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Topic (iii): Metadata, conceptual models and standards

USING XBRL FOR DATA REPORTING

Submitted by the Australian Bureau of Statistics¹

Contributed paper

I. INTRODUCTION

1. Over the years, a number of different mechanisms for exchanging data have been developed. Until the Internet and Extensible Markup Language (XML) these mechanisms tended to be proprietary or unique to the application or purpose for which each was created. eXtensible Business Reporting Language (XBRL) is one of the many industry specific 'languages' of XML. XBRL hailed as 'the digital language of business' facilitates the reuse of information contained in business reports, providing structure and context for that information.

II. WHY XBRL?

2. The Australian Bureau of Statistics sees XBRL as the 'language' likely to succeed as the industry accepted 'business reporting language'. Leaders in the accounting profession such as the Financial Accounting Standards Board (FASB) and the International Accounting Standards Committee (IASC) have researched the impact of the Internet on the distribution of financial information and have reached the conclusion that XBRL, or something similar is needed. XBRL is strongly supported in the Australian accounting and consulting sector. The Australian Prudential Regulatory Authority (APRA) is also strongly supporting XBRL and is already accepting and disseminating information in XBRL.

III. DOES XBRL SET NEW ACCOUNTING STANDARDS?

3. XBRL does not set new accounting standards. XBRL expresses certain aspects of existing standards electronically and in an organised manner that is understandable to individuals and computer programs. XBRL does not define financial accounting or reporting concepts, rather, it expresses these concepts electronically. XBRL is intended to improve financial statement reporting by making electronic financial statements possible.

IV. IS XBRL A STANDARD CHART OF ACCOUNTS?

4. An XBRL taxonomy is not a standard chart of accounts to use, rather, it is a way to map an internally used chart of accounts to common terms used externally. XBRL does not change the underlying accounting and classification differences that exist today in financial reporting. XBRL will put comparability issues in a new light. Because it is easier to compare information, more information will be compared.

¹ Prepared by Merry Branson.

V. HOW DOES IT WORK?

5. XBRL can be viewed as a framework of 'controlled flexibility'. XBRL provides a method of creating 'name/value pairs' or 'mapping' which provides fundamental attributes about a value such as its data type, format etc. XBRL provides agreement on the names but organisations provide different values within this framework.

6. XBRL does constrain how you do things:

- ?? XBRL provides 'name/value pairs' for expressing financial facts, but defines no financial facts;
- ?? XBRL provides a method of expressing lists of financial facts, a taxonomy; and
- ?? XBRL provides a method of making values of financial facts available in an instance document.

7. XBRL provides the fundamental building blocks, users of XBRL do the building. Users define the facts they wish to exchange and build documents to exchange those facts based on what they need. The 'how' you must do it offers the predictability.

VI. ADOPTION

8. For XBRL to succeed as the digital language of business, it must be adopted by organisations that prepare financial statements and others who report business information. Adoption can occur if applications are available which take advantage of XBRL. Such applications are already beginning to appear. Several accounting software vendors have already incorporated XBRL into their products and others are working towards this.

9. When users realise that they can no longer be held 'hostage' by proprietary data formats, they will demand XBRL in applications. XBRL can ensure preparation of a whole range of financial reporting becomes an automated extraction from their accounting systems.

VII. XBRL FOR STATISTICAL DATA REPORTING

10. It is important to note that, to date, the ABS experience with electronic data reporting and the experience in overseas statistical agencies suggest that the business community is not yet willing to deal electronically with statistical agencies on a large scale using electronic forms. The take-up of electronic 'form' data reporting for statistical data by business providers is generally less than 10%, and often less than 5%.

11. The ABS view is that e-forms do not provide a strong value proposition for the provider, especially when the provider is in regular and/or multiple collections. For these providers the value proposition is much stronger to deal electronically with us if the information can be extracted from their finance and/or other management information systems. The XBRL business case for providers is that important financial information is repackaged/re-used for multiple purposes. Providers potentially can satisfy the reporting requirements of many government and other institutions, ranging from Taxation to the Stock exchange without manual or repetitive effort. For statistical purposes the main gains are made when providers 'tag' information at the general ledger level. It is from this information that statistical agencies can most easily 'map' the XBRL information to our data items.

