COMPARABILITY: XBRL'S BIG DATA PLAY

By GREG SOULSBY, Director, IB Partners, and Chair of the XBRL Comparability Task Force, XBRL International

WHAT IS THE PROBLEM?

XBRL is a great success story with adoption across the globe and an exponential rate of uptake.

The great XBRL problem is the opportunity cost for analytics and big data access. The XBRL success story to date has been a point to point reporting model. It has been great for regulators, but now there is such a massive volume of XBRL we have a new opportunity – XBRL consumption on a greater scale and for broader, analytic applications.

Let's look at some of the problems the next generation of XBRL users have with XBRL today:

1. They work across the globe, across business function areas and thus, across XBRL taxonomies, but XBRL taxonomies are incompatible.
2. They want to work with aggregates of companies – look at industry averages, etc, but pools of XBRL data are only provided by proprietary, entrenched vendors.
3. They want to find the data. Most XBRL today is not at the end of a URL – these kinds of users need extra functionality to scale their consumption.
4. They have data needs beyond regulatory reports, but there is no scalable way to integrate XBRL and non-XBRL data and function.

SO WHAT COULD XBRL LOOK LIKE WITH COMPARABILITY?

Comparability brings to the XBRL standard the ability to compare instance documents from different taxonomies, as well as non-XBRL Data, for example, the ability to compare a GAAP

filing by a US company to a filing from a London company based on the IFRS taxonomy.

This is a new domain for the standard – it is not about reporting but about the consumption and transformation of business information using user defined rules. All the Use Case developed for comparability points to this capability driving some powerful new markets for XBRL;

1. **Query capabilities:** End users require a "language" with which to compare, query and analyse XBRL instance documents. This opens up the XBRL market to report consumers, analysts and all those who "add value" to business information.
2. **Discoverable:** For any XBLR instance documents to be compared they must be uniquely identified and found. This means they must all be on the web, in the broadest sense.
3. **Value added services:** The comparison of elements of different taxonomies demands that mappings, transformations, and many other "assertions" are required. There are as many "assertions" required as there are elements in business reporting to be compared, and different flavours will be required to suit differing end use needs.
4. **The global market for XBRL Comparability products and services will include:**
   - Capture, storage and processing of large volumes of XBRL business documents, in both public and private domains.
   - Complex and capable analytical tools for end users.
   - Customised business related mappings, transformations and assertions.

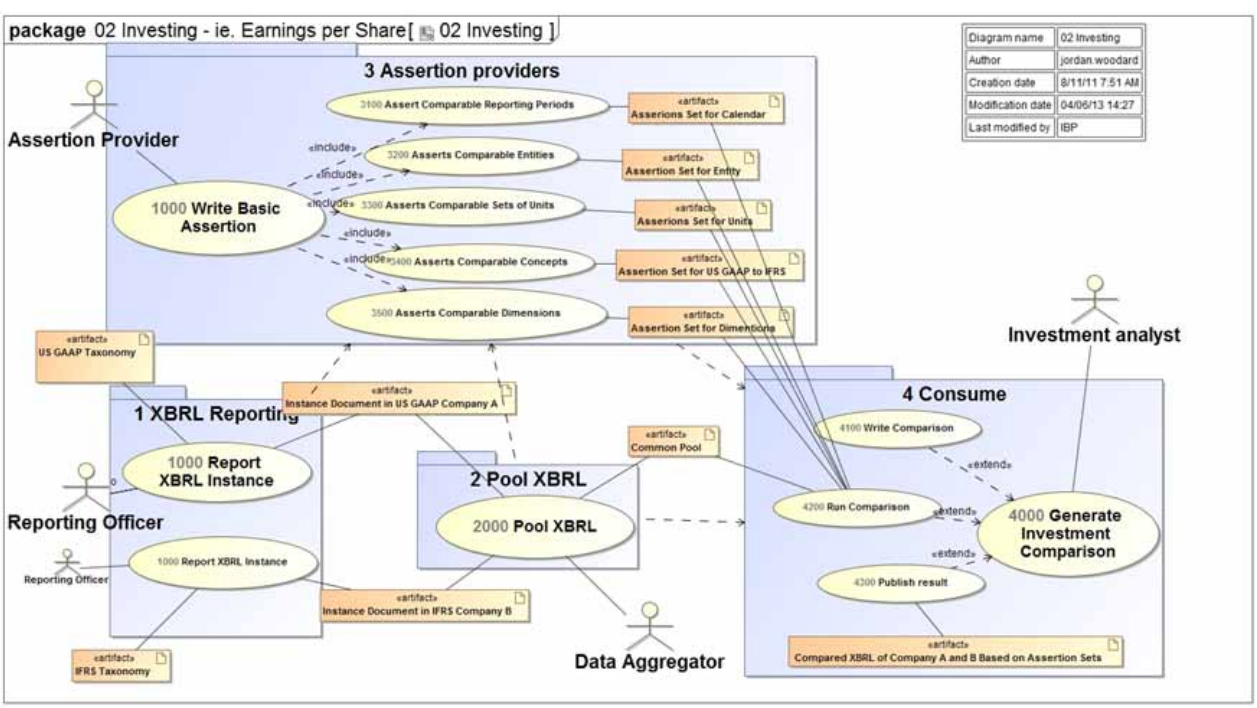
The population of XBRL business reports will expand progressively to over 1 billion XBRL documents within the next decade.

