

Transmission
Facilitates electronic exchange
✓ Automates collection, immediate validation through flexible rules

Consumption
Potentially real time information
Interactive, flows into proprietary applications
✓ Shifts focus to analysis, facilitates judgement, quick generation of information and reports

Technology independent
✓ Open, royalty free, independent standard, low cost

Quality, Efficiency, Cost Savings
Beneficiaries Of XBRL Data

- Regulators
- Auditors
- Corporate Finance and Control
- Equity and Credit Analysts
- Investment Bankers
- Investors
## Beneficiaries of XBRL

### Key arguments for the use of XBRL – and who benefits from it

<table>
<thead>
<tr>
<th>#</th>
<th>Benefits</th>
<th>Companies (Issuers)</th>
<th>Investors</th>
<th>Analyst</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Increase of quality and consistency of data</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>2</td>
<td>Higher profitability and efficient production process</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>3</td>
<td>Easy to compare published information</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>4</td>
<td>Easy handling due to standardisation and automation</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>5</td>
<td>Faster availability of data</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>6</td>
<td>Easy access to relevant capital market data</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>7</td>
<td>Centralisation of delivery and request of data</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>8</td>
<td>Cost savings in preparation, production, distribution</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
XBRL For Internal Use...

Where?

• Systems integration
• Data access, assembly and overview
• Redefinition of spreadsheets as user interfaces not data storage/transformation facilities
• Better controls – ultimately enabling continuous auditing and monitoring

Why?

• Data quality
  – Validation at the “source”
  – Consistency in data validation rules and analysis/visualization of data
• Abstraction of business rules and controls that can be applied across a wide range of software applications
• Lower cost operating environment
Development of XBRL

- Charles Hoffman researches XML use possibilities in financial reporting
  - 1998

- First prototype FRXML
  - Dec, 1998

- Establishment of XBRL International Steering Committee
  - Aug, 1999

- Specification XBRL 1.0
  - Jun, 2000

- Specification XBRL 2.0
  - Dec, 2001

- First XBRL Jurisdictions
  - Sep, 2001

- XII cooperates with W3C; start of XBRL GL development
  - Jun, 2001

- 1st XBRL Conference (London); IFRS-GP taxonomy
  - Jan, 2001

- Specification XBRL 2.1
  - Dec, 2003

- Specification XBRL Dimensions 1.0
  - Sep, 2006

- Specification XBRL Formula 1.0
  - Jul, 2008
XBRL International Inc.

- Not for profit consortium
- XII Maintains the XBRL Standard
- Comprises of countries and bodies (referred as Jurisdictions)
- More than 650 organizations as members
- XII Approves or Acknowledges Taxonomies
- Promotes adoption of XBRL across globe
XBRL Around The World

Presence of IRIS

**NORTH AMERICA**
- Canada — CSA, Toronto Exchange
- Cayman Islands — CIMA
- US — FDIC, SEC, Dept of Parks
- World Bank — Micro Lending
- State of Nevada / State Government
- State of Ohio / State Government

**EUROPE**
- Belgium — CBFA & National Bank
- EU — CESR, CEBS
- Luxembourg
- France — Bank de France, AMF
- Netherlands — 4 major ministries & Water Boards
- Spain — Bank of Spain & CNMV, Sweden — Companies House
- UK — HMRC (Companies House)
- Macedonia — Government Wide Project

**ASIA CONTINENT**
- India — MCA, Bombay & National Stock Exchange,
- Reserve Bank of India, ICAI
- China — Shanghai & Shenzhen Exchanges, CSRC, SFC
- Japan — Tokyo Exchange & Bank of Japan
- Korea — KOSDAQ
- Singapore — ACRA, Government Wide
- Thailand — Thailand Exchange

**SOUTH AMERICA**
- Argentina — Bank of Argentina
- Brazil — Bank of Brazil
- Chile — Bank of Chile, SEC
- Columbia — Bank of Columbia
- Peru — Bank of Peru

**MIDDLE EAST/AFRICA**
- UAR — SCA, ADX and DFM
- Israel — Securities Authority
- South Africa — Stock Exchange

**AUSTRALIA**
- Government Wide

**NEW ZEALAND**
- Government Wide

*Expected to be Mandated in 75% of World’s Market Cap by end of 2014*
XBRL In India

1999
- XBRL is Born

2006
- ICERS – XBRL based filing platform developed for BSE
- ICAI Constitutes XBRL High Level Group