12. Work has been undertaken in the ABS previously to assist large businesses to 'map' their charts of accounts to ABS concepts to enable them to provide the ABS with a file produced as a by-product of their accounting systems. This ABS specific mapping has proven to be expensive for both the ABS and the providers. Current thinking is that when a widely accepted standard (we predict XBRL is the most likely candidate) can be found, providers will have this capability as part of their accounting requirements and ABS file extraction really will become an administrative by-product.

VIII. APRA STATISTICS PROJECT

13. APRA is the Australian Prudential Regulation Authority, which is responsible for the prudential regulation of banks, other deposit-taking institutions, insurers, and superannuation (or pension) funds in Australia. Together with the ABS and RBA, APRA has been working to harmonise and modernise existing data returns ("Call Reports" in the US) for deposit taking institutions. APRA are seeking to collect everything they require for prudential analysis, together with the depository corporation data that the RBA needs to construct the monetary aggregates, and the ABS needs for the financial accounts and national accounts. The forthcoming official Australian XBRL accounting taxonomies will cover many of these data items. This will mean they can be extracted directly from institutional general ledgers - also used for public disclosures, ratings agencies, stock exchange, auditors etc. This approach should lead to a substantial reduction in provider burden. These new returns were introduced in late 2001.

14. APRA had a choice of either using something proprietary (just for APRA) or XBRL. APRA (like the ABS) have not yet come across another XML Schema that is aimed at managing aggregate financial reporting data sets. APRA term XBRL an emerging standard although at this stage they too remain reasonably confident that XBRL will become the standard in this area.

15. APRA uses XBRL to define the data that it seeks from financial institutions. An APRA built XBRL data collection package called "Direct to APRA" allows provider institutions to import, validate and securely submit data to APRA using these standards. Institutions can import their data straight into the forms if their reporting systems "speak" XBRL. Otherwise data is keyed in. XBRL is also used to exchange data between APRA and the RBA and ABS, in aggregate and unit record (individual institution) form. Each agency has its own, radically different, data structures that are used to manipulate the data internally once it has been received in XBRL form.

IX. CONCLUSION

16. The APRA Statistics Project is "proof of concept" that by using a single e-standard (in this case XBRL) and by cooperating with the key users of the information, APRA is able to collect, transmit, exchange and disseminate data collected from financial institutions. As XBRL becomes more pervasive, the accuracy and timeliness of the information obtained will increase significantly. Since major systems vendors and niche software providers alike are including "XBRL Functionality", in their products, end-to-end integrity is a real possibility for this important aspect of economic analysis.

17. The APRA project has demonstrated how agencies can reduce provider burden significantly by cooperating and agreeing on an XML schema and the scope and depth of the metadata taxonomies that will be cooperatively developed. This item-by-item definition is hugely labour intensive, although it does deepen the understanding and clarity associated with each piece of information. Of course, and just as importantly, each of the participants need to develop systems interfaces into the new standards.

18. Vertical integration, in terms of the use of a common set of standards between national statistical providers, and all of the international statistical users of this information is an important first step. It is to be hoped that the logical next step can also be taken and those same standards can be incorporated into provider accounting systems making reporting a standard extraction. This outcome provides significant gains to all parties. We believe that if we are collecting information that organisations are also providing to ratings agencies, to stock-exchanges and to tax authorities, then the information will be much more accurate. At the same time, the organisations will benefit, because they have cut down on repetitive, manual effort.

19. XBRL and this type of by-product extraction from computer systems is not the solution to all data collection. The ABS estimates only 40% of the data we collect from businesses can be defined and mapped to XBRL and other common standards. The ABS continues to pursue other strategies for these

data and some of the strategies will involve form collection for data items which are simply not stored in computer systems, CEOs opinions on business expectations is one example of this type of data.

20. The ABS sees XBRL as having great potential for electronic data capture as a by-product of provider's finance and/or management information systems. E-government initiatives in Australia are marketing the idea of 'tell government once'. Operationally this is very complex and privacy issues arise. The ABS thinks the 'providers tag once' is a much better proposition than 'tell government once' which requires a huge integration effort. Agencies instead can use the XBRL to extract data many times from providers and map to their requirements. Many issues will remain with the major ones continuing to be data security and authentication.