HOW WILL XBRL COMPARABILITY WORK?

The Comparability Working Party defined three main domains for the XBRL Comparability Use Case;

1. XBRL based reporting of business data (the current scope of XBRL).
2. Service and assertion providers.
3. XBRL Comparability consumers.

Comparability does not directly change the current reporting process. To support the new class on XBRL consumers some changes will be required. Please see the diagram below:



HOW MANY XBRL DOCUMENTS WILL THERE BE? WHERE WILL THEY BE?

There are 5M+companies in the USA with 5 or more employees[1]. USA is 25% of global GDP, so we will use the figure of 20M Companies in the world.
The average company submits two XBRL documents per year into the public domain; examples include SEC filings in the US, Companies House filings in the UK.

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If the number of in-house XBRL documents is 10 times the number of publicly fielded documents then we can estimate there will be, in five years time:

- 100M documents in the public domain.
- 1B documents in the private domain.

All these documents will be online, in the cloud, available for consumption by XBRL Comparability functions. They must be identifiable, findable, searchable and verifiable. They must be able to be analysed in bulk – "compare the total revenue of telecoms companies in Poland with the equivalent revenue in the Arab states".

HOW MANY END USERS WILL THERE BE?

We assume for the purposes of this article, that there are 20M companies authoring XBRL documents. All will be using XBRL software, if not in-house then via a service provider, such as a financial printer.

The basic end-user will simply author and consume individual XBRL instance documents. With the increased footprint of XBRL, from mandated usage in regulatory reports to use in-house, numbers of users requiring multi and cross taxonomy reporting, analysis and comparability increases.

The heaviest users of XBRL Comparability will be:

- In-house business managers,
- Financial and industry analysts,
- Regulators and others in governments,
- Business managers requiring an understanding of industries and competitors.

WHAT KIND OF SERVICES WILL BE REQUIRED?

End users require "normalisation" of instance documents to enable comparisons. Examples of normalisation include:

1. **Reporting Calendar:** The definitions of "financial year" or "first quarter" may vary between reporting entities. To compare financial data from different reporting cycles a normalisation process is required. There will be a number of approaches to solving this problem. A provider of calendar normalisation services may offer a number of options to this issue.
2. **Currency conversions:** End users will not only require currency conversions, they will be required historically.

   Example: Compare the 5 year revenue of Boeing with the 5 year revenue of Airbus, in today's USD.

3. **Definitional equivalents:** Each term and definition used by an XBRL Taxonomy author is documented and understood. While "profit" is a well recognized term, the exact definition varies greatly. Service providers (Users?) will need with the capability to provide guidelines (rules?)

[1] HTTP://WWW.MANTA.COM/MB

which permit comparison of reported items which are defined differently.

Another value added service will be augmentation of XBRL instance documents so end users may find them, improving discoverability.

> Example: typical North American users identify industries by SIC code, the Canadian Revenue Agency has its own set, and the UK another. End users will require a service to translate to their preferred industry code so they can find comparable instance documents by industry.

HOW DO WE GET THERE?

Big business data will be implemented by a large ecosystem of firms, governments, NGO's and technology suppliers. XBRL's role includes supporting them with the common standard, free and open, enabling this community to integrate and cooperate. Many other standards are equally critical, from security to legal entity identifiers.

Thus XBRL needs to engage with, and collaborate with, a wider, more diverse community.

WHERE NEXT?

Now the XBRL Comparability business requirements have been written, a standard will follow. Given the scope and dependency on external organisations, two things are required;

1. Baby steps to the end goal.
2. Clear priorities.

The XBRL Comparability Taskforce plans to run a workshop or "focus group" later this year. We welcome a broad range of inputs. To register your interest, please email comp-feedback@xbrl.org. Prior to this we are planning a comparability webinar. For more details please email comp-feedback@xbrl.org

IN SUMMARY

The key points to take away about XBRL Comparability include:

1. XBRL Comparability is an important part of enabling big business data and a new class of large scale XBRL consumers.
2. Comparability is an enabler with a large, complex ecosystem of reporters, technologies, vendors and non-XBRL data.
3. A new kind of play is introduced to the XBRL world by open standard XBRL comparability – the function and assertion providers.
4. The development of comparability is at an exciting point – you can contribute and make a difference simply by contributing to the next few events.

FURTHER INFORMATION

In addition to registering your interest in the workshop you can:

- Read the comparability business requirements. Feedback still welcome. http://www.xbrl.org/comparability-task-force
- Email the XBRL Comparability Workforce at comp-feedback@xbrl.org