Implementation of the XBRL System in RBI

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On-line Data Submission in RBI

- The Reserve Bank of India collects various fixed format data (called 'Returns') from commercial banks, financial institutions, authorised dealers and non-banking financial institutions.

- The On-Line Return Filing System (ORFS) started in 2006.

- Although ORFS helped in many ways, the system has shortcomings:
  - No standardization happened as far as the data elements are concerned.
  - Repetitive information getting submitted to various departments of RBI, increased data inconsistency.
**XBRL Project Status**

- **Phase I of XBRL project** started in May 2008 with 7 returns of DBS, DBR, FED and DSIM including Financial Statements of the banks.

- **Phase II of XBRL project** started in March 2012 with 42 returns of DBS, FED, DCBS, DSIM. Later 48 returns of FED, IDMD, DCBS, DBS and DSIM were taken up.

  - Out of 97 returns taken up so far, 90 returns under live/parallel run after UAT sign-off.
  - In terms of number of returns – 1/3 under XBRL (out of total 272).
  - In terms of elements captured (6000) – more than 2/3 under XBRL.
RBI XBRL PHASE II - Architecture

- **XBRL site**
- **Upload**
- **Validation**
- **Oracle Table**
- **ETL**
- **Data warehouse Database (Oracle)**

**Stages:**
1. XBRL site
2. Upload
3. Validation
4. Oracle database (Oracle)
5. ETL
6. Data warehouse Database (Oracle)
Gains from XBRL

As per the IT Vision document (2011-17) of RBI

- To ensure smooth flow of quality data in a timely manner to the users, it is essential that:
  - Uniform data reporting standards are developed
  - Data flow is automated from the source systems of banks to their MIS server
  - Data is submitted to the Reserve Bank in an automated manner without any manual intervention.
Gains from XBRL ...

- Standardisation of masters across returns/banks/RBI departments
- Unique identifier for each entity
- Rationalisation of returns
  - Duplication within returns removed
  - Redesigning the format
  - Within Department - DCBS – 59 to 34 to 23 (12+6+5), DBS – 35 to 22, DSIM – 3 to 1, Inter Department - DCBS & DBS/DBR – 5, DPSS/DSIM -3 to 1

- Parameterisation of returns
- Cross return validation
- Facility to accept XBRL document directly from source

Thus XBRL has ensured a uniform data reporting standard and has the facility to ensure automated data flow.
Gains from XBRL ...

- Single point of submission for banks
- Single point of dissemination for user departments
- Access may be provided to any user of RBI
- Core taxonomy – A unique list of elements across all returns

<table>
<thead>
<tr>
<th>No. of Returns</th>
<th>Main</th>
<th>Distribution</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>42 banking returns</td>
<td>2781</td>
<td>164</td>
<td>2945</td>
</tr>
<tr>
<td>OSMOS returns (23)</td>
<td>2480</td>
<td>134</td>
<td>2614</td>
</tr>
<tr>
<td>97 returns</td>
<td>5504</td>
<td>374</td>
<td>5878</td>
</tr>
</tbody>
</table>

- Unique list of elements provides answer to
  - How many elements are captured by RBI?
  - Which are the returns containing a particular element? – formed the basis for harmonisation
  - Common elements across 2 or more returns
Gains from XBRL

- Data Analysis with more granular information is possible
- Generating standard and ad-hoc reports as and when required
- Maximum possible automation of processes
- More analysis facilitated since less data related issues are expected
- Ease of incorporating data for various analytical studies and periodic reports
- Quicker access of data to the regulatory and other departments.
Uses of XBRL Data

- Banking Regulation
- Supervision of Commercial Banks
- Regulation and Supervision of Urban Co-operative banks
- Regulation and Supervision of Primary Dealers
- Regulation and Supervision of Banks and Authorised Dealers related to External Sector
1) Uses of XBRL Data - Banking Regulation

- Compilation of CRR for banks (Form A)
- Compilation of SLR for banks (Form VIII)
- Financial Statement of Banks
- Unclaimed deposits at banks (Form IX)
- Monthly assets and liabilities of domestic operations, estimation of household financial savings (Form X)
II) Uses of XBRL Data - Banking Supervision

- Returns related to Off-Site Monitoring And Surveillance System (OSMOS), which involves the receipt, review and analysis of financial statements and statistical returns.
- The analysis of this information facilitates the monitoring of each bank’s performance and of its observance of supervisory requirements over time, so that emerging problems may be identified.
- Returns related to Fraud Monitoring System
- Returns related to Supervision of Financial Institutions
III) Uses of XBRL Data - CRILC

- The Central Repository of Information on Large Credits (CRILC) has been created within RBI to collect, store and disseminate data on all borrowers' credit exposures including Special Mention Accounts (SMA 0, 1 & 2) having aggregate fund-based and non-fund based exposure of Rs.50 million and above.

- The repository is expected to help in track and review exposures/impairment of such large borrowers more effectively across banking institutions and also NBFCs so that timely remedial measures can be taken.

- SMA2 alert is generated in near real-time

- The same is being implemented for NBFC & Insurance companies, as advised by FSDC
The following 3 reports are displayed in the CRILC Module and have been made available to banks

- Bank's exposure to a borrower
- SMA-2 borrowers during a period
- Status of Classification of a Borrower

Recent Changes

- creation of new modules for updating Joint Lenders Forum (JLF) status and Red Flagged Account (RFA) status,
- viewing RFA/fraud details,
- sending RFA/Fraud alert mails,
- requesting information of non-cooperative borrowers,
- reviewing and updating status of non-cooperative borrowers and
- changing status of borrowers classified as SMA-2
Interfacing with NSDL

- Developed functionality for NSDL verification of PAN numbers
- PAN details not present in existing PAN Master are added by banks through this module
- The PANs uploaded by banks are then verified with NSDL twice on daily basis
- If the PAN is correct as per NSDL, it is inserted in the PAN Master else it is rejected
- In both the cases, an email is sent to concerned bank which uploaded the PAN, In case of rejected PAN, the correct name as per NSDL is also provided in the email

Features available in PAN Module

- Interface for adding PAN details/Downloading Master
- Bulk PAN Upload Screen - for uploading multiple PANs together
- Facility for banks to add borrower details and request PAN if borrower PAN is not available
- Facility for RBI to approve/reject unique PANs - for PAN pertaining to foreign entities/regulatory bodies
CRILC - Group Module

- Group details are also captured in CRILC Reports wherein individual borrowers are associated with groups
- Banks upload group details through the Group module and the mapping is approved by RBI

Features available in Group Module

- Interface for adding Group details
- Download Master Facility
- Bulk Group Upload Screen - for uploading multiple Groups together
- Facility for RBI to approve/reject unique PAN mapping to groups
  - In case of approval of PAN mapping to groups, the records are added to Group Master
Centralised Fraud Registry

- A Centralised Fraud Registry is developed on the basis of the Fraud Monitoring Return submitted by the banks under the XBRL system.
- The Registry is shared with all the banks.
V) Uses of XBRL Data – Regulation and Supervision of UCBs

- Compilation of CRR for banks (Form A)
- Compilation of SLR for banks (Form VIII)
- Financial Statement of Banks
- Unclaimed deposits at banks (Form IX)
- Monthly assets and liabilities of domestic operations, estimation of household financial savings (Form X)
- OSMOS
- Inspection of UCBs
VI) Uses of XBRL Data – Regulation and Supervision of PDs

- Statement on Sources and Application of Funds
- Statement on Securities Market Turnover
- Statement on Capital Adequacy
- Statement on Select Financial and Balance Sheet Indicators
- Stress Test
- Interest Rate Sensitivity Test
VII) Uses of XBRL Data – External Sector

- Statement showing the details of remittances effected towards import
- Money Transfer Service Scheme Return
- Consolidated information relating to exposures of corporates in foreign currency
- Remittances under Rupee Drawing Arrangements
- Market value of FVCI
- Monitoring of disinvestments by Overseas Corporate Bodies
- Import of gold by EOUs, units in SEZ/EPZ and nominated agencies
- Statement on guarantees letter of undertaking letter of comfort issued by authorised dealer bank
- Non-resident deposits comprehensive single return on NR/FCNR deposits and their transactions in a month
Survey of Banks on XBRL Implementation

Recently conducted a survey on whether XBRL implementation by banks benefitted

- **Increase in the efficiency of the overall system** – 96%
  - To great extent- 45%,
  - To a certain extent- 51%

- **Increase in the effectiveness of business decision making** – 83%
  - To great extent- 19%,
  - To a certain extent- 64%

- **Aid in research and analysis** – 79%
  - To great extent- 19%,
  - To a certain extent- 60%
Survey of Banks on XBRL Implementation ..

- Reduction of errors in data reporting – 96%
  - To great extent- 58%,
  - To a certain extent- 38%

- Facilitation of audit and reviews – 99%
  - To great extent- 50%,
  - To a certain extent- 49%
ADF Server - Storage of elements

Submission through XBRL system

Storage and report generation

Dissemination to users
Going Forward!

- Banks are going to generate the data through ADF and seamlessly report through XBRL.
- Taxonomies will be used as a guide for specifying and communicating the data reporting formats in a standard manner.
- Creation of metadata from the taxonomy
- Migrate from ‘Return based reporting’ to ‘Data based reporting’.
- Bring remaining returns, related to Monetary policy, External Sector, Financial Inclusion, NBFC, Payment System, Financial Market, Currency Management, etc. under XBRL
- Conduct regular consultations with all stake-holders to facilitate the process.
Thanks!