2007
- CorpFiling – XBRL based filing platform adopted by BSE and NSE

2008
- RBI launches IRIS’ XBRL based filing platform for Capital Adequacy Returns
- ICAI through IRIS develops XBRL taxonomy based on Indian GAAP

2009
- India becomes jurisdiction of XBRL International

2010
- Development of Mutual Fund taxonomy for SEBI

2011
- MCA mandates XBRL filing

Indian taxonomies acknowledged by XII
MCA Mandate

- Submission of XBRL data from FY 2011 and onwards
- Companies covered by mandate
  - Companies listed in India and their subsidiaries having,
  - paid up capital of Rs. 5 Crore and above or Turnover of Rs 100 crore or above
  - Excluding Banks, NBFCs, Power and Insurance companies

Now
- We need to understand XBRL
- Impact of MCA mandate on professionals
Session 2

INSIDE XBRL
Role of Taxonomy

- **Standardization**
- Facilitates Understanding of the Data System
- Enables Reuse, Data Exchange and Comparisons
What is Taxonomy?

*Taxonomy is “systematic classification of business and financial terms”*

XBRL Taxonomy is made up of –

**Schema**

*Dictionary of business and financial terms, along with their XBRL properties*

**Linkbases**

*Interrelationships amongst the terms defined in the schema*
Schema

- “.xsd” extension
- Namespace
- Prefix
- Refer to linkbases

Concepts + Properties

Schema Element

- Element Name and Element ID
- Abstract
- Data Type
- Balance Type
- Period Type
- Substitute Group
- Nillable

XBRL Solutions
What are Linkbases?

Linkbases are taxonomy components which define relationships between elements and link them to external resources:

• Interrelationships between elements
• References to regulatory material
• Human readable definitions of elements
• Six types of linkbases
Types of linkbases

- Relationships defined in system readable manner
- Every linkbase has a different purpose
Anatomy of Taxonomy

Schema:
Name: CurrentAssets
Id: in-gaap_CurrentAssets
Abstract: false
Type: monetary
Balance: debit
Nillable: true
Subs. Grp: item
Period: instant

Presentation linkbase:
Net Current Assets heading
  Current assets 1
  Current Liabilities 2
  Net Current Assets 3

Calculation Linkbase:
Net Current Assets +1
  Current Assets +1
  Current Liabilities -1

Definition linkbase:
Net Current Assets by Region
  India
  UK

Reference linkbase:
Net Current Assets Schedule VI
  Current Assets Schedule VI
  Current Liabilities Schedule VI

Formula Linkbase:
Current Asset Ratio
  = Current Asset / Current Liabilities

Label Linkbase:
Current Assets : Current Assets (Standard)
Current Assets : C.A. (Terse)
Current Assets : Total Current Assets (Total)
Major XBRL Taxonomies

**Global Taxonomies**
- **US-GAAP 2011**
  - Financial Reporting to US SEC
- **IFRS 2011**
  - Represents IFRS 2011
- **EDINET taxonomies**
  - Reporting to FSA in Japan
- **FinRep & Corep**
  - Financial Reporting & BASEL II based Reporting in CEBS*

**Indian Taxonomies**
- **Indian GAAP**
  - Caters to Indian Accounting Standards
  - Taxonomy owned by ICAI
- **RBI Taxonomies**
  - Used by banks to file some of their data in XBRL like RCA (Returns on Capital Adequacy), Form A
  - Taxonomy owned by RBI
- **SEBI – MF taxonomy**
• Business report in electronic format
• Refers to a taxonomy
• Contains facts build on the basis of elements defined in the XBRL taxonomy, which have a certain value, context and unit assigned
• Stores values in Actuals
• Validating against taxonomy
XBRL Solutions

SOUTH AMERICA
Argentina – Bank of Argentina
Brazil – Bank of Brazil
Chile – Bank of Chile, SEC
Columbia – Bank of Columbia
Peru – Bank of Peru

MIDDLE EAST/AFRICA
UAE – SCA, ADX and DFM
Israel – Securities Authority
South Africa – Stock Exchange

Sample Instance:

```xml

<xbrli:context id="I2009">
  <xbre:entity>
  </xbre:entity>
  <xbre:period>
    <xbre:instant>2009-03-31</xbre:instant>
  </xbre:period>
</xbre:context>

<xbrli:unit id="INR">
  <xbre:measure iso4217:INR</xbre:measure>
</xbre:unit>

<xbrli:unit id="INRPerShare">
  <xbre:divide>
    <xbre:unitNumerator>
      <xbre:measure iso4217:INR</xbre:measure>
    </xbre:unitNumerator>
    <xbre:unitDenominator>
      <xbre:measure xbre:shares</xbre:measure>
    </xbre:unitDenominator>
  </xbre:divide>
</xbre:unit>

<in-gaap:ShareCapital id="TAB10" decimals="-5" contextRef="I2009" unitRef="INR">1978600000</in-gaap:ShareCapital>
<in-gaap:ShareCapital id="TAB20" decimals="-5" contextRef="I2008" unitRef="INR">1978600000</in-gaap:ShareCapital>
<in-gaap:ShareholdersFunds id="TAB50" decimals="-5" contextRef="I2009" unitRef="INR">15700010000</in-gaap:ShareholdersFunds>
<in-gaap:ShareholdersFunds id="TAB60" decimals="-5" contextRef="I2008" unitRef="INR">12300120000</in-gaap:ShareholdersFunds>
<tsc:FinanceLeaseReceivablesCurrentGross id="TAB3510" decimals="-5" contextRef="I2009" unitRef="INR">23900000</tsc:FinanceLeaseReceivablesCurrentGross>
<tsc:FinanceLeaseReceivablesCurrentGross id="TAB3520" decimals="-5" contextRef="I2008" unitRef="INR">3300000</tsc:FinanceLeaseReceivablesCurrentGross>
<tsc:ElectricalInstallationsNet id="TAB5480" decimals="-5" contextRef="I2008" unitRef="INR">1924400000</tsc:ElectricalInstallationsNet>
<tsc:ElectricalInstallationsNet id="TAB5490" decimals="-5" contextRef="I2009" unitRef="INR">2659700000</tsc:ElectricalInstallationsNet>
```
Session 3

CREATING INSTANCE DOCUMENT
Steps in creating instance document

In house:

- Resources
  - Software/tools
  - People

- Mapping company reports using MCA rules
- Validating document generated
XBRL Document Creation

Unstructured Data

Word, PDF, HTML

Annual Report

2010–11

Structured Data

XBRL Authoring Tools (like IRIS Proton)

Extraction of data points (Financial, non-financial and textual information)

Mapping with MCA Taxonomy

Validation

Instance Document

XBRL Bridge Tools (like IRIS iDeal, IRIS iAxe)

Initial mapping of database with MCA Taxonomy

Extraction of data based on mapping (schedulers, as required)

Validation

Input for data outside ERPs (Textual information, non-financial data)

Instance Document

XBRL Solutions
Demo

Demonstration of XBRL Tool
Session 4

WAY AHEAD
Developments in India

• MCA mandate
• Filing process for companies
• Options available with companies
• Opportunity for professionals
  – Assisting companies prepare XBRL filings
  – Certification of XBRL filings
The companies affected by the mandate are:

- All companies listed in India and their subsidiaries,
- having a paid up capital of Rs. 5 Crore and above
- or a Turnover of Rs 100 crore or above
- This excludes
  - banking companies,
  - Insurance companies,
  - power companies,
  - Non-Banking Financial Companies (NBFCs)
- and overseas subsidiaries of these companies.
The end date without additional fee for filing report is September 30th 2011

…..Not a very far off future
MCA taxonomy

- Around 3000 concepts included in taxonomy
- Based on
  - Schedule VI, Companies Act
  - Accounting Standards
  - MCA specific requirements
  - Other regulatory requirements
- Use of tuples
- Current version designed for Commercial and industrial entities
Role of professionals

- Building XBRL taxonomies
- Creating XBRL instance document
- Providing consultancy services
- Implementing XBRL solutions within organization for internal reporting
- Certification of XBRL filings
About IRIS

✓ IRIS is one of the global leaders in XBRL space
✓ Over 6 years of experience in XBRL
✓ IRIS has developed suite of XBRL based products of solutions, which include
  ➢ Taxonomy building tools
  ➢ Instance document creation tools
  ➢ Rendering tools
  ➢ Validation tools
  ➢ Bridge software to connect to accounting systems
✓ Provides XBRL training and consultancy services
✓ Webinars for XBRL awareness
THANK YOU

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