



## SEC AND FASB: DRIVING DEVELOPMENT

SUSAN YOUNT, SEC and LOUIS MATHERNE, FASB

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THE ROUTE  
TO DIGITAL  
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# FROM THE EDITOR'S DESK



THE RELATIONSHIP BETWEEN THE VARIOUS PARTICIPANTS AND STAKEHOLDERS IN THE XBRL UNIVERSE HAS NEVER BEEN MORE IMPORTANT, AS ACADEMICS, FILERS, REGULATORS, ACCOUNTANTS AND SOLUTION PROVIDERS ALL HAVE THEIR OWN VIEWS ON THE DEVELOPMENT OF THE GLOBAL XBRL REGIME. IT IS A TIME WHEN REFLECTION ON PAST DEVELOPMENTS IS JUST AS IMPORTANT AS OPINIONS ABOUT FUTURE CHANGES.

Throughout the year we have featured filers and the end-users of XBRL on our covers, however, this issue we take a step back. In talking to Louis Matherne of the FASB and Susan Yount of the SEC we look at those who are driving XBRL forwards, and how they listen to the industry and the users of the data when making decisions about new taxonomy developments. By engaging different areas of the chain, through from filers to the regulators, we are endeavouring to show the interconnection that occurs in the business reporting world, and the feedback loops necessary to create an XBRL taxonomy that is useful for both the regulators and the users of the data.

As I begin my tenure as Editor of the iBR journal, I wish to extend my thanks to all our contributors, both past, present and future, and to everyone who makes this publication possible.

We welcome all feedback and thoughts, and to be a part of the journal feel free to reach out to myself or any other members of the editorial board.

Hope you enjoy the edition,

## PETER WATERS

Editor, iBR

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# DRIVING DEVELOPMENT

By LOUIS MATHERNE, FASB and SUSAN YOUNT, SEC

LOUIS MATHERNE OF THE FASB AND SUSAN YOUNT OF THE SEC EXAMINE THE ORIGINAL DEVELOPMENT OF THE XBRL TAXONOMY, AND HOW IT CONTINUES TO EVOLVE.



LOUIS MATHERNE, FASB

## HOW WE HAVE CHANGED (IN THE BEGINNING)

**Louis:** In 2006 the SEC took an important step for requiring XBRL filings for public companies by charging XBRL US with the responsibility to build a

taxonomy that had all the US GAAP requirements, all the common reporting requirements, and would be ready for use in under a year. Frankly, most of us thought it was unrealistic but failure on this critical milestone could have undone the momentum that was building. Failure was not an option.

Over the next several months, the SEC, XBRL US, and FAF pulled together the resources that were needed, which included heavy participation from the accounting firms, other interested parties, and a core group of technologists that were essential to build the first taxonomy during 2007. At that time, we didn't have much of a reference point for what the taxonomy should look like or the systems that should be in place. We were effectively starting with a blank sheet of paper.

**Susan:** This was the taxonomy that was ultimately used in the voluntary filing program. So, we had over a hundred people on site, over 80% of them were accountants. We also had people spread out around the country working on specific footnotes and modelling those. I was working on parts of it from Seattle.

**Louis:** The largest part of building the taxonomy was capturing and modelling the accounting knowledge, the subject matter expertise of the accountants. At the same time, the IT platform and the tools we used to capture this knowledge were clearly critical for us to get the taxonomy built. We needed a platform, multi-user tools, architecture, and a virtual working environment that could support all these individuals working on the taxonomy at the same time, often in different parts of the country. The technologists and the accountants were integral to

the success of the project, and there would be no success without both groups.

An often overlooked aspect of our platform is that it was and continues to be a true multi-user environment for building taxonomies. If we hadn't had this capability, I don't think we could have gotten it done. We were under tremendous pressure to meet deadlines, building a large scale taxonomy, with over a hundred people contributing. Without a collaborative multi-user environment it just wouldn't have been possible.

We've now evolved to a point where our platforms are much more sophisticated and stable, with far greater control over our processes and changes. We no longer have so many people working directly on the taxonomy, but anyone that has an interest can comment on the taxonomy at the FASB website anytime they like. The collaborative nature of taxonomy building continues.

Today, we don't make a change to the taxonomy without at least two levels of review, and often more. In addition, whenever we make a change in our development environment, it's exposed to the public almost immediately. We have the ability to re-publish the taxonomy on a daily basis. We date tag every change, so that anyone can view proposed changes and the month and year of the change.

**Susan:** From my perspective the big change that happened between 2007 and 2011 is that instead of distributing this work to so many people, we developed a dedicated staff of domain experts. These people are CPAs or near CPAs. This is their job, this is what they do, and I think that's been a significant shift in the process for the better.

Having the development directed more closely by the domain experts is really important and that's one of the reasons I'm pleased to see the taxonomy development and maintenance happen at the place where the accounting standards are being set.

**Louis:** That is a key point. I've always believed that taxonomy development belongs in the domain of the subject matter experts, whether



**SUSAN YOUNT, SEC**

we're talking about the Global Reporting Initiative or International Financial Reporting Standards or what we do here at the FASB. I've always felt that this is where it belongs because XBRL is an enabling technology for communicating, in this case, financial reporting information.

In 2010, when the FAF and FASB took over responsibility for the on-going development and maintenance of the US GAAP Financial Reporting Taxonomy, we now had the opportunity to integrate XBRL into the standard setting process such that we could be more responsive to the standard setting requirements and in a manner that better informs the standard setting process. It allows us to be more responsive and have a



# Don't get lost . . .

better understanding of what is required by the standards because we're here, we can talk to the people who have been writing the standards and we can make sure that the modelling we put in the taxonomy reflects those requirements. I'm very happy with the results of this change and it is starting to bear even more positive outcomes than I would have imagined in 2010.

## FILERS USING THE TAXONOMY

**Susan:** Because we have dedicated domain experts responsible for maintenance and also embedded into the standard setting process, we have an understanding of what kinds of disclosures we can expect to see and how to best model those. We have actual data that's been submitted using our taxonomies, and we can observe how filers apply what we're showing them.

We now have this feedback loop where we show filers a taxonomy structure and a group of elements and then we observe the filings they send us, and we can see how they're using the taxonomy. We also have advisory groups that allow us to have direct conversations with filers about taxonomy quality. From there, we get a sense of where filers might be struggling, where we might need to make improvements in the elements or the structures of the disclosure so that the taxonomy will reflect the actual filings that we've received; the practical application of accounting standards. And that has allowed us to make huge strides in taxonomy improvement.

**Louis:** Addressing new accounting standards disclosure requirements are obviously an important

part of what we do. We have to make sure that the taxonomy covers US GAAP requirements. However, inclusion of common reporting practices has always been a part of our process and strategy. For the US market, we always said that this taxonomy had to address both GAAP requirements and common reporting practices. And so we've also built the taxonomy to make sure it was including the way companies reported. Just because the literature illustrates one way to disclose information, it doesn't mean that the preparers wouldn't choose to do it in a slightly different way. It still conforms to US GAAP but it's sufficiently different that if you don't provide adequate choices, then they'll end up extending. Extensions in themselves are not a bad thing, but if we don't provide enough choices, you get so many extensions that the data becomes difficult to use.

**Susan:** We saw an example of that with an earlier taxonomy version when we were looking at disclosures for derivatives. Accounting standards that require disclosure of derivatives and activity around derivatives have some suggested disclosures and a suggested format, and we incorporated that into the taxonomy. And then we saw that this was an area where we were getting a lot of extensions. When we looked at the filings, what we discovered is that practice has settled around a slightly different format for showing the required disclosures, and filers were having a hard time finding the existing elements in the disclosure format that they were using. So there's an example where we just needed to move things around and show people the elements in a format that they could understand and that they were familiar with.

**Louis:** And our team is structured around that idea: everyone on the FASB XBRL team has topic responsibility. They are responsible for understanding how filers are actually using that part of the taxonomy, so that they can improve it going forward based on those observations. Back in 2007, we had the voluntary filing program which was helpful but limited with maybe 100 companies participating, and now we have almost 10,000 filers submitting detail tagged filings. We don't make a single change in the taxonomy today without understanding how filers are using the taxonomy by looking at filings and performing a cost/benefit analysis to support the change.

#### INVESTORS USING THE TAXONOMY

**Louis:** Our focus now includes the data aggregators and end users. We (and the entire XBRL community) have invested considerable resources helping preparers get their financial statements into a usable XBRL format and minimise the impact of year to year taxonomy changes. We now have thousands of filers with thousands of filings and millions of facts available. We must make sure that this incredibly rich database is available and populated in a manner that works for users. As such, we have shifted our resources to make sure we are engaging with and responsive to user needs. We're improving our understanding of their requirements for taxonomy content and how to best manage the unavoidable year to year taxonomy changes.

**Susan:** One of the best ways to protect investors is to give them timely and accurate information. To the extent that XBRL helps them get that information, we think that helps protect investors and helps maintain an orderly capital market. Some data aggregators have been quicker than others to embrace XBRL; those with an established process might consider that they do not need it, but then might someday find that they've been left behind by the advancement of technology. At the SEC we are using this information to populate risk analysis models and to review the effects of our regulations. When we look at the implementation of our regulations, in the absence of data that's readily available and easy to analyse, it can be difficult for us to determine in a timely manner if they are having the effects that we intended. From a regulatory standpoint and an accounting standards standpoint, this is a tremendous opportunity to make sure that what we mean to say is actually what's being heard by filers and by the marketplace. Where we have issues, we have an opportunity to see that much more quickly.

**Louis:** The FAF and FASB also use the XBRL data to support our research. The FAF has a post-implementation review process to evaluate the effectiveness of the standard-setting process which is addressing standards that were released a few years ago. With XBRL we can more rapidly and efficiently identify if those standards were implemented the



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way the FASB expected. In a similar manner, we also review how filers are using the taxonomy for current accounting standards and we will make adjustments in the taxonomy to capture their reporting practices so long as they conform to US GAAP.

And much like the SEC, we are also using the XBRL tagged data to support our Board level research.

**Susan:** Recently, we looked at pension discount rates that are being used by companies. Our initial assumption was that in a slowing economy, those discount rates would be coming down. Data that normally could have taken us a couple of months to collect by looking at each filing, we were able to collect in under a day, and we were quickly able to analyse how companies were responding to the market. That kind of real-time disclosure review at that granular level of detail hasn't been available to us in this form before.

#### BROADER IMPLICATIONS OF XBRL INTEGRATION INTO ACCOUNTING STANDARD SETTING

**Louis:** Our presence within the FASB has markedly helped with integration into the accounting standard setting process. At the simplest level, we are a part of the accounting standards project teams to make sure we have appropriately captured the disclosure requirements in the taxonomy. But more importantly, the opportunity has been created to better inform the standard setting process from a structured data perspective; to broaden the discussion for disclosures beyond the traditional presentation perspective.

And to this end, we've had to improve our understanding of much of what we take for granted in the traditional financial report, which is understood from a presentation-centric perspective and is overloaded with implied meaning that we must unravel using XBRL.

For example, many of us in the XBRL community have said that XBRL makes statement geography irrelevant, i.e. where a reported fact is located in the financial statements. In fact, XBRL doesn't make geography irrelevant but separates the implicit relationships expressed in the traditional report into individual explicit relationships. XBRL has several

ways to express these presentation, calculation, or dimensional relationships among reported facts. So while location doesn't matter in an XBRL filing, explicit relationships are critical to both the creator and user of the document.

With this integrated approach, everyone involved in the process learns more about the value XBRL brings to the conversation. They gain an understanding of the underlying data model that supports a particular disclosure and the importance of the data model to the user of the information.

#### FUTURE IMPACT

**Susan:** One of the things we've heard from data aggregators is that the financial statements are a portion of the information that they use to create the data that they disseminate. They're looking at the entire filing – they're looking at MD&A, they're looking at business descriptions, they're looking at liquidity disclosures. None of that is presented in a tagged format today. So, looking forward to a structured data world, I wonder if, as users start to understand the real utility of having this information in a format that doesn't need to be re-keyed and that is already tagged by the filer, they would find value in having more information available in a structured format. We'd like to hear from investors if they think if it would or would not be helpful to have that.

**Louis:** It is not uncommon for users to tell us that we are only responsible for a small part of the information they need. But this has always been true, even before the advent of XBRL. What is different now is the real capability of combining information from different domains in ways we would have never envisioned or been able to accomplish. It's the possibility of this mash up of cross-domain information that gets me excited for the future of XBRL. New ideas and innovation will spring from these connections that were not possible before XBRL. I expect over time we're going to see some incredible connections made between different datasets that support real-time forecasting and predictive models unlike anything we've seen before. It's really hard to guess what that would be but it's easy to see that XBRL will play a key role by providing structured financial data to the mix. ■BR

# THE EMERGING REQUIREMENT FOR TAXONOMY STANDARDISATION AND MANAGEMENT

By **CEES DE BOER**, Deloitte Netherlands

iBR TALKS WITH CEES DE BOER, CFO/COO AT DELOITTE NETHERLANDS.

**THE BUSINESS CASE FOR XBRL ADOPTION** is most obvious and visible from the perspective of the receivers of information. Currently, organisations such as banks, regulators, governments spend a lot of time and money on systems devised to capture and interpret the information they require which is reported in formats such as word, excel etc. This is then retyped and interpreted in a particular way depending on the purpose for which it is needed. Each organisation must employ a significant number of people to re-key the information into their systems to ensure they can apply the data correctly and effectively. These organisations have typically been the first adopters of XBRL where the information submitted is machine readable, computer to computer with definitions in a taxonomy so that the information can be interpreted immediately without having to validate it. The benefits are obvious and immediate, for example with a tax authority where data is received in XBRL format and doesn't require further handling before use.

The business case for the compiler and sender of this information is less obvious. Companies have existing processes in place and they must make an investment to file in XBRL format that



will not necessarily benefit anyone other than the organisation they are reporting to e.g. the Chamber of Commerce or tax authority with XBRL already embedded into their standard processes through their taxonomies. This problem is compounded when companies are reporting to multiple organisations using different taxonomies to meet their individual reporting requirements e.g. one taxonomy for the Chamber of Commerce, another for the tax authority, regulators, governments and banks etc.

Rather than having individual taxonomies, receiving organisations need to talk to each other and co-ordinate their individual taxonomies. Some of this information will be the same data, but the needs of each receiving body will be specific. If these different organisations sit down together they will discover a huge overlap in data they are requesting from the point of view of the data itself and the definitions point of view. If the receiving parties co-ordinate instead of producing lots of different taxonomies, life becomes much easier – the companies sending the information can automate the system in such a way that the source of data, for example the accounting system can generate XBRL files automatically from general ledger. Once taxonomies overlap and become pretty standard, it becomes easier for the organisations sending information. On the other hand, if the receiving organisations do not talk to each other and co-ordinate, life becomes much more complicated and expensive. This defeats the whole purpose of XBRL in the first place.

#### **OTHER DRIVERS PUSHING AN INCREASE IN XBRL**

**ADOPTION:** In addition to the governmental institutions who have identified a clear business case for XBRL adoption, large corporations are now beginning to look at standardising data reporting within their own corporate structure. A large global organisation has hundreds to thousands of business units and entities reporting information centrally where it is consolidated and fed back to the stakeholders. XBRL reporting used internally in this way in large corporations will result in a very standardised and efficient system that can be used both internally and externally to streamline their reporting processes. This will exert more pressure on the global community to standardise taxonomies.

**XBRL ADOPTION IN THE NETHERLANDS:** In the Netherlands we have an SBR (Standard Business Reporting) platform in place where the Ministry,

Chamber of Commerce, tax authorities, banks, software vendors, business representatives and accounting firms talk to each other to ensure there is maximum overlap between the taxonomies. Even the banks, when they request information in XBRL format, use the same taxonomy as the other regulatory organisations where possible. But this platform is voluntary, set up by the government of the Netherlands to allow parties involved in the process to avoid multiple taxonomies being used. There is nobody directing the creation and maintenance of taxonomies themselves. Also, there are relatively few stakeholders at present, but as the business case for XBRL adoption grows, so will the number of stakeholders. We must be very careful in the development of other taxonomies to ensure the necessary overlap continues to be in place.

*"...large corporations are now beginning to look at standardising data reporting within their own corporate structure."*

Discussion is ongoing in the Netherlands to set up an agency to manage the taxonomies. This is a relatively straight forward process as

we only have a limited number of organisations currently asking for information in XBRL format. However, the business case from the receiver organisations is so strong that more and more are looking at XBRL adoption. We understand that computer to computer data exchange is beneficial, but if there are multiple taxonomies it makes life harder rather than easier. We need to ask governments and other institutions to organise a process whereby some organisation has the mandate for managing the taxonomy in such a way that we don't get too many taxonomies disrupting the whole business case for XBRL reporting.

The reason that different taxonomies are used is very obvious: receivers of information can develop their own taxonomy to impose on the company reporting to meet their exact requirements which will provide them with the optimal business case for adopting XBRL. If they have to talk to

other organisations to get a more overlapping taxonomy, compromises are required and often result in a less optimal business case for the organisation itself. Similarly, if all receiving organisations use different definitions, there is no way you can make a standard process. You need to make mappings for your tax authorities, another for the Chamber of Commerce, another

for the banks etc. But if you really want to make XBRL successful as a global reporting standard, co-operation of this nature is essential, and someone needs to start managing taxonomies. Once XBRL is adopted with a big overlap in taxonomies, huge benefits become apparent in the handling and comparison of data and with data transparency.

### LACK OF TAXONOMY STANDARDISATION LEADS TO HIGH ADMINISTRATIVE BURDEN FOR COMPANIES



**THE SOLUTION:** Multiple standard setting bodies already exist around the world eg ISO, SWIFT etc. Even the IASB is a type of standard setting body. These are typically not-for-profit organisations and I would argue that we need something similar to manage taxonomies. Discussions are already underway, but there is no real action at the moment. So far, the XBRL International organisation has been responsible for managing the technical standards that are being adopted and accepted. The next step must be the standardisation of our taxonomies which will require the co-operation of all stakeholders. There is also the financial implication to consider - who is going to pay for such a body?

Once we have both a technology standard and taxonomy standard, the data interaction will be much more effective and efficient, and the way in which we consume the data will improve enormously. For example, banks would be able to collate all their commercial information to produce great benchmark reports or analyst reports comparing performance of their clients to their peer group. The quality data is currently lost in translation and in all the mapping processes taking place. In an ideal XBRL world, there will be less translation problems: you can consume the data immediately because of the overlapping taxonomies. This requires a standardisation of taxonomies. **IBR**



# DIGITAL DISCLOSURE FOR FUTURE PROFITS: THE SUSTAINABILITY REPORTING REVOLUTION

By NELMARA ARBEX and ELINA SVIKLINA, GRI

AS THE GLOBAL REPORTING INITIATIVE (GRI) DEVELOPS THE NEXT GENERATION OF ITS GUIDELINES, NELMARA ARBEX, DEPUTY CHIEF EXECUTIVE OF GRI, AND ELINA SVIKLINA, REPORT SERVICES MANAGER AT GRI, TALK ABOUT RECENT CHANGES AND WHAT THE FUTURE HAS IN STORE.

Sustainability reporting can mean different things to different people. We hear lots of terms that are used interchangeably, like corporate responsibility, triple bottom line and CSR reporting, and in the end we're all talking about the same thing: a publication that includes information on the economic, environmental, social, and governance performance of an organisation.

For companies and organisations, sustainability – the ability to make something last for a long time, or indefinitely – is based on performance in these four key areas. A sustainability report enables companies and organisations to report sustainability information in a way that is similar to financial reporting. Systematic sustainability reporting gives comparable data, with agreed disclosures and metrics.



An increasing number of companies and organisations want to make their operations sustainable, and integrate sustainability into their overall business strategy. Establishing a sustainability reporting process helps them to set goals, measure performance, and manage change – this in turn helps them improve, save, and profit. A sustainability report is the key platform for communicating positive and negative sustainability impacts.

#### THE GRI

GRI was established in 1997 as a joint project between the United Nations Environment Programme (UNEP) and US non-profit Ceres, with the aim of developing guidance for companies on how to report their sustainability performance. GRI's Sustainability Reporting Framework consists of the Sustainability Reporting Guidelines, Sector Supplements, and the Technical Protocol.

The first Sustainability Reporting Guidelines were released in 2000, and GRI is committed to continuously updating its guidance; the latest version, G3.1, is an update of the third generation of Guidelines. Sector Supplements (tailored versions of the Guidelines) are available for ten different sectors, including oil and gas, event organisers and financial services. GRI's Technical Protocol provides process guidance on how to define the content of a sustainability report.

GRI's Framework is developed following a multi-stakeholder Due Process, designed to ensure the

Guidelines meet the needs of organisations of all sizes and sectors, and their stakeholders around the world.

#### GRI USERS

Every year, an increasing number of organisations use GRI's Guidelines when making their sustainability reports: there are around 5000 reports listed in online databases around the world. In late 2011, KPMG published its International Corporate Responsibility Reporting Survey – "the largest and most comprehensive survey of Corporate Responsibility (CR) reporting trends ever published. 3400 companies representing the national leaders from 34 countries around the world, including the 250 largest global companies, were included in the research." The survey showed that 95 percent of the 250 biggest companies in the world disclose some kind of non-financial performance information (up from 80 percent in 2008); and that 80 percent of those that report use the GRI Guidelines.

Stakeholders like civil society organisations, customers and employees also use the GRI Guidelines to assess the performance of the companies they are connected to or impacted by. New audiences for sustainability information, including investors and regulators, are now calling for more and better performance data from companies, and GRI's Guidelines can help.

Several governments consider GRI's Framework to be an important part of their sustainable development

policy, including Norway, the Netherlands, Sweden and Germany, and there are many examples of regulation on sustainability reporting, both governmental and from stock exchanges.

Sustainability reporting is for every organisation in the world. GRI works to make sustainability reporting standard practice, and for this to happen, growth in reporting needs to be exponential. GRI's guidance is designed to be used by all companies and organisations – and their stakeholders – and will play a major role in the future of all organisational reporting.

### THE HOW AND WHY

An effective sustainability reporting cycle should benefit all reporting organisations. Internal benefits can include an increased understanding of risks and opportunities; streamlining processes, reducing costs and improving efficiency; and comparing performance internally, and between organisations and sectors. There are also many external benefits of sustainability reporting, which include improving reputation and brand loyalty; enabling external stakeholders, including investors, to understand a company's true value, and tangible and intangible assets; and mitigating, or reversing, negative environmental, social and governance impacts.

For people who read the reports, including like investors, regulators and customers, the GRI Guidelines can help make it easier for them to compare companies' performance, supporting decisions about investments and purchases.

The digital revolution is having a big effect on corporate reporting, and sustainability reporting is no exception. Companies are using digital tools to collect data, using online platforms to present their reports, and starting to tag the information they want to present using XBRL.

There are many software options for a company wanting to produce a sustainability report, from developing tools in-house to purchasing software designed by providers. In 2011, GRI conducted a survey of organisations that use the Guidelines to find out how they see digital tools, and what

their future plans are. The survey showed that the proportion of companies that use software to monitor their sustainability performance increased by 50 percent between 2006 and 2010.

GRI supports organisations that use software to produce their sustainability reports by checking software that contains content from the GRI Sustainability Reporting Framework. GRI's Certified Software & Tools Program ensures that all software that includes GRI content uses it correctly. There are currently 16 software programs certified by GRI, produced by SAP, PE International, and many others.

### THE GRI TAXONOMY

An XBRL taxonomy is an industry-specific categorisation scheme that defines and 'tags' data in relation to its purpose, framework or outline. It enables users to uniquely tag and identify individual detailed reporting elements which can be easily shared electronically. One of the first XBRL taxonomies for sustainability reporting, the GRI Taxonomy, was developed in collaboration with Deloitte Netherlands.

GRI's Guidelines set out the disclosures that companies can make to show their sustainability performance. The GRI Taxonomy follows the structure of the Guidelines, enabling organisations to tag the performance data in their reports according to the GRI Guidelines.

With increasing demand from investors and regulators for robust data, and growing interest in assurance from companies themselves, the format of reports became an interesting discussion. With financial reporting, XBRL helps companies present their results to their shareholders and regulators in the way they want to use it; tagging data enables comparison and analysis. GRI's intention was to apply this to sustainability data and reports.

The GRI Taxonomy was launched in March 2012, and it covers both the G3 and G3.1 Guidelines. The Taxonomy was developed in collaboration with experts from around the world; it was reviewed by an expert team comprised of auditors, analysts, investors, reporters and service providers, and by practitioners, during a Public Comment Period.

After the GRI Taxonomy was launched, we invited companies that use it to participate in a Voluntary Filing Program. The aim of the Program is to enable companies to try out XBRL for sustainability reporting, and to file their reports with GRI as examples for other companies. So far, several organisations are in the process of tagging their reports.

The GRI Taxonomy is for any organisation that wants greater reliability and consistency of sustainability performance information; this is something that XBRL can offer. It also enables faster data collection, aggregation and sorting analysis, and enhances the ability to customise reporting to meet the specific needs of information users. Companies that want to present their performance data to investors in a way that enables them to use it to inform their decisions will benefit from the GRI Taxonomy.

Since XBRL is already used in financial reporting, using the GRI Taxonomy will give companies greater compatibility with their financial reporting systems and requirements (such as SEC, IFRS, and Basel II). This also means that we expect the pioneering users of the GRI Taxonomy to be companies that already use XBRL for financial reporting and apply their experience to sustainability reporting.

#### **WHAT IS NEXT?**

GRI is currently developing G4, the fourth generation of Sustainability Reporting Guidelines, which is planned to be published in May 2013. Public consultation periods, diverse expert Working Groups and GRI's approval procedures will ensure that G4's guidance is consensus-based and reflects the broadest possible stakeholder input.

One of G4's objectives is to make reporting guidance more user-friendly. To achieve this, GRI is now working on the G4 Online project. G4 Online will be a digital tool to help organisations access

the parts of the Guidelines they need to make relevant, focused reports. G4 Online will also enable organisations to tag their sustainability performance data using XBRL, making it easier for companies to present their data in the way their shareholders want to see it.

In the future, the reporting process could be very different. Imagine a company consulting with its stakeholders via Twitter to determine which topics are most relevant to report on, then using an iPad app to select the Indicators it needs from the

"With financial reporting, XBRL helps companies present their results to their shareholders and regulators in the way they want to use it; tagging data enables comparison and analysis. GRI's intention was to apply this to sustainability data and reports."



NELMARA ARBEX, GRI



ELINA SVIKLINA, GRI

GRI Guidelines, and tagging its data with the GRI Taxonomy, before publishing the report in XBRL, PDF, HTML and even interactive video formats. It's an exciting time for corporate sustainability reporting, and ultimately the users: organisations that report and people that want to read the reports will determine the direction it takes. **IBR**



# THE ROUTE TO DIGITAL ACCOUNTING

By JP KRAHEL, KEVIN MOFFITT and MIKLOS A. VASARHELYI

JP KRAHEL, KEVIN MOFFITT AND MIKLOS A. VASARHELYI EXAMINE THE PAST, PRESENT, AND FUTURE OF PAPERLESS ACCOUNTANCY.

Accounting is the science of measuring economic activity. Many of the developments in speaking, writing and mathematics were mainly motivated by a need to record such activity. The ability to denominate, count, and track goods was essential in human progress. For example, Fra Luca Pacioli,<sup>1</sup> widely credited for recording the double entry accounting method in the fifteenth century, entitled his work "Summa Arithmetica," equating accounting concepts with mathematical processes.

Since these early days, accounting was paper-based and became progressively standardised and eventually regulated. With the advent of information technology, these processes were automated, but maintained their basic essence following double entry, sub-ledgers and traditional financial reports. A progressive gap developed to a point where corporations internally had a wide range of information based in their ERPs (SAP, ORACLE) but the distribution of their key external reports continued to be "paper oriented" as their images were financial statement-like. A widening gap between information capabilities and provisioned external information developed in the recording, disclosure, and assurance areas. These have expanded data capture/recording methods (implemented in ERPs), increasing the need for electronically distributable and interpretable financial reports (XBRL), and near-real-time assurance<sup>2</sup>. These three major areas are now often



JP KRAHEL



KEVIN MOFFITT



MIKLOS A. VASARHELYI

called digital accounting and are in ever frequent evolutionary flux.

Accounting processes were progressively formalised and currently encompass the corporate digital infrastructure and super-corporate interconnectivity. Organisations need to be connected into the information superhighway and to agree among themselves what the files represent. For that purpose, the W3C developed the XML protocol that allows descriptions of data (metadata) to be distributed with the files or be associated to these files, allowing universal ability of interpretation.

The sub-domain of accounting created the XBRL protocol aiming at the distribution of "paper oriented" electronic data about financial statements that allows also for a certain degree of atomisation of financial information. The XBRL standard, specifically the FR dialect<sup>3</sup>, is aimed

at distributing financial statements as they are represented in paper in accordance with accounting rules that are specified by multiple accounting regulatory authorities of voluntary groups of users. The major problem with this approach is that the XBRL/FR standards does not map well with other XML dialects that will bring in the transactions necessary to create the financial statement.

"If we hope to move financial statement presentation into the digital age, we must accept fundamental changes in the entire lifecycle of financial data generation, and this begins with accounting standards themselves."

in current financial statement standards, but is of great interest to many audiences.

#### THE FORMALISATION OF REPORTING RULES

If we hope to move financial statement presentation into the digital age, we must accept fundamental changes in the entire lifecycle of financial data generation, and this begins with

<sup>1</sup> PACIOLI, L. (1514). PACIOLO ON ACCOUNTING (SUMMA DE ARITHMETICA, GEOMETRIA, PROPORTIONI E PROPORIONALITA: DISTINTIO NONA - TRACTATUS XI, PARTICULARIS DE COMPUTIS ET SCRIPTURIS) TRANSLATED BY R. G. BROWN AND K. S. JOHNSON. McGRAW-HILL.

<sup>2</sup> VASARHELYI, MIKLOS A., MICHAEL G. ALLES, AND KATIE T. WILLIAMS. CONTINUOUS ASSURANCE FOR THE NOW ECONOMY. A THOUGHT LEADERSHIP PAPER FOR THE INSTITUTE OF CHARTERED ACCOUNTANTS IN AUSTRALIA. JULY, 2010.

<sup>3</sup> THE XBRL GL DIALECT AIMSTO CAPTURE DATA AT A LOWER LEVEL OF AGGREGATION AND MITIGATE SOME, BUT NOT ALL OF THESE ISSUES.

accounting standards themselves. Any transition from the current paper-based format of financial statement presentation to a more atomised, machine-readable format will necessitate a simultaneous change in the promulgation of accounting standards. Any imprecision in the fundamental language of an accounting standard is untenable in a strictly rules-based system, and computers are such systems. The responsibility of implementation, then, includes a duty on the part of the programmer to enact a singular interpretation on any such vagary, potentially deviating from the intended effect of the accounting standard<sup>4</sup>.

As of this writing, there is no standard domain ontology to govern the generation of new accounting standards. This has led to haphazard, non-uniform standards language, which subsequently causes a large number of reformulations of previously issued standards. This must change. In the absence of rigid guidelines concerning the objects of concern and their relevant attributes within an accounting system, firms will be forever under the threat of having to monitor previously ignored variables in an effort to maintain compliance.

The creation of a universal ontology, a master list of objects and attributes to be monitored by GAAP-compliant firms, will result in cost reduction and greater uniformity of presentation. If a firm is aware of clearly-demarcated elements of its assets and liabilities that must be reported upon, then any future changes in standards will be viewed as simple arithmetic changes that can be easily imputed into a pre-existing ERP.

In an environment of formalised accounting standards and an established domain ontology, the only truly dramatic changes in reporting

<sup>4</sup> KRAHEL, J.P. ON THE FORMALIZATION OF ACCOUNTING STANDARDS, PHD DISSERTATION, RUTGERS BUSINESS SCHOOL, NEWARK, NJ 2012.

requirements will stem from the need to capture novel business phenomena, and not from arbitrary and frequent changes in GAAP standards.

### CAPTURING A LARGER SEMANTIC ECOLOGY

Benny Landa famously predicted in 1993 that, "everything that can become digital will become digital." Nine years prior to that prediction, the SEC put into motion the digitisation of financial reports with a pilot program, and in 1996 the SEC's system for companies to file electronically, EDGAR, went online. Now, with the advent of mandatory XBRL filings, financial information has become even

more accessible except for important narrative language in financial reports. When standardised XBRL tags for narrative portions of the financial reports are mandated, linguistic data will be analyzed with the same efficiency and effectiveness as numerical data for the purposes of predictive financial analysis, fraud detection, forensic accounting, and auditing.

"Using XBRL to identify and group parts of the MD&A into defined sections (e.g. business risks, strategies, and resources) it will be possible to compare subsections of the MD&A within companies for multiple years and across companies for the same year."

Automated semantic analysis of verbal data is a new frontier in financial analysis. Over the past decade academic researchers have analysed different linguistic corpora for predicting stock market performance and fraud including language from the 10-K, 10-Q, and 8-K. In order for these methods to touch the mainstream, the data needs to be more accessible. The key to accessibility is applying standardised XBRL tags for annotating textual data in financial reports.

Applying XBRL tags to the narrative portions of financial reports will likely lead to the ubiquitous usage of semantic analysis of financial reporting data, as the tags will cut through the barriers of collecting and identifying textual content, like the MD&A and its subparts. Using XBRL to identify and group parts of the MD&A into defined sections (e.g. business risks, strategies, and resources) it will be possible to compare subsections of the MD&A within companies for multiple

years and across companies for the same year. Year over year, analysts will be able to detect differences in content, tone, tense, immediacy, expressivity, readability, positivity, etc. for specific subsections of the MD&A.

While analysts have done this for individual companies, the ability to instantly detect and compare changes in language for multiple businesses and industries will be entirely new. For example, analysts will instantly be able to gauge the tone of an industry's narrative of their forward looking statements, detect outliers within the industry, and make more informed judgments about each company. XBRL tagged narrative data will likely lead to semantic analysis being common and integrated with traditional financial analyses. The availability of data will lead to the development of new semantic analysis methods and models for predicting company performance because we know that anything that can be used to predict stock performance will be used for that purpose.

The digital infrastructure of the 21<sup>st</sup> century will likely entail exponential expansion of bandwidth and storage, enabling transmission of large amounts of frequent data from a multiplicity of redundant cloud storage sites. Although these will present challenges, the bandwidth occupied by raw data will be minuscule in comparison with that of, for instance, streaming high-definition video. Such transmission is already being accomplished, and we see no reason for this expansion to end.

Systems will seek competitive advantage by providing very rapid response monitoring business processes, applying a multitude of business rules

to support improved customer service, process support, and decreased occupation of capital. This will also allow for more dynamic business processes that will adapt to a series of different conditions.

This scenario creates a set of additional needs for the assessment, assurance, and standards of business measurement. These needs in the three areas of digital accounting includes 1) Methods of expanded data capture/recording that capture information in real time at most points of business added to rapid measurement and association with a wide plethora of environmental information (e.g. GPS positioning, e-mails, blogs, Facebook, web searches), 2) the need of electronically distributable and interpretable financial reports (XBRL) that are geared to this environment and not necessarily similar to current balance sheets and income statements, and 3) the need of close to real-time assurance that in a close to the event basis provides assurance of data quality and extracts questionable events.

### XBR IN THE FUTURE

Concluding, it is likely that XBRL will evolve over time to: 1) support a more frequent reporting model<sup>5</sup>, 2) incorporate richer semantic contexts, 3) tie into a continuous audit schema, 4) facilitate a predictive audit model<sup>6</sup> and, 5) facilitate standards formalisation. **iBR**

<sup>5</sup> GAL, G. 2008. "QUERY ISSUES IN CONTINUOUS REPORTING SYSTEMS," JOURNAL OF EMERGING TECHNOLOGIES IN ACCOUNTING, VOL. 5, 81-97.

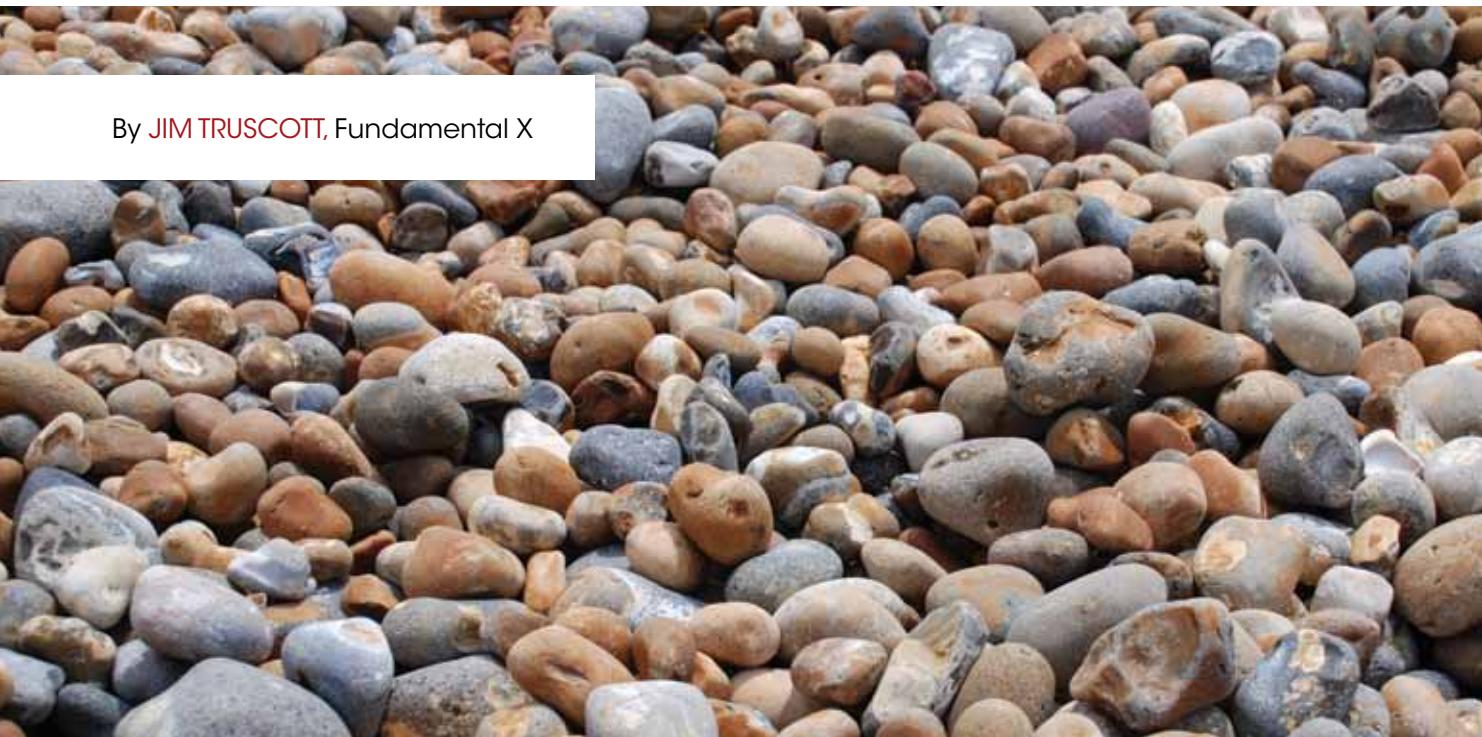
<sup>6</sup> KUENKAIAEW S., AND VASARHELYI, M.A., THE PREDICTIVE AUDIT: LOOKING FORWARD AS OPPOSED TO BACKWARD, WORKING PAPER, RUTGERS BUSINESS SCHOOL, 2012.

training  
extension model  
metadata  
XBRL analysis implementation  
taxonomy banking tax  
securities insurance regulators  
reports statistics  
data XML



# OPENING ANALYSIS

By **JIM TRUSCOTT**, Fundamental X



JIM TRUSCOTT, FOUNDER OF FUNDAMENTAL X, DISCUSSES THE 'EPIPHANY' THAT LED TO THE DEVELOPMENT AND LAUNCH OF THEIR XBRL APPLICATION.

Fundamental X launched XBRL to XL on 31 January 2012 to coincide with the XBRL US 2012 challenge to build an application to analyse corporate financial data. Work had started on its construction in July 2011 after Jim Truscott's 'serendipitous epiphany moment'.

Jim Truscott: We had been researching the issues surrounding the modelling of European private company data for a potential client when we started to wonder whether XBRL might ultimately provide the solution. Unfortunately there was no available XBRL data in Europe so we headed straight across the Atlantic to see how XBRL's progress into the SEC was looking.

This inability to 'look' at examples of XBRL in any meaningful way (besides in a text editor

swimming in tags) was the 'epiphany' moment where we started out on the road to making XBRL instantly accessible for analysis. Along the way we discovered that there were many other issues surrounding mandatory SEC XBRL filings that would prevent SEC interactive data from being used straight off the shelf for comparative analysis.

The Fundamental X team are based in Hastings, England – on the 'America Ground' (the USA's lesser known 24<sup>th</sup> state!). It does feel a bit strange being an Englishman working with XBRL when we are so far behind the US in establishing XBRL as a publicly listed disclosure standard.

I recently attended the XBRL US conference in Austin, Texas and was not surprised to hear from an assortment of different voices at the conference

that XBRL is still regarded as unusable in any kind of meaningful analysis. I don't necessarily agree with that, but I do concur that there are many issues that need to be overcome before XBRL is ready for analysis; hence our goal at Fundamental X to create 'Analyst Ready' data.

### MAKING XBRL ACCESSIBLE

Our first objective – to make XBRL accessible – was achieved with the launch of XBRL to XL in January 2012. Nearly all analysts do at least some of their analysis in Excel so it seemed obvious to put XBRL right at the heart of the analyst's desktop; in other words, in Excel.

A simple web front end enables you to choose which filings you wish to use as your source. At the click of a button, the XBRL data is then retrieved live from the SEC database, it is processed and then downloaded into an Excel template. We wanted to deliver comparable transparent XBRL data with the minimum of fuss.

Behind the web interface sits the processing engine. It does more than just extract the data from all those information heavy tags – the values are re-modelled and transformed to make the underlying data more comparable and accessible whilst still maintaining the granularity and enshrining the transparency that XBRL affords.

The screenshot shows the 'XBRL to XL' software interface. At the top, there's a navigation bar with tabs like 'Dashboard', 'Search', 'Companies', 'Analyst Models', 'XBRL API', 'Help', and 'Logout'. Below the navigation is a search bar labeled 'Search for XBRL SEC Filing' with fields for 'Ticker or CIN' (MSFT) and 'Filing Date' (2012-08-21). To the right of the search bar is a 'Select one or more Filings' section with a dropdown menu showing 'Filings 1-5' for 'MICROSOFT CORP (MSFT) (786015)'.

The main area displays a table titled 'MICROSOFT CORP (MSFT) (786015)' with columns for 'Filing Date', 'Value', and 'Type'. The table contains several rows of data, such as '2012-08-20 10.44', '2011-12-31 10.43', etc. At the bottom left, there's a note: 'I have no interest in Microsoft (MSFT), or merely specified the date in which it has been prepared. I expect the information contained in this document to be accurate and reliable. It is my own responsibility to verify its actual value in the market if it exists.'

We have actually used the processing engine to create other customised tools for clients and it has been very easy for us to create specific layers on top of the engine to meet different customers' requirements for the data. Having all the data in there and connected in unique and different ways means we can offer a variety of solutions to the end user.

### RETAINING THE TRANSPARENCY

Our second objective was to retain the original transparency of the XBRL tagged data.

We have deployed a rather unique solution to the problem of providing standardised numbers for comparisons whilst at the same time retaining the

"Excel is a superb analytical tool, and its customisable features need no replication. 'XBRL to XL' delivers the data in a template that makes XBRL accessible and transparent to all that excellent functionality. It means that at Fundamental X, we can focus on getting the right data into Excel in the first place."



JIM TRUSCOTT, FUNDAMENTAL X

transparency of the 'as presented' view, as seen in the 'interactive data' html. The 'as presented' view is important as it is in this context that the values were originally created and in which the preparer originally wished them to be viewed.

The data is downloaded into Excel 'as presented', leveraging Excel's powerful data manipulation features to create the additional standard values required. Customised financial models can then be created from this standard layer.

The presentation layer is enhanced by the presence of the XBRL tags, with the lines coded as extensions highlighted in a different colour. This means that you can see at a glance which tags lie behind the presented version.

STATEMENT OF INCOME ALTERNATIVE			
31	us-gaap salesrevenuenet	Revenue	699430000000
32	costsandexpensesabstract	Operating expenses:	
33	costsofrevenue	Cost of revenue	155770000000
34	us-gaap researchanddevelopmentexpense	Research and development	90430000000
35	us-gaap sellingandmarketingexpense	Sales and marketing	139400000000
36	us-gaap generalandadministrativeexpense	General and administrative	42220000000
37	us-gaap costsandexpenses	Total operating expenses	437810000000
38	us-gaap netincome	Net income	161620000000
44	Model Standard Tags	Filing (1) Filing (2) Filing (3) Filing (4)	Filing (5)

This three tier model has a number of advantages. It creates a layer (the 'Standard' sheet) in which the analyst can intervene in the standardisation and preparation process – therefore retaining control over the data throughout the entire modelling procedure. Secondly the numbers are completely transparent and finally, it is much simpler to create.

20	xbrl tag	Filing (1)	Filing (2)
21	Relative Year	0	0
22	entityregister	MICROSOFT CORP	APPLE INC
23	Year Date	year	2011 2011
24	Revenues - Sales	salesrevenue	69943000000 108249000000
25	Total Revenues		69943000000 108249000000
26	R & D	researchanddevelopment	9043000000 2429000000
27	Tax	incometaxes	1921000000 8282000000
44	Model Standard Tags	Filing (1) Filing (2) Filing (3)	Filing (4)

Excel is a superb analytical tool, and its customisable features need no replication. 'XBRL to XL' delivers the data in a template that makes XBRL accessible and transparent to all that excellent functionality. It means that at Fundamental X, we can focus on getting the right data into Excel in the first place.

A number of enhancements have been made to the data since its release. More meta-data has been added and new Excel templates have been created specifically for quarterly analysis. We have also been joined by a further developer, Phil Crowe, who worked alongside me at the Financial Times when I was managing the Company Analysis family of products.

### COMPARABILITY ISSUES

The third and final objective (and in our view a very long objective!) is to deal with the comparability issues inherent within the XBRL.

When a company prepares a financial report, its principal aim is not to create comparable data but more a narrative that explains its financial position and the potential for changing that position. XBRL helps to close the comparability gap but this isn't a guarantee or automatic.

Many issues, such as taxonomy extensions, haven't been deliberately put there to make analysis more difficult but merely to reflect the intended nature of XBRL – such as its extensibility. Some jurisdictions seemed to have introduced BRL which is bit like chopping off XBRL at the kneecaps.

I have found my previous experience invaluable when preparing data for analysis. When we collected data at the Financial Times, we were in effect dealing with extensions all the time, and so at Fundamental X we have developed a number of strategies to deal with this issue. We already have one potential client testing the modified data and have high hopes for this approach.

The Fundamental X team are also addressing issues such as changing taxonomies, differing taxonomies and various types of accounting policy. We aim to fix the comparability issues that can be fixed and highlight those that can't.

We have found that some problems are being caused by old habits and reluctance on the part of some to change their mind sets in order to meet the new possibilities afforded by XBRL.

From what I've heard and seen, we have both preparers and potential users obsessing over the presentation. This might lead to inadvertent errors in the XBRL as filers prioritise how it looks over how it adds up and potential users overly concerned about the discrepancies between the presented filed reports and the XBRL values in their test models.

I can understand why historically analysts have wanted to handle the data themselves – to be assured of its quality and that it came from a trusted source. This lack of trust stemmed from knowing that a third party vendor would employ error-prone 'human hands' when preparing the data. This human element hasn't completely

disappeared as XBRL may still pass through two sets of hands (at the filer or any external XBRL house that creates the filing) but at least the data won't have been pulled apart by a completely unknown third party.

There has been much talk of XBRL being audited in the future and I think that would go a long way to giving analysts the confidence to trust XBRL. At Fundamental X, we believe that iXBRL could be the next step forward - the data and the presentation are synonymous with each other so it will give people more confidence in the underlying numbers.

We are also concerned about how some key numbers are not always available. For example, I was looking at Apple's 10K recently and was surprised to see 'interest income' hidden away in

the Management Discussion & Analysis (MD&A). I suppose that I'm just used to European reports where disclosures are very detailed and everything is generally in the right place.

**"The problem here is that XBRL creation is generally back to front. Until the XBRL is created first, the issue of expanding its scope is always going to be a major headache."**

going to be a major headache.

In the meantime, at Fundamental X, we continue working with what's there and keep chipping away at the ongoing issues. **iBR**

I can understand why some would wish to see MD&A in the XBRL filing. Although having seen XBRL being prepared, I can imagine the consternation if this were suggested (as happened at the recent conference in the US!). The problem here is that XBRL creation is generally back to front. Until the XBRL is created first, the issue of expanding its scope is always

## Reducing Reporting Complexity Unlocking the value of XBRL



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Dave van den Ende at [DGvandenEnde@deloitte.nl](mailto:DGvandenEnde@deloitte.nl),  
+31 88 288 0208 or visit our website  
[www.xbrlplus.com](http://www.xbrlplus.com).

# MOVING TOWARDS AN INTEGRATED REPORTING FRAMEWORK

By BRAD J. MONTERIO, Colcomgroup and LIV A. WATSON, WebFilings LLC

BRAD J. MONTERIO, MANAGING DIRECTOR OF COLCOMGROUP, INC AND LIV A. WATSON, DIRECTOR, GLOBAL BUSINESS DEVELOPMENT OF WEBFILINGS LLC, EXAMINE THE NEXT STEPS FOR INTEGRATED REPORTING.

Integrated Reporting (<IR>) has been referred to as the next stage in the evolution of corporate reporting. Defined by the London-based International Integrated Reporting Council (IIRC) as "a new approach to corporate reporting that demonstrates the linkages between an organisation's strategy, governance and financial performance and the social, environmental and economic context within which it operates," <IR> has gathered significant momentum in the last two years. Accounting standard setters, corporations, investors, regulators, accountants, technologists and others have come together to define a globally-accepted integrated reporting framework that better and more accurately communicates a company's value to the marketplace.

With the recent publishing of a draft <IR> Framework Outline document, the market is one step closer to a meaningful framework. This early outline gives us a glimpse into the impending framework under

development by the IIRC and scheduled to be released for public comment some time in 2013. The journey to get to this place in the evolution of corporate reporting has not been without its challenges, including:

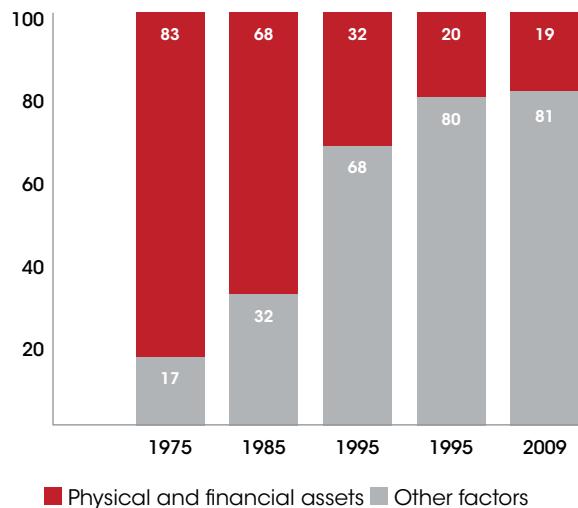
- Navigating a patchwork quilt of competing frameworks and standards;
- Gathering quality, consistent, non-financial, ad hoc data sets often found outside the ERP or financial reporting systems;
- Aggregating information across supply chains;
- Building trust and reputation with key stakeholders; and
- Cross-industry comparability.

## SHIFTING VALUE PARADIGM

Investors are increasingly seeking information not found on the balance sheet to better understand how that company intends to create value over time. They've come to realise that more value is found off the balance sheet - in fact, according

to a 2010 study conducted by Ocean Tomo that looked at components of S&P500 market value, in 2009, only 19% of value was reflected in physical and financial assets, while 81% was found elsewhere. As Diagram 1 shows, this is a complete reversal from what we found in 1975 where most value, we thought at the time, was reflected in the financial statements. The paradigm shift we see today tells a completely different story.

**DIAGRAM 1 COMPONENTS OF S&P500 MARKET VALUE**



SOURCE: OCEAN TOMO, 2010

Investors and other stakeholders now find more than 80% of a company's value reflected in its environmental, social and governance (ESG) practices and disclosures.

Content of corporate reports today is evolving to include more of this type of non-financial, ad hoc information:

- According to the Corporate Register, on average, the number of Corporate Social Responsibility (CSR) reports grew 18% a year over the last decade to more than 5,600 in 2010. At this rate of growth, more than 25% of all listed companies worldwide will produce such reports by 2014.
- It is estimated that several thousand companies produce reports following the sustainability reporting framework from the Global Reporting Initiative (GRI).
- Approximately 5,000 companies currently report carbon, greenhouse gas emission, forestry and water use information using The Carbon Disclosure Project reporting framework.

- The IIRC's current integrated reporting pilot program currently involves more than 70 larger companies around the world that are each working to produce their integrated reports for investor audiences.

Market appetite for non-financial disclosures is clearly beginning to have an influence on companies as they prepare their CSR, CDP, GRI, sustainability, ESG and <IR> reports. These types of reports are no longer about public relations and branding tools; they are about communicating value and material risk factors more effectively to investors, analysts, regulators, NGOs and many other stakeholders in the communities in which a company operates.

<IR> is the newest 'kid on the block,' and perhaps the most interesting of its peer group. <IR> is not about stapling a CSR report to an annual report. Rather, it's about a company telling its own story on how it intends to create value over the short, medium and longer terms; it's about building better relationships with stakeholders and managing the company reputation; it's about creating meaningful disclosures; it's about effective communication and participating in the 'multilogue' with those stakeholders; it's about improving transparency, increasing access to capital and simplifying the process of complex report development.

## RELATED BUT DIFFERENT

Sustainability reports and their closely related brethren are not the same animal as an integrated report. All one need do is look to the IIRC and the work it is undertaking to define <IR> and educate the world about its benefits, value and differences from current CSR and sustainability reporting. The IIRC Web site states, "an Integrated Report should be a single report which is the organisation's primary report – in most jurisdictions the Annual Report or equivalent. Central to Integrated Reporting is the challenge facing organisations to create and sustain value in the short, medium and longer term. Each element of an Integrated Report should provide insights into an organisation's current and future performance." Integrated reports look at a company through a different lens than their cousins – they're intensely focused on communicating value and impact in the future. Unlike traditional corporate reporting, integrated reports do not

emphasise the historical look back at past performance and old results – they look forward.

#### ONE STEP AT A TIME...

The IIRC's efforts to define <IR> and educate companies, investors and other stakeholders about what it is, and isn't, will certainly be a challenge. Education and awareness building are essential to help the market evolve along with this kind of reporting. Executives will raise objections, roadblocks and obstacles as reasons not to move towards <IR>, not the least of which will be about their perceived increased burden on companies to disclose even more information than they previously had (SOX 404 and XBRL come to mind here as well). However, we anticipate that the results of the IIRC pilot program will serve as market proof that <IR> is not only achievable; it's effective and valuable to companies and their stakeholders.



BRAD J. MONTERIO, COLCOMGROUP



LIV A. WATSON, WEBFILINGS LLC

etc) that each targeted a piece of the bigger integrated reporting domain. In a global world, we cannot settle for country-focused or otherwise narrow reporting frameworks to solve our evolving integrated reporting needs. The IIRC is working

towards a globally accepted framework for <IR> and has established an aggressive timeline for doing so.

The recent IIRC Draft Outline is the latest step in the journey intended to inform <IR> stakeholders about the likely structure and general content of the <IR> Framework currently under development. The Draft Outline takes into account the recent feedback received on the Discussion Paper, the experiences and collective learnings of IIRC Pilot Programme participants and the IIRC Pilot Program's Investor Network (a grouping of primary audience members from the investor community to provide feedback and insight into the shortfalls of current reporting), and research being conducted by the IIRC Secretariat and its various working groups and technical task forces. Although the Draft Outline is not a formal part of the IIRC's due process for developing the <IR> Framework, it is currently accepting stakeholder feedback.

The IIRC has indicated that a more complete, detailed outline of the technical content is expected to be released in late 2012. This would be followed by a draft <IR> Framework to be released for public consultation in early/mid-2013 and the eventual release of version 1.0 of the Framework in late 2013. Timelines are moving quickly in the world of <IR>, and that's a good thing. If current reporting falls short of what key stakeholders need to make informed decisions, we cannot wait a decade for the right solution. An <IR> framework is needed soon.

#### UNDER THE MICROSCOPE

The Draft Outline of the <IR> Framework focuses primarily on two areas: (A) an overview of <IR>, including discussion of what it is, a description of how the framework will be used, and the key conceptual foundations of the framework as discussed in the Discussion Document originally; and (B) how to prepare an integrated report, including guiding principles and definition of important content elements.

#### PRINCIPLES-BASED

The IIRC indicates that the Framework is intended to take a *principles-based* approach rather than focusing on specific KPIs or rules for measurement

or disclosure of individual matters. A principles-based approach requires senior management (and perhaps the Board) to apply considerable judgment to determine which matters are material and to ensure they are adequately disclosed in the integrated report. They will have to consider the application of generally accepted measurement and disclosure methods in that process of determining material risk factors. As is often the case, the *intent* of a principles-based approach is to find some amount of balance between flexibility and prescription in a seemingly conflicting world – one that “recognizes the wide variation in individual circumstances of different organisations but enables a sufficient degree of comparability across organisations to meet relevant information needs,” as the IIRC indicates. The Draft Outline also indicates that the Framework does *not* establish benchmarks for assessing an organisation’s strategy, governance, performance or prospects, and that responsibility for such assessments lies with the users (e.g. investors, analysts) of the report. Probably no big change there from how they do things currently.

### SHOULD VS. MUST

Perhaps not surprisingly, the Draft Outline indicates that if a company is going to hold out its report as an *integrated* report that references the <IR> Framework, it “should” apply all of the Guiding Principles and address each of the Content Elements identified in the <IR> Framework. Notice the use of the word “should” vs. “must.” Without a requirement to apply all of them, are there going to be problems when it comes to comparability and benchmarking across integrated reports? Do we handicap the user if the company is not required to include this information?

### CREATING AND PRESERVING VALUE – A CENTRAL THEME

The Conceptual Foundation section covers concepts underlying <IR> and serving as a foundation to the Framework’s Guiding Principles

and Content Elements. One of the key themes covered in this section is the ability of an organisation to create and preserve value over time – this is a central theme of <IR>. In addition to defining value in the context of the organisation, the Framework will also look at value from the perspective of other stakeholders.

Guidance will also be provided on a variety of other topics, including:

- **Use of technology:** How technology (e.g. the internet, XBRL, social media platforms) can be leveraged to link information or data within an integrated report.
- **Reporting frequency:** Whether a consistent, periodic cycle is needed for an integrated report and whether this cycle needs to be coordinated with the company’s business or reporting cycles.
- **Time horizon:** The different timeframes to be considered in <IR>; short, medium and long term.
- **Governance:** The role of effective leadership and decision-making regarding <IR>.
- **Degree of data aggregation:** The determination of the level at which information in an integrated report is disclosed, particularly with respect to segmentation of information for large, complex companies.
- **Potential constraints:** Includes cost/benefit considerations, concerns about disclosure of commercially-sensitive information, and potential legal risks for directors and disclosure of forward-looking information.

The Guiding Principles of <IR> to be featured include:

- **Strategic focus:** An integrated report provides insight into a company’s strategic objectives and how those objectives relate to its ability to create/sustain value over time, as well as the resources and relationships on which the organisation depends.

- **Connectivity of information:** An integrated report shows the connections between the different components of the company's business model, external factors that affect the company, and the various resources and relationships on which the company and its performance depend.
- **Future orientation:** An integrated report includes management's expectations about the future, as well as other information to help report users understand and assess the company's prospects and the uncertainties it faces.
- **Responsiveness and stakeholder inclusiveness:** An integrated report provides insight into the company's relationships with its key stakeholders and how/ to what extent the company understands, considers and responds to their needs
- **Conciseness, reliability and materiality:** An integrated report provides concise, reliable information that is material to assessing the company's ability to create and sustain value in the short, medium and long term.

In terms of content elements, a typical integrated report should include sufficient information on each Content Element to answer the questions posed for each. The Content Elements are fundamentally linked to each other and are presented in a way that makes their interconnections readily apparent – in other words, the continuous thread linking them should be obvious and sidestep more isolated, standalone approaches to the content.

The Content Elements include:

- **Organisational overview and business model:** What does the company do and how does it create and sustain value in the short, medium and long term? The report must communicate this effectively to stakeholders.
- **Operating context, including risks and opportunities:** What are the circumstances under which the company operates, including the key resources and relationships on which it depends and the key risks and opportunities

that it faces? This section focuses on materiality of those risks.

- **Strategic objectives and strategies to achieve those objectives:** Where does the company want to go and how is it going to get there? This is forward looking – perhaps uncomfortable for the attorneys, but nevertheless insightful for an investor trying to determine future direction of the company.
- **Governance and remuneration:** What is the company's governance structure, and how does governance support the strategic objectives of the company and relate to the company's approach to remuneration?
- **Performance:** How has the company performed against its strategic objectives and related strategies? Past performance is a strong indicator – just not the only one on which to base a decision.
- **Future outlook:** What opportunities, challenges and uncertainties is the company likely to encounter in achieving its strategic objectives and what are the resulting implications for

“In a global world,  
we cannot settle for  
country-focused or  
otherwise narrow  
reporting frameworks  
to solve our evolving  
integrated reporting  
needs.”

its strategies and future performance. Again, an uncomfortable topic for the management team or general counsel, but this is the kind of information investors want to know.

## WHAT'S MISSING?

XBRL. At least in any significant manner (it is referenced as an example under the "Use of Technology." XBRL is an enabling technology that will make the process of integrated reporting easier to undertake. So all eyes from the XBRL community will be focused on the first version of the draft Framework when it comes out in 2013 to see how significant a role XBRL plays in that framework and guidance.

## YOUR NEXT STEP?

Review the IIRC Draft Outline and submit your comments. It is not a question of if an <IR> Framework will be developed, but rather, when it will become more mainstream. Will you evolve with corporate reporting, or will it pass you by? 

# XBRL AND BIG DATA: SEPARATING THE FACTS FROM THE FEAR

By PAUL WARREN, CoreFiling

OVER THE LAST YEAR, A NUMBER OF PROJECTS HAVE EVALUATED OR IMPLEMENTED XBRL FOR HANDLING VERY LARGE DATA SETS, WITH MIXED RESULTS.

The less successful attempts have led to speculation about where the problems lie. Some have asserted that the problem lies with an immature tools market, while others claim that the problems are inherent to the XBRL specification and cannot be solved with tools alone. Some pin the blame on adopters failing to follow best practice, while others believe that the data volumes are simply too far beyond what XBRL was designed for and another technology should be found.

An unhelpful side effect of the widespread adoption of technology is that there is a need to

provide simple summaries of complex, technical issues, and unfortunately in doing so the truth can get lost in translation. The reality is that while none of the above statements are wholly true, none of them are wholly false either.

In this article I will attempt to distil the real problems in using XBRL to work with large data, and what can be done to address them.

## PRODUCTIVITY THROUGH INEFFICIENCY

In an earlier blog post on XBRL and large data I raised the notion of "productivity through inefficiency",



a reference to the fact that computing power has increased to the point where it is often feasible to use data representations that are inefficient in order to achieve productivity gains elsewhere, such as quicker implementation. The most obvious example of this is the XML standard upon which XBRL is built. An XML document is typically several times larger than a binary file containing the same data, and may take many times longer to consume, yet the use of XML for data exchange is now commonplace. Modern computing power means that for many applications the real world performance impact of using an inefficient format such as XML is negligible, and this is far outweighed by the benefits of self-describing data that can be processed and validated using standard tools.



PAUL WARREN, COREFILING

"XBRL takes this inefficiency of representation to a new level, in order to build a framework for business reporting that is flexible and extensible."

XBRL takes this inefficiency of representation to a new level, in order to build a framework for business reporting that is flexible and extensible. For many applications this inefficiency simply doesn't matter. XBRL is "fast enough", and to quote Tim Bray on software performance, "If it's fast enough, don't worry anymore."

#### IMMATURE TOOLS?

What we are seeing now is XBRL starting to be applied to applications for which it isn't currently fast enough. We've seen this happen before, and in the past the tools market has responded. We've seen software struggle with the size of taxonomy first seen in US GAAP, and vendors responded quickly with tools that could cope easily with upwards

of 15,000 concepts. Similarly we've seen projects with requirements for very high throughput of relatively small instances, and again, the market has responded with tools such as CoreFiling's True North now able to process real world instances against a cached taxonomy in tens of milliseconds.

Given this experience, you might reasonably expect the market to respond with faster tools, and the problem will go away. To a certain extent this may be true. There's almost certainly scope for some optimization of current tools, but there are a number of features of the XBRL specifications that present significant barriers to efficient processing of very large XBRL instance documents.

#### SPECIFICATION PROBLEMS?

One of the deficiencies of the XBRL v2.1 Specification is that it does not document a logical data model that is separate and distinct from the XML syntax that is used to represent it. For the most part, this is a minor detail that is of little relevance to all but technical purists, but it does have some wider implications. The intertwined relationship between XBRL and its XML representation has resulted in design decisions in later specifications that close off certain possible optimisation paths for XBRL processors. In particular, the XBRL Formula specification makes

use of the XPath expression language. XPath is a powerful language for navigating XML documents. Unfortunately, as is usually the case, this power comes at a cost, and in this case the cost is that in order to support the full range of XPath expressions that can appear in an XBRL Formula Linkbase, you are pretty much bound to maintaining an in-memory model of the XML document. Such models are large, typically ten times the size of the underlying document, and when you're looking at multi-gigabyte instance documents, this very quickly becomes a problem on current hardware.

Frustratingly, well-written XBRL Formula rules should make very little use of the features of XPath that require access to an XML document model. XBRL

Formula provides its own constructs for selecting facts from an XBRL document, so if you're using XPath expressions to access elements and attributes in the document, you're doing it wrong. This frustrating fact presents a way forward: if you were to constrain yourself to a subset of XPath, or switch to a different expression language altogether, you could potentially drop the need for access to an XML document.

Such a change in the allowed expression syntax would need to be driven through the formal specification process: some vendors are already following the route of creating optimised processors that only support a subset of the specification, but if different vendors begin to support different subsets the value of standardisation will be very quickly eroded.

In the XML world, a standard approach to coping with large documents is to switch away from in-memory models to stream-based processing. Unfortunately, a seemingly trivial design decision of the XBRL v2.1 Specification effectively prevents efficient stream-based processing. It places no constraint on the order in which the facts, contexts and units that make up the instance can appear. This means that when a processor encounters a context, it has no way of knowing how many of the facts in the document use that context, and so must keep the details of that context in memory until it reaches the end of the document. Similarly, if the processor encounters a fact before its corresponding context, the fact must be held in memory until the context is reached. In the worst case, you could end up with the entire document in memory, which is exactly what you're trying to avoid with stream-based processing.

Fortunately there are some relatively simple approaches that could be taken to address this limitation and enable stream-based processing – but in order to be effective they need to be standardised.

#### A BEST PRACTICE ISSUE?

To date, the development of XBRL technology and best practice has centred around the characteristics of the early-adopting projects, and for the most part these have followed a similar pattern. Generally they have involved the conversion of existing filing mechanisms to use

XBRl as a data exchange format, with a focus on corporate, and to a lesser extent individual, data. Although there are some key differences between the "application profiles" of the various XBRL implementations, at a high level they are broadly similar. All the data in the filing fits naturally into a single XBRL instance document, and will be validated upon receipt for business rules compliance using a document-level validation technology such as XBRL Formula or Sphinx.

What we are seeing now is XBRL being applied to some very different application profiles, and best practice from existing implementations may well be inapplicable. This does not mean that XBRL is unsuitable in these environments, just that it needs to be applied differently. Applications such as the reporting of pensions information, or loan-book data, typically involve the reporting of a very large number of moderately sized records. Much of the validation that needs to be applied to such data is checking the integrity of individual records, and can be performed without the context of the full instance document. Putting all the data into a single instance and blindly applying such validation using a document-level approach is unlikely to be successful; the luxury of "productivity through inefficiency" is not yet available to this task.

In the short term there are a range of approaches that can be taken to solve these requirements, such as splitting very large returns into smaller chunks that can be validated and processed independently, or working with software developers to create solutions that can process subsets of a streamed document.

#### OPTIMISING XBRL

It's fair to say that the XBRL world is not yet fully optimised for big data and the "XBRL experts" who oversaw existing implementations are not necessarily well qualified to advise on these very different application profiles. At a technical level, there are ways that the specifications and tools can be improved to better support large data, and at a human level, we should expect suitable best practices to evolve.

The XBRL world has responded quickly to new challenges in the past and there is no reason to believe that big data will be any different. ■

# XBRL ABSTRACT MODEL FOR THE REST OF US

By ASHU BHATNAGAR, XBRL International Inc.

ASHU BHATNAGAR, DIRECTOR STANDARDS & PRACTICES, XBRL INTERNATIONAL, INC., BREAKS DOWN THE COMPLEXITIES INHERENT IN UNDERSTANDING XBRL ABSTRACT MODEL.

## WHAT COMES TO MIND WHEN YOU HEAR THE FOLLOWING?

"XBRL Abstract model is an OMG MOF model which defines a way of modeling the semantics of business information and its information models that may be reported by the XBRL 2.1 core specification and the Dimensions 1.0 specification. The model provides the tools to capture the fundamental structures and design of business information, at an abstract level of its semantics, and can be mapped to a concrete level to be conveyed using XBRL and XBRL Dimensions (using current XML syntactical details) or using OMG CWM. The model covers semantics defined abstractly for modeling business information (in terms of aspects and viewed in tables), and can make use of the concrete features of XBRL extension modules including Formula, Table Linkbase, and to base the meta-model on accepted industry meta-modeling technology".

"Cool!", "Nice", or just "I understand" are some of the remarks we expect to hear from technology experts who thrive in the abstract clarity of concepts, classes, layers, packages, UML models, meta models and meta meta-models without the need for descriptions of lower level physical things and instances.

As for the rest of us, it's more likely a collective – "What?" or more importantly "Why should I care?"

## XBRL AND ANALOGIES FOR NEWCOMERS

You probably know that XBRL stands for Extensible Business Reporting Language, a XML standard based computer language enabling next generation business reporting by leveraging domain knowledge of accounting standards like IFRS and GAAPs. If you know that much, then you also know that XBRL is complex and not so easy to explain to a lay person.

In conferences and seminars on XBRL training, we sometimes try to explain XBRL to newcomers through analogies, such as comparing XBRL to a bar-code which enables computers accurately, quickly and easily to read and interpret XBRL formatted business reports and data.

While this analogy or others like it are not completely accurate, and not intended to be taken literally, they are helpful in explaining this difficult subject to layman. When seeking to leverage XBRL to address business needs, however, there can be no room for ambiguity. A developer's understanding of XBRL must be ironclad. But how can this be accomplished?

## THE CHALLENGE OF COMMUNICATING XBRL - EVEN TO EXPERTS

The vocabulary, constructs, rules and grammar of XBRL language are standardised and described in

a set of documents including XBRL 2.1 Specification and Dimensions 1.0.

These set of XBRL documents are written in plain English, and where possible, provide detailed examples of both the syntax (structure) and semantics (meaning) of XBRL, where syntax is a set of precise rules for structuring the XML document to be valid and well formed, and semantics are quite literally the meaning of various words or concepts used.

When collaborating and working with a very large group of XBRL stakeholders which includes XBRL technology developers, users, enablers and decision makers, around the globe, speaking many different languages, the use of English is a necessary but imperfect solution. This is where graphical languages come into play.

#### **GRAPHICAL LANGUAGES**

Imagine for a moment, if we were to contract to build a house. The most efficient and standard method of describing our requirements is likely by hiring an architect who translates our desires of sizes and number of rooms, kitchen, bathrooms and layout of doors and windows into a set of graphical engineering drawing or blue-print. In fact, there will be several distinct layers of these engineering drawings, ranging from a plot plan, to floor plans, to the foundation plan, to the roof plan, and then several more detailed gas, electricity, plumbing, telephone, cable and security wiring diagrams.

As a homeowner and a layman, we need not understand all these engineering diagrams in great detail, but for the home builder each one needs to be precise, accurate, and conforming to the standards, building codes and compliance regulations.

Quite similarly, the XBRL is now being described in a standardised language called Universal Modeling Language (UML). Being graphical in nature, this

language is commonly understood by technologists around the world as a standard. More importantly, it employs varying degrees of abstraction at different layers. It doesn't replace the use of plain English to explain the XBRL standard, or the financial concepts described by the standard, but supplements them with a more formal means of communication.

As one of our experts David Frankel explains, "XBRL taxonomies, and reports that conform to the taxonomies, use a syntax based on XML technologies including XML Schema and XLink. The

"As a homeowner and a layman, we need not understand all these engineering diagrams in great detail, but for the home builder each one needs to be precise, accurate, and conforming to the standards, building codes and compliance regulations."



ASHU BHATNAGAR, XBRL INTERNATIONAL, INC..

reliance on XLink in particular makes the syntax verbose and rather convoluted. As a result, XBRL users – including software developers – frequently fail to implement the XBRL specification properly. The purpose of the abstract model is to distill the dense syntactic aspects to reveal in an uncluttered fashion the actual things that XBRL taxonomies and reports express. The initiative also aims to produce an unambiguous mapping of the Abstract Model to the XBRL syntax."

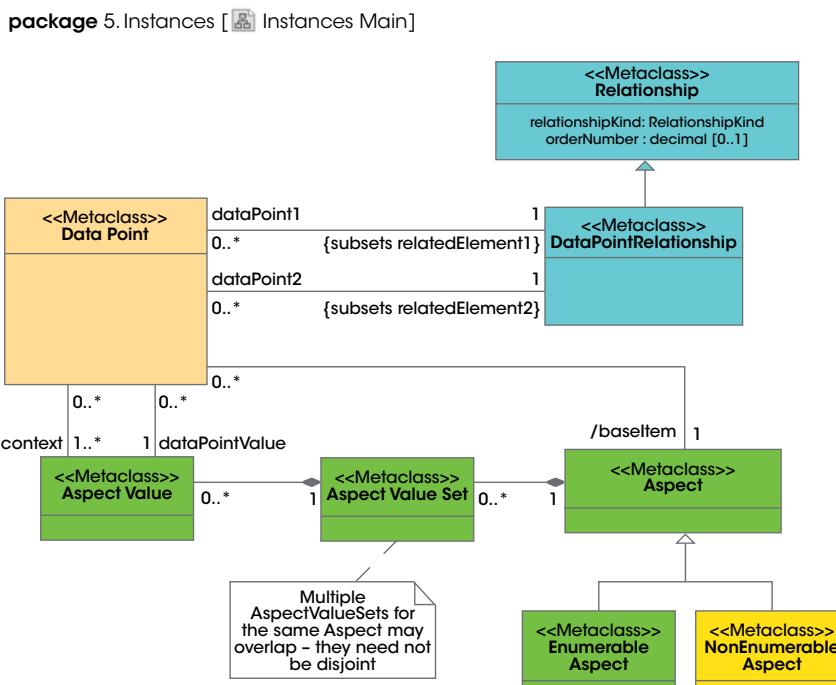
The Abstract Model project is creating two models, shown in Figure 1:

- Primary model: Models semantics
- Secondary model: Maps the modeled semantics to the XBRL technical syntax

FIGURE 1 XBRL ABSTRACT MODELS

PRIMARY MODEL	<ul style="list-style-type: none"> <li>Driven by semantics</li> <li>Remains syntax independent</li> </ul>
SECONDARY MODEL	<ul style="list-style-type: none"> <li>Driven by syntax</li> <li>Binds semantics to syntax</li> </ul>
XBRL SPECIFICATIONS	<ul style="list-style-type: none"> <li>XML syntactical representation of semantics</li> </ul>

FIGURE 2 META MODEL OF INSTANCE ARTIFACT:



### WHY YOU SHOULD CARE?

XBRL originally began as an effort to codify a business report with the description of semantic information conveyed in the report. Initial focus on the syntax and notation in the current files misses the concept of modeling of the business information being reported. Syntax and tools evolve and with the abstract model, we can project the business information onto companion technologies, such as databases based on OMG technology that co-evolved over the same time period as XBRL. These will allow us to consume ever increasing sets of information, with modeled information from different perspectives and submitters that need to be merged, pivoted, analysed and vetted.

### SO, HOW DOES AN ABSTRACT MODEL LOOK?

Figure 2 below shows a snippet of a meta model of an Instance artifact. It captures Data Point class instances that are facts (such as within a Document instance), that are related to the set of Aspect Values that identify or describe the Data Point (fact). There are a large number of such models which describe the entire XBRL Abstract Model.

For the technically inclined: The Abstract Model will be a metamodel expressed via the Meta Object Facility (MOF). MOF is a subset of UML used for Metamodelling, so UML tools can be used to develop the Abstract Model. [IBR](#)

FOR A MORE SERIOUS AND IN-DEPTH READING  
ON THIS SUBJECT, PLEASE REFER TO XBRL  
ABSTRACT MODEL 2.0 PUBLIC WORKING DRAFT  
06 JUNE 2012. URL HERE –  
<http://www.xbrl.org/Specification/abstractmodel-primary/PWD-2012-06-06/abstractmodel-primary-PWD-2012-06-06.html>

# BRINGING XBRL IN-HOUSE

By ARIEL MARKELEVICH, Suffolk University, Boston MA



ARIEL MARKELEVICH, ASSOCIATE PROFESSOR OF ACCOUNTING AT SUFFOLK UNIVERSITY, BOSTON MA, LOOKS AT THE VALUE OF BRINGING XBRL SYSTEMS INTO A COMPANY, AND HOW THIS CAN BENEFIT DATA QUALITY.

## LET'S TALK ABOUT THE BACKGROUND AND ORIGINS OF XBRL USE FOR COMPANIES.

Many people feel disappointed because XBRL is not offering enough benefits for companies. But, we need to bear in mind that XBRL was not designed to benefit companies, it was designed to benefit users of financial data. Being cynical, you might think it was designed to benefit regulators, and if this were the case, and the regulators are doing their jobs better and more cost effectively, then society as a whole is better off. And in a more general sense, the benefits should come from the use of the data, and not necessarily from the creation of the data.

The push by many in the XBRL community has been to show how powerful XBRL is for companies. Looking back, regulators did not claim that XBRL was designed in order that companies become better off, with the exception perhaps of more SBR-type projects, for example the Dutch and Australian projects. So we are really talking about the benefits, obviously the benefits to the users, but also the important benefits to companies. I would suggest that considering many companies are now stuck with the requirement for XBRL, that there are significant potential advantages to be gained from that requirement.

**WHAT ARE THE MAIN BENEFITS?**

The main benefits depend on how deeply you embed the XBRL. If you embed XBRL less deeply, the main benefit is that it shortens the time taken to create financial statements. The quality increases because XBRL allows you to check data quality when preparing the financial statements. If you embed XBRL further and modify the flow of information within the organisation, you gain by an increase in the quality of data across the organisation. By using structured standardised data, you can also improve the flow of the financial data within the organisation. I think this is an under-explored area.



ARIEL MARKELEVICH, SUFFOLK UNIVERSITY, BOSTON MA

**WHAT ARE THE MAIN APPROACHES TO BRINGING XBRL IN-HOUSE?**

When a company is dealing with the requirement to use XBRL and it has no XBRL knowledge or capability in-house, the easiest option is to use a bolt-on approach. Most companies in most countries are following this approach, because it's the one that requires the least knowledge of XBRL – you simply prepare the financial statements the same way you have done up to now and then convert them to XBRL. The conversion is typically outsourced to a third party. Companies are realising that this might not necessarily be the best approach. More and more companies are now trying to create the XBRL instance documents much sooner than after the financial statements

*"If you embed XBRL further and modify the flow of information within the organisation, you gain by an increase in the quality of data across the organisation."*

are created. This is a good idea but does depend on how deeply you want to embed the XBRL.

For larger companies with ERP systems, those systems steer the flow of the data within the organisation. There is then less of a need to 'reinvent the wheel' or make substantial changes. The only thing needed is to produce the financial statements in Word, PDF or HTML, and then also in XBRL. To that end, some ERP vendors have added an XBRL module that allows for the creation of XBRL instant documents.

**MOVING AWAY FROM ANNUAL REPORTING OBLIGATIONS, WHAT ABOUT CONTINUOUS USE OF DATA?**

Here we go back to the flow of financial data within the organisation. One thing that happens frequently in companies is that the different arms or parts of the company are not really using or sharing information. But what frequently happens is that the external reporting arm uses financial data which is not necessarily connected to the managerial or cost accounting section of the company, or potentially the tax compliance section. This is a missed opportunity in my opinion, because all those sections are ultimately using accounting data. They use it

differently, of course, because their requirements and needs are different. For example, in a managerial accounting setting you might make some decisions on an hourly or a daily basis, whereas the tax compliance or the external reporting sections will have different timescale requirements. You will also have different accounting rules for each department.

But if you look at the transactional level – the actual granular data – it's all the same. That misconnection or potential misconnection could be a missed opportunity if you're recreating data which itself increases the likelihood of mistakes. I don't like to use the term 'rekeying data', but look at the example of XBRL GL (the XBRL Global

Ledger) and I think I'm quoting Eric Cohen when I say that the whole point is to key the data in once and then re-use it numerous times. If you can do that once and not re-enter data in other parts of the organisation, then you're better off because you're increasing the quality of the data.

XBRL is a way to structure data – it allows you to check for quality and changes in different taxonomies. In many taxonomies, only about 10% of the taxonomy is the basic item. The other 80% or 90% comprises the relationship between the different items; the formulas and calculations. So there are obviously many relationships between the different items and structured data. This lets you check that those relationships exist and are correct and so allows you to maintain higher quality data.

#### **SO WHAT ARE THE PRINCIPLE AREAS OF DEBATE AROUND THE PROPRIETARY VERSUS THE NON-PROPRIETARY TAXONOMIES AND REPORTING TECHNIQUES?**

The main disadvantage of a proprietary taxonomy or proprietary system is that it is locked-in. This is obviously beneficial for the vendor, but you are then locked in with that vendor. If you're using a non-proprietary taxonomy (again using XBRL GL as an example) then you are not tied to anything. Any system that is implemented, whether it is an ERP by one vendor or XBRL GL, at some point, since you have different data sources, you will need to map the different data sources to the main taxonomy that they are using. Maintaining a taxonomy that is not changing in the sense that it is not proprietary, allows you to have a constant that should make life easier.

#### **SO WHERE DOES IT GO FROM HERE? WHAT ASPECTS WOULD YOU LIKE TO DEVELOP FURTHER IN TERMS OF THIS REPORTING?**

I think what's happening in many cases is that the people experiencing the XBRL 'headaches',

for lack of a better term, are those dealing with XBRL reporting. They do not necessarily see the internal benefits and in many cases they don't see the external benefits either. What I'm trying to do as an IMA member and accounting academic, is to raise awareness of the existence of these internal benefits. This has been discussed in the past but I think that now is a good time to discuss it again given that in the US, for example, all public companies are now using or are required to create XBRL documents, and XBRL is here to stay.

So now that we are in the midst of it and it's no longer a futuristic requirement, companies should at least consider whether further embedding XBRL into their systems could work for them. But let's be clear – this is not for everybody. If you have a very structured data system in which the flow of information between parts of the organisation works beautifully, then there's potentially no need to make any changes.

*"All over the world, there are companies dealing with XBRL, either knowingly or not, that could benefit from integrating XBRL into their organisations."*

But if you know that you're having data quality issues, and you know that the information doesn't flow well between different parts of the organisation, it may be a beneficial option. There has been much discussion about the example of the Maryland society of CPAs and their use of XBRL internally and the benefits that came from that use. I'm suggesting that non-public companies adopt this structured data system specifically for their own benefit.

All over the world, there are companies dealing with XBRL, either knowingly or not, that could benefit from integrating XBRL into their organisations. Many companies use software whereby they simply upload an Excel file or key in data. The software is used to convert the data to XBRL, i.e. a version of the bolt-on method. Again this may work for many, but I'm just trying to raise awareness that there are different options and that companies should think about them. **IBR**



# XBRL WILL NEVER WORK? IT'S ALREADY WORKING...

By PRANAV GHAI and ALEX RAPP, Calcbench

XBRL CHALLENGE WINNERS PRANAV GHAI AND ALEX RAPP OF CALCBENCH ARGUE AGAINST THE DETRACTORS OF XBRL.

It's become common here in the United States to hear a lot of grumbling about XBRL, at least among people that have even heard about it at all. The public companies that are required to file it? They aren't pleased with being asked to comply with yet another regulation that carries with it no clear payback. And the investors who are expected to use this information? Well, they don't seem to be able to figure it out. "It's just *too complicated*," is a common complaint.

Put it all together, and **IT WILL NEVER WORK**. At least, that's the refrain we've heard over and over.

And yet it IS working.

As the founders of Calcbench, we've been knee deep in contexts, facts, tags and dimensions for about 15 months. The result of this work is a full cloud based universe of error corrected financial data taken from XBRL filings, in both raw and normalized form. We use this information to help our users perform a wide variety of tasks, from analyzing individual companies to economic research or corporate benchmarking. And we see this as just the start.

In particular we are excited about two significant advantages XBRL has over the "old way."

**1. Richness of information** – I often describe what financial data services do as taking a photograph, scanning it in to a computer at low resolution, and then printing it out again. In the end it's the same picture, but so much of the important detail is blurred. XBRL solves this problem by giving each company the ability to upload their own picture their own way in great detail, so the resolution remains intact. The upside is you get all of the information EXACTLY as the company wants you to see it, PLUS a huge pile

of relationships and other metadata to go along with it. The downside, of course, is the complexity of dealing with all of this raw info, but we'll get to that in a moment.

**2. Interactivity** – Starting with such a powerful raw data set allows you to compile the information in many different ways, depending on your use case. To take this a step further, data providers no longer even need to know what the use case will be in order to provide a good experience. At Calcbench we allow users to create their own path by enabling them to draw directly from the raw data, but WITHOUT having to know anything about the raw data. They can start with our templates, but then go off script however they like, and we can still compile the results in real time.

"I often describe what financial data services do as taking a photograph, scanning it in to a computer at low resolution, and then printing it out again."

So what's the bad news? **Complexity**; XBRL instance documents are simply not user friendly. Anyone who expects to be able to download a few and get to work will surely be disappointed. In fact, the individual instance documents are more or less useless on their own, if your goal is to collate and work with a lot of information.

But dealing with a complex topic like financial reporting isn't supposed to be easy.

Judging from the comments I hear, many people may have hoped that XBRL was not only going to capture information, but also simplify it into an easy to use, one size fits all template. However, this was never the point, and would defeat the purpose. XBRL is not supposed to "simplify" anything, except for the process of getting financial reports into a computer to start chewing on it.

And that is fine with us. It's 2012...a full 40 years after we put a man on the moon. It's not too much to ask that people report their data directly into a computer. AND it's not too much to ask that a computer be required to do some complex processing. **IBR**

# TOWARDS IMPROVING ECONOMIC ECOSYSTEMS

By LEVINE NAIDOO, IBM



LEVINE NAIDOO, ASSOCIATE PARTNER, XBRL LEADER & SME AT IBM, EXAMINES THE PATH TOWARDS BETTER FINANCIAL NETWORKS.

Looking beyond financial reporting, XBRL, amongst other things, essentially gives us the ability to communicate multidimensional performance information. This article explores a broader use, and for this purpose we shall use the term "economic ecosystem" to describe a community that is

composed of people, institutions, relationships and rules centred around some product or service.

Andrew G Haldane, Executive Director of Financial Stability at the Bank of England, in his 2009 speech titled 'Rethinking the financial

network,' stated "Seizures in the electricity grid, degradation of ecosystems, the spread of epidemics and the disintegration of the financial system: each is essentially a different branch of the same network family tree". He emphasized that we can better understand the financial network using network theory.

Extending this thinking, we can also further comprehend economic ecosystems if they are treated as networks where linkages and dependencies exist between the nodes, and any failure of a single node or cluster of nodes can cause cascading failure; what we term "systemic risk." It is obviously important for these economic ecosystems to be efficient, and any fractures in their networks place the social fabric under stress.

Many individuals interact as participants of economic ecosystems without casting a second thought about the larger network behind their interactions. Some examples of these economic ecosystems are the global financial network, banking, insurance, securities, retirement savings, health care, social services, or the not-for-profit sector, and the list goes on.

Surprisingly, the not-for-profit sectors are quite large in many countries. For example, in Australia as much as 65% of the population belong to some type of not-for-profit organisation. Australia's not-for-profit sector also contributes at least \$43 billion, or over 4%, to Australia's gross domestic product, making it one of Australia's largest 'industries'.

Further network analysis of an economic ecosystem would be useful if structured around the following three questions (adapted from "The Economics of Networks: Theory and Empirics" by Marco Juri van der Leij , MJ Leij - 2006):

1. What structural properties does the network have?
2. How does the network structure influence economic decision-making?
3. What role do economic incentives or

regulations play in influencing the structure of the network?

Answering the above questions in a cyclic manner can lead to a continuous improvement of our understanding on the role of networks in economic ecosystems. These questions, which may also lead to many sub-questions, can be asked by a regulator analysing its market, a business analysing its customer network, or an investment organisation or individual analysing a portfolio of opportunities.

XBRL represents information as a network of data points and is a good way to gather performance-

"Although the use of XBRL solves quite a few challenges, many of the approaches that can resolve outstanding challenges are not commonly known or adopted."



LEVINE NAIDOO, IBM

related information about a network or economic ecosystem. A country, a regulator, a bank or a customer can be a node, depending on the aggregate view.

### WHAT IS IMPEDING PROGRESS?

The obvious question then is, how do we collect and analyse as much XBRL information about a network as possible? Although the use of XBRL solves quite a few challenges, many of the approaches that can resolve outstanding challenges are not commonly known or adopted. Some of the remaining challenges are:

- Manually tagging information as per a standardised taxonomy can be a burdensome and costly process.

- Fundamental changes to the reporting process for an entire ecosystem take a long time.
- Custom building submission business-to-business (B2B) solutions in order to exchange XBRL information in a resource-constrained market slows down adoption.

As a result, standardized reporting mandates will be partially implemented and will take the market too long to reach sufficient maturity. Market participants and regulators will miss significant pieces of the puzzle in order to predict and treat systemic risk in a timely manner.

An approach that focuses on improving an economic ecosystem can;

- increase transparency, data volume and quality,
- decrease the reporting burden,
- increase market regulation and vitality, and
- reduce market risk.

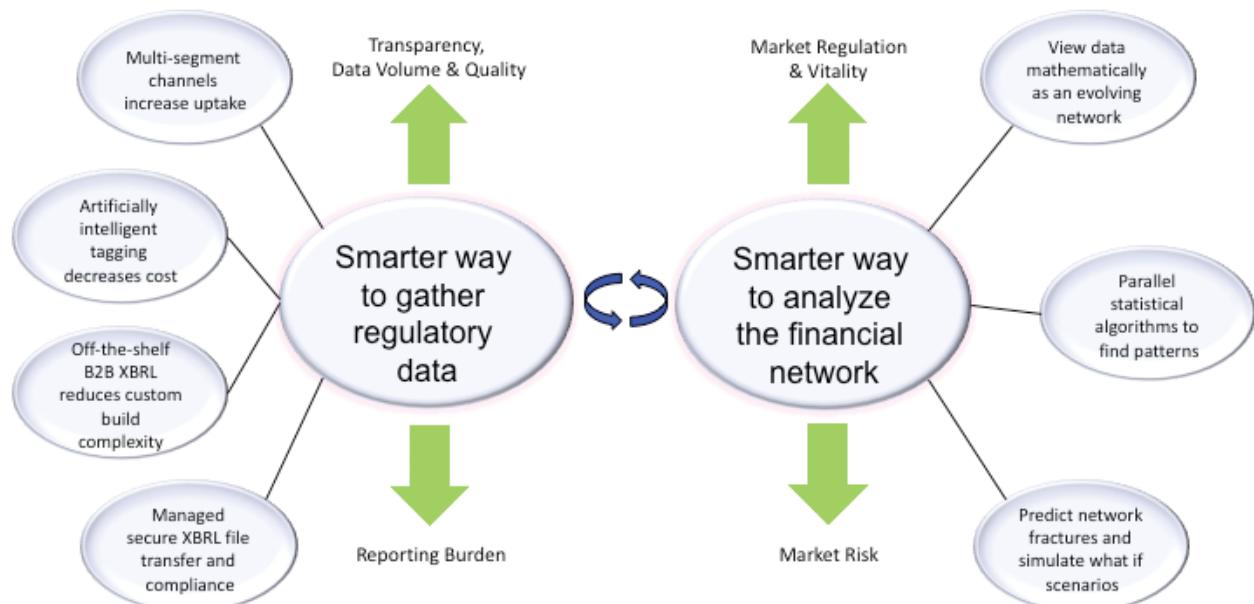
### A SMARTER PLANET APPROACH

The value proposition for network participants would be to use analytics to help anticipate, shape and optimise business outcomes, enabling decision makers at all levels to turn information into actionable insights. Despite the wealth of data and content available today, most decision makers are starved for the right information and insight. Becoming an analytics-driven organisation will help them to outperform their peers by connecting people with trusted information, enabling them to make real-time decisions and act with confidence that can deliver better business outcomes.

*"Despite the wealth of data and content available today, most decision makers are starved for the right information and insight."*

The path to this end state would require a two-fold approach that focuses on gathering and analysing the data, with a few key attributes, as depicted in Figure 1.

FIGURE 1 GATHERING AND ANALYSING THE DATA



Producers and consumers of XBRL information would benefit greatly if vendors were to package common components pertaining to the creation, secure transmission and validation of XBRL into their integration platforms, reducing the need to constantly reinvent these aspects on every project. Managed file transfers have become important to many stakeholders who are starting to push the envelope in terms of size of XBRL instances. A smarter way to gather the data could help reduce the burden for the entire network, not just the organisation tasked with collecting the data.

Analytics focused on the "what" and "who" questions would typically be used to assess the structural properties of the network, identify potential fractures and to help determine how to contain the spread of the network failure. Proactively, a number of analytic techniques can be used to make predictions based on historical data, discover potential associations and linkages,

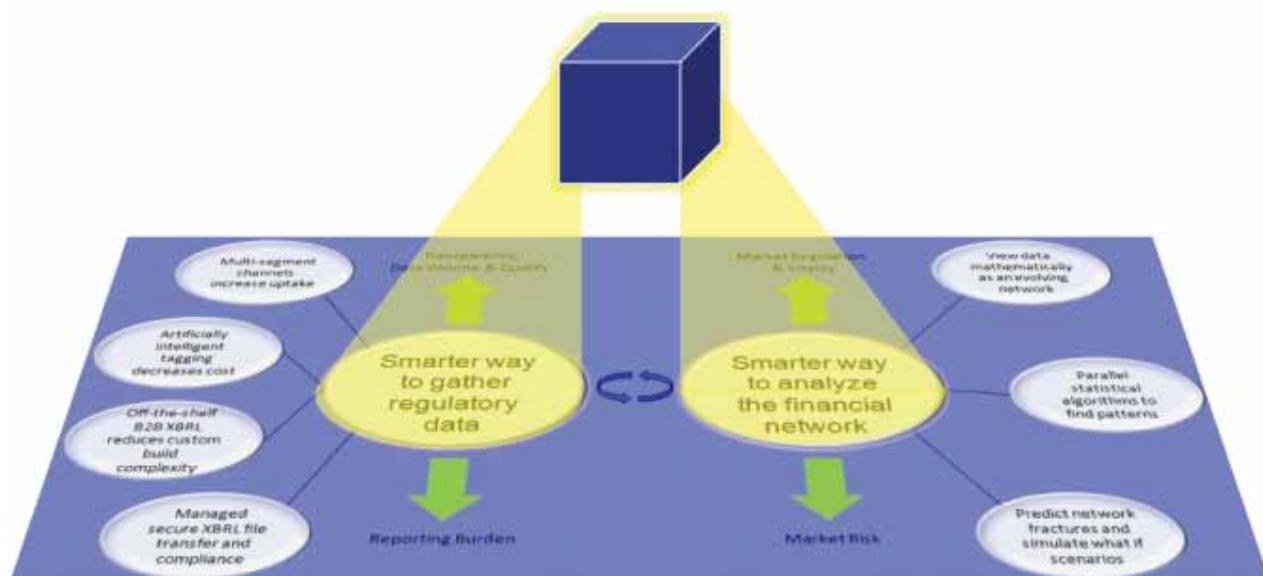
and detect anomalies. The predictive approach, focusing on the "why" and "what-if" questions, can help understand what decisions, incentives or regulations can influence the structure of the network to help reduce the likelihood of failure. The ability to generate multichannel alerts would be fundamental to early warning.

**"Perhaps XBRL's greatest value is the ability to use its multidimensional model to drive both the collection and analysis of network data."**

Perhaps XBRL's greatest value is the ability to use its multidimensional model to drive both the collection and analysis of network data, as depicted in Figure 2.

Additionally, the analysis model, and how we want to analyse the network informs the taxonomy model. This determines what information is collected and its quality, and hence the quality of the analysis, resulting in a continuous feedback loop and process of improvement. Ultimately, reducing the latency between collection and analysis would be essential for building early warning systems. **IBR**

**FIGURE 2 XBRL'S MULTIDIMENSIONAL MODEL DRIVING COLLECTION AND ANALYSIS**





# XBRL US CONFERENCE 2012

## IT'S ALL ABOUT THE DATA



**TERESA S. POLLEY**  
XBRL US CONFERENCE CHAIR



TERESA S. POLLEY, PRESIDENT AND CEO, FINANCIAL ACCOUNTING FOUNDATION (FAF)

I was honoured to serve as Chair of the 2012 XBRL US Conference. For the past several months, I have worked closely with the XBRL US team and other committee members to plan the event. One of our primary objectives was to focus on the challenges related to implementing and adopting XBRL. In the long run, the taxonomy is going to be a really important tool in achieving our shared goal of improving financial reporting. It is worth the investment of time and resources, and will provide long term benefits for investors and other financial statement users.

One goal was to provide attendees with opportunities to learn from others who already have gone through the implementation process. We hoped that this sharing of experiences would facilitate the process for some of the new companies that are coming online. This aspect of the conference was particularly important, as more than half of the participants identified themselves as preparers of financial statements.

We also wanted to put greater focus on the needs of users of XBRL data. For the past few years, the FAF and the FASB have focused on making the taxonomy easy for preparers to use. Now that more and more companies have come on board, we're beginning to shift our attention to the consumers of that data—namely, investors and other financial statement users—to find out how they are using it, and if there are ways that the information could be made more accessible or understandable. Louis Matherne, the FASB's Chief of Taxonomy Development, and his team have been instrumental in this area.

Mike Starr's keynote presentation was a definite conference highlight. Mike, who had just left his post as deputy chief accountant at the SEC, kept everyone riveted with his speech. He and Susan Yount, of the SEC's Office of Interactive Data, were the driving forces behind filing requirements for XBRL. Their views and discussion about the SEC's increased scrutiny of XBRL data gives it more gravitas. When the SEC is looking at something closely, you want to make sure you're doing it right. It's no surprise, then, that preparers found the sessions designed to help them "do it right" to be particularly helpful. The data forum generated a lot of enthusiasm, too.

There are those who think we should be further along in terms of adoption and use, but we are starting to see momentum pick up. The increase we've seen in the number of conference attendees this year demonstrates that point. More importantly, the feedback from those attendees has been positive, and I think that there's nowhere to go but up. As we continue to expand the awareness of XBRL, more and more uses will be developed for it, and that will continue to drive conference growth. That's why I think initiatives like the XBRL Challenge are particularly valuable—they encourage innovative thinking and new ways of utilising XBRL information.

Overall, this conference was another building block for us to think about how to satisfy the needs

of an expanding range of stakeholders for XBRL information and education. As always, we can learn some lessons from this conference and build upon them for the next time. We are only on the very cusp of the XBRL revolution. The future potential for many applications in XBRL is virtually unlimited.

## J. W. MIKE STARR KEYNOTE SPEAKER



**J. W. MIKE STARR**, DIRECTOR OF STRATEGIC INITIATIVES AT WEBFILINGS LLC

My key impression of the conference was that there was a higher energy level overall. The most interesting sessions were the ones that focused on what has been learned about what investors needs are; you really have to focus on what the end customer wants.

One of the points that I made in my speech was that we've spent too much time defending or justifying the use of XBRL and not enough time listening to what the end user wants from XBRL-formatted information. As I look out over the next three to five years I think that investors who use audited financial information in making investment decisions will be using XBRL-formatted financial data. In many cases, investors will not even know that the financial data is derived XBRL-formatted information.

## XBRL US CONFERENCE 2012 – IT'S ALL ABOUT THE DATA

### WHAT THE SOPHISTICATED INVESTOR WANTS

All too frequently views of what investors want are shaped by so-called investor advisory committees that are dominated by "investor advocates" as opposed to investors who use audited financial information as a key source for investing decisions.

We need to take a "product" view and understand directly from those investors what they want or need. In other words, our product is financial information and we need to deliver to our customers what they need or we will go out of business.

There really hasn't been a full robust dataset for investors and others to consume, and although development has kept pace with what was there; we're going to see a significant increase in demand for XBRL-formatted information in the next couple of years.

We also have to step back and recognise that until June 2011 in the US, we only had 1,700 listed companies that were filing XBRL-formatted financial data. It's only in the past year or so that that number has increased to somewhere between 9,000 and 10,000, and the phase-in for submitting XBRL-formatted financial information won't be completed until the spring of 2013.

Essentially, XBRL makes financial information "machine-readable" enabling computers to do the routine sequential tasks and freeing humans to do things that require imagination and creativity.

Actually, the transformation to using machine readable information is part of a much broader trend moving society from the information age, where a select few people had exclusive knowledge about certain topics, to the conceptual age where access to information or knowledge is generally free, and the value is added by putting the information in context.

Based on discussions with investors, there is a pent-up demand for information in other areas of SEC documents to be formatted so that it is machine readable. So, for example, I think you'll see a demand for tagging the financial information in MD&A and in proxy statements.

The cost of tagging data has declined significantly since 2009. There needs to be an updated cost-

benefit study of the use of XBRL format and information. We have a very good understanding of the cost, and we also have sufficient experience using XBRL-formatted information to develop scenarios on what the benefits of its use are. A thoughtful, thorough cost benefit analysis will likely support the expansion of the use of XBRL-formatted financial information.

It should also show us what changes need to be made to optimize the benefit of machine readable information for investors. The ideal time to start this updated study is the beginning of the second quarter of 2013, when the phase in for filing XBRL documents with the SEC will be substantially complete.

### SUMMARY OF TAKE-AWAY POINTS FROM THE CONFERENCE

The first key point from the conference was the importance of understanding what investors want and need, and making changes necessary to address those desires. The second key point, very much related to the first, was the need to enhance the quality of the data. It's not that the data quality isn't good, but it could be better. There are still too many little things that are done incorrectly. And the increased use of machine readable information will make regulatory oversight more efficient and more effective.

If you're doing something to benefit someone and it doesn't benefit them, then you wasted your time. In order to understand what really benefits them you need first to seek to understand. I'm a firm believer in clear, concise mission statements. The XBRL community need to rethink its purpose or mission to focus on what investors want. We need to make the preparation of machine-readable information easy for companies and the consumption of that data easier for investors.

## GARY HOOVER KEYNOTE SPEAKER

I have been reading annual reports since I was 12 years old, and now have a collection of financial and business data going back to the first Moody's Manual, published in 1900! My lifelong interest in business and in helping people better understand business and its scorecards, led my friends and I to create the company that became Hoovers.com in 1990.

Today public trust in big business has suffered enormous blows, largely at the hands of big businesses themselves. This undermines confidence in the capitalist system, which I believe has been the greatest force for good, for human interaction and peace, and for prosperity in the history of the world. Key to all this is openness or "transparency" about business decisions and business results.

The global movement toward standardized financial reporting that is represented by XBRL therefore has important implications not just for companies, investors, and people working on data; it has implications for our society at large. The better we show our results, the faster they become available, and the more standardized they are, the

better off we all will be.

I also urge everyone in the "financial reporting industry" to reach out in your communities and teach and preach financial and business literacy. I speak all over the world to students of all ages, and while

they know everything there is to know about green energy and about being philanthropic, almost none of them know a balance sheet from a profit and loss statement, or a mortgage from a common stock. This also needs to be fixed, and I hope all of us work to support financial, business, and economic literacy.



**GARY HOOVER**, ENTREPRENEUR,  
CO-FOUNDER, HOOVERS INC. ON  
THE EVOLUTION IN CORPORATE  
REPORTING

## