Whitepaper

How Banks can Piggyback on the XBRL Wave Universal Banking

XBRL Standards – the Concept

Have you ever wondered how it is possible to pay so quickly at the supermarket counter? Or about the nifty handheld gadget that the cashier uses to scan your stuff which sends all the details to the screen? Each item in the supermarket is labeled with a unique barcode. The barcode reader identifies this unique label and displays the related data on the user's screen. Each barcode tag contains a unique identifier that distinguishes one item from another. Ideally, the tagging follows a standard format recognized across the supermarket's ecosystem. A similar example is that of International Standard Book Number (ISBN). ISBN identifies the publisher as well as the specific title, edition and format of a book not only within a bookshop or country, but anywhere in the world. That's the convenience and utility of standardization.

XBRL (eXtensible Business Reporting Language) is the retailing barcode's equivalent in the financial world. It is an electronic language for communication of business and financial data which has revolutionized business reporting. It is an open standard, free of license fees. XBRL makes the process of creating, distributing, reporting and analyzing information within software programs more efficient and effective. XBRL is built around XML (Extensible Mark-up Language) based on the concept of meta-data. Meta-data provides context to information, rendering it almost self-explanatory. Wherever XBRL data moves, it carries the context along with it enabling any software application to interpret and process it. The data represented in XBRL not only specifies the attributes of individual information elements but also shows how they are interrelated. In short, any type of unstructured data, collected from multiple formats and sources, can be converted into structured information using XBRL, which is emerging as the preferred standard for structuring, storing and exchanging data.

Objective of the Paper

Extensible Business Reporting Language is gaining acceptance among regulators worldwide as an antidote to reporting woes. We have seen Central Banks in Spain, Belgium, France, Netherlands, USA and India adopt and succeed with XBRL reporting. All sectors, across geographies, are embracing XBRL standards for reporting data to their regulators. Much has been said about the regulatory reporting angle of XBRL adoption in the banking Industry. Treading the road less travelled, this paper explores the feasibility and possible impact of adopting XBRL standards for structuring, storing and exchanging data for internal use by banks. It does not cover the implications or developments related to the XBRL initiatives driven by banking regulators.

XBRL – Key Differentiators

The worldwide adoption of XBRL can be attributed to the following key differentiators:

Standardization	Accuracy of data	Controls and Monitoring	Process Efficiency	Lower TCO
Helps to bring about a 'single version of true data' across the enterprise	Ensures accuracy of data which forms the basis of all decision making	Facilitates capture of an audit trail for transactions and business rules for monitoring	Increases process flows by reducing manual intervention and accelerating workflow	Reduces overall reporting costs and other downstream interfaces

Regulators are the primary force behind the growing adoption of XBRL by the banking industry. This is crystal clear from the initiatives adopted by different bodies such as FDIC in the U.S., CEBS in the E.U., and RBI in India, to name a few. At the same time, the idea of using XBRL for internal data management and processing is still largely unexplored. XBRL could potentially find application in several areas within banking organizations. It is advisable that banks evaluate the opportunities and potential benefits of XBRL now, instead of waiting for it to become ubiquitous.

Envisage a scenario in which granular level information is tagged with a universal identifier, which can be used for any type of processing. It throws open unimaginable possibilities for manipulation of data by a plethora of applications - analytics, reporting, cross selling, employee productivity, and loyalty management, among them.

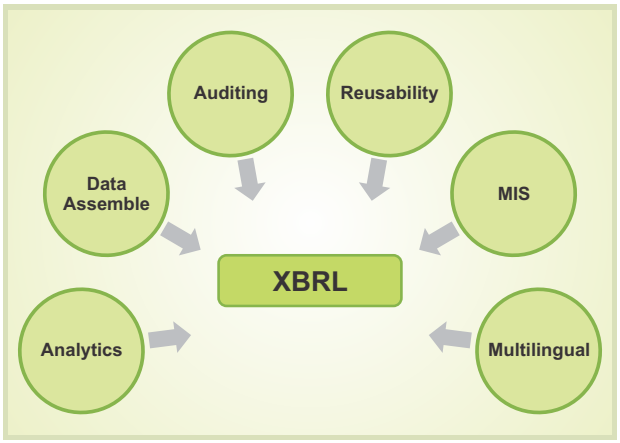
XBRL is the best option available wherever there is exchange, processing or consumption of information as it makes the data system readable, standardized and interoperable. Recognizing this, regulators are not only adopting XBRL, but also recommending implementation within other organizations so that they can benefit from seamless reporting and more. For example, the Reserve Bank of India has envisaged the facilitation of automated data supply from banks through the use of XBRL.

Banks can leverage XBRL in many verticals. For instance, they can integrate disparate accounting systems / data with XBRL-enabled connectors to seamlessly create XBRL output. Accuracy, consistency and transparency being the hallmarks of XBRL, it is possible to build applications for analytics, monitoring and auditing using XBRL data. Since this data is system understandable and reusable, tools for automated data assembling and processing can also be designed around it.

Currently, XBRL is implemented after the final output or report has been generated. It is gaining a lot of interest worldwide as a collaborative mechanism for complete end-toend reporting. XBRL International has also developed specifications with the objective of standardizing the data represented by accounting and operating systems, referred to as the XBRL Global Ledger (XBRL GL). The idea behind XBRL GL is to widen the scope of XBRL. The XBRL GL framework caters to anything that is found on the charts of accounting and journal entries, financial or otherwise. For straight-through creation of XBRL final reports, use of XBRL GL in internal systems is being explored by entities.

Interestingly, many countries are slowly adopting or converging upon IFRS. It is another area where XBRL could be used to transform data between different GAAPs meaningfully and effectively. XBRL documents carry

a provision to store concepts in multiple languages. Hence, when there is a need for reporting the same data in multiple languages, a solution can be built using XBRL, which can generate multi-lingual output with one click. This is especially useful for banks with multi-country operations. The business benefits of using XBRL for internal data management within banks are as follows:



Scenarios

Loan Origination & Servicing

MIS In most cases, loan origination and approval takes anywhere between 10 and 14 days. This time is mainly spent in cumbersome activities such as reviewing documents in diverse formats, and manually checking and processing the numbers submitted, rather than in taking informed lending decisions. Apart from being time consuming, this method is also prone to errors creeping in during manual re-keying of data collected from different documents.

Processing delay can cost a bank many opportunities because a prospect may approach another lender that can process the application slightly faster.

XBRL enables banks to define the required granularity of data. Once mapped with a unique XBRL tag, the data can be identified during all the stages of a loan life cycle. It would be possible for a customer to provide all loan related documentation, presently submitted in unstructured form, as XBRL data, which can be easily consumed by the banks' backend systems. Thus, a majority of the steps involved in the loan life cycle become automated and error free.

- Banks can receive borrowers' financial statements as XBRL-enabled information over the Internet.
- More time can be dedicated to analysis, decision making and risk management with XBRL- enabled credit analysis.
- Banks can save the cost, time and effort incurred in re-keying and aggregating data.

However, the more important benefits of XBRL data are better loan monitoring and early warning of default to keep NPAs under check.

MIS

Today, almost all internal reports in a bank are generated in HTML, MS Word, Spreadsheet or PDF format. Moreover, each bank hosts a multitude of IT applications, each generating its own reports. Therefore, in order to have a 360-degree view of enterprise data, the bank must first re-key the same before consolidating it ma nually. There are two major drawbacks to this – a high error incidence and lack of flexibility in MIS reporting format. By adopting

XBRL, the bank can uniquely tag each accounting concept which enables it to consolidate data across the system either through an operational data store or otherwise. Enabled with an

XBRL-supported report generator tool, the bank can generate reports based on any data cube or parameter at any time. The bank also has the choice of broadcasting the data online (as HTML) or printing it out as documents in MS Excel, MS Word, Pdf and other formats, since XBRL is format agnostic. Leveraging XBRL GL, the final reports can be generated from trial balances, ledgers or transactions, with provisions for adjustments, annotations and additional information. Consolidation of data from various branches, departments or even subsidiaries can be automated based on the business rules defined. These business rules and the process of consolidation can be stored to become independent of the analyst or accountant involved in the process.

Analytics

Every banking organization needs to understand the requirements of its customers and act accordingly. As banks move from a product-centric to segment-centric to customer-centric approach, they must understand their customers better in order to sustain competitive advantage. In the absence of standardization, banks have to contend with a huge dump of data in non-standard formats that they need to make sense of before taking their mission-critical operative and strategic decisions. The effort of doing anything meaningful is as staggering as its cost. Even so, banks are not able to generate the output as and when required. XBRL helps address this challenge. Once the data is tagged with the standard taxonomies in XBRL, it is ready to be reused for a whole host of activities. An XBRL-enabled analytical application can talk to the source systems within banks, which also the taxonomy tagged to the relevant fields. The scope of the analytics that can be carried out is immense.

Risk Management

Banks need to extract data from a plethora of documents in different formats for managing credit, operational or market risk. Risk Management experts depend on individual reports from relevant source systems whose data they typically go on to re-key into a risk management application. Naturally, this is prone to both delay and error. XBRL can fix this by automating the whole process. A lion's share of the time spent by credit experts in data collation and re-keying can be saved, leaving them free to concentrate on their core activity of risk management.

Regulatory Reporting

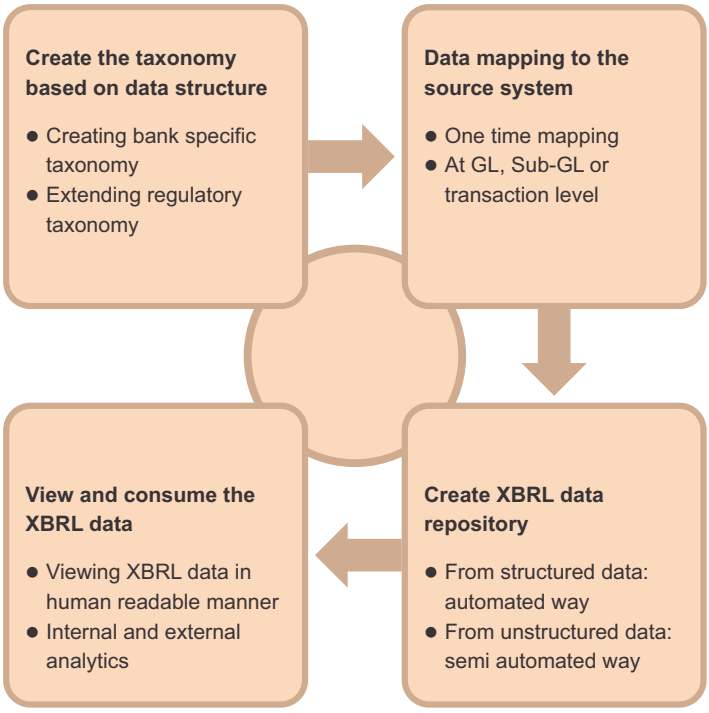
Regulators have been the driving force behind adoption of XBRL. In India, Reserve Bank of India and Securities and Exchange Board of India, the banking and capital markets regulators respectively, have made reporting mandatory for banks; now the Ministry of Corporate Affairs wants to follow suit. Hence, the sooner banks adopt XBRL in their internal systems, the better. In a bid to highlight the benefits of adopting XBRL within banks' internal operations, Reserve Bank of India recently published an approach document discussing the automation of transfer of data related to regulatory reporting from banks to RBI using XBRL. The paper makes it clear that a bank that proactively adopts XBRL can achieve significant efficiency improvement.

The Process

Banks may choose to implement XBRL in one of three ways. They can adopt it as the final layer at the far end of the report generation process, or choose to integrate an XBRL application which in turn can take semi-processed data for conversion into final XBRL output. The third and optimal approach is to embed XBRL into their accounting systems and banking applications. By creating an XBRL system in this manner within, banks can work with real time data to reap significant benefits. At a high level, the steps in the process are as follows:

Most banks have a definite data structure in their core banking solutions, an important system in their IT landscape. For this data structure to be globally accepted and machine readable, it needs to be translated into XBRL taxonomy. Banks can decide on the granularity of information to be converted into XBRL and then design the taxonomy.

They can either create an entirely new taxonomy or extend the existing regulatory taxonomy by including bank-specific elements. Building the taxonomy is a critical activity as this is what facilitates easy exchange of data between various systems.

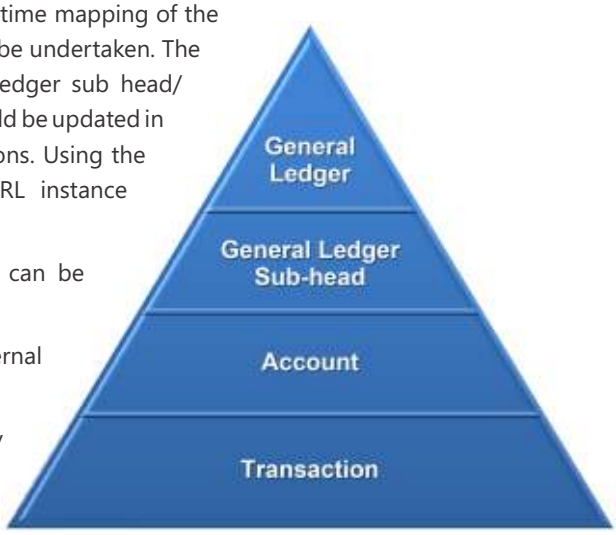


With the taxonomy in place, half the battle is won. A one-time mapping of the taxonomy to the core banking and other systems needs to be undertaken. The mapping could be done at a General Ledger/ General Ledger sub head/ account/ transaction level. The taxonomy and mapping should be updated in tune with changes in reporting requirements and regulations. Using the mappings, the XBRL applications can generate the XBRL instance document, which has the meta-data

stored along with it. The XBRL data generation process can be automated to a considerable extent because banking

data is relatively structured. Communication between internal and external systems will be smooth once tagging is done.

The XBRL-enabled associated systems can conveniently process the data at any given point in time, yielding several benefits as discussed earlier.



XBRL and IFRS

Many countries are adopting International Financial Reporting Standards (IFRS) for accounting, while others are contemplating a roadmap for migrating to IFRS. The combination of IFRS and XBRL – best in their class – is set to change the face of accounting and reporting. The objective of IFRS is to ensure high quality, transparent and comparable information in financial statements. All these goals can be achieved with the help of XBRL taxonomy. The IFRS Foundation XBRL team is primarily responsible for development of the IFRS taxonomy, an electronic version of the IFRS standards, defined in a system readable manner.

The move towards IFRS-based standards requires data based on existing standards – at a root level of transactions and ledger balances – to be transformed. XBRL GL, which is the specification developed by XBRL International for ledger and transaction-related data, can be leveraged for automating the process of transformation of data from local GAAP to IFRS. The transformation rules can be defined in a standard and system readable manner. These rules can be institutionalized and stored for future use.

To illustrate the use of XBRL for the conversion process, let us take the example of provision for dividend. As per IFRS standards, provision for dividend is not to be recognized on the books whereas under Indian standards it forms part of current liabilities. If we have data for provision for dividend tagged using Indian GAAP taxonomy, we can define a rule using the XBRL formula link base to derecognize the provision from the dividend, which would decrease the current liabilities and increase the profit and loss balance from which it was appropriated (double effect of the transaction). These adjustments can be done with proprietary or customized tools or by directly reversing entries in the system. The advantage of using XBRL for the transformation is that the process is standardized, transparent and can be institutionalized within the memory of the system.

Conclusion

Adopting and implementing XBRL within a bank's ecosystem will throw up many challenges. This should not deter them from moving towards the larger goal. The critical success factor in implementation is the development of a comprehensive taxonomy and robust system based on XBRL standards and taxonomy.

Taxonomy Development

From an execution point of view, banks could outsource taxonomy development. They could also look at a co-development model so that their own IT team would develop the knowledge base to drive future enhancements. The entire program is bound to be dynamic requiring periodic alterations and updates. The team should also keep tab of unfolding developments on the XBRL front in the outside world, especially amongst the regulators.

Implementation Strategy

Another challenge that needs to be addressed is the implementation roadmap. There are various alternatives available to a bank for building the XBRL ecosystem; hence determining the most suitable method is very crucial. Taking a big bang approach would achieve the desired result of straight through reporting, however, success largely depends on the readiness and technology adoption by the bank. Another approach could be phased implementation. Banks can draw up a plan to adopt XBRL internally in a step-by-manner, starting with a few departments before moving on to the rest. This is quite useful when various departments in the bank are using diverse applications. Banks could also peg their level of XBRL adoption to that of the regulators. For instance, in India, the adoption could be in sync with the returns specified by the Reserve Bank of India under the XBRL mandate. The bolt on approach causes minimum interruption as it remains at the last mile of XBRL conversion only.

Impact on Existing System

An important factor that needs to be thoroughly researched is the possible impact of XBRL implementation on existing processes. Banks must conduct a parallel run of both systems and migrate to XBRL only after that system is complete and thoroughly tested. The impact may be minimized if the XBRL eco-system could be broken down into sub-modules and each taken up one at a time. However, one cannot completely avoid modification to existing information chains and processes within the bank. All the stakeholders in the banking industry now acknowledge the relevance of XBRL to their system landscape. The hurdles associated with XBRL adoption are far outweighed by its potential business benefits. Therefore, banks would do well to prepare their strategies for XBRL adoption at the earliest.

Glossary of Terms

Terms	Expansion
CEBS	Committee of European Banking Supervisors
FDIC	Federal Deposit Insurance Corporation
GAAP	Generally Accepted Accounting Principle
GL	General Ledger
IFRS	International Financial Reporting Standards
ISBN	International Standard Book Number
RBI	Reserve Bank of India
SEC	Securities Exchange Commission
XBRL	eXtensible Business Reporting Language
XML	Extensible Markup Language

Infosys Technologies Limited, IRIS Business Services:

Bridging the gap further between the banks' internal data systems and RBI's regulatory reports, we now offer XBRL solutions with a blend of leadership and expertise!

IRIS iDEAL tool has now been integrated with Infosys Technologies universal banking solution, Finacle to provide banks with highly sophisticated XBRL solutions that facilitate automation of financial reporting process in compliance with XBRL standards.

Authors

Shilpa Dhobale
XBRL Domain Expert
IRIS Business Services Limited

IRIS Business Services Limited
T-131, International Infotech Park, Vashi,
Navi Mumbai, India- 400703
Phone: +91 22 67231000 | www.irisbusiness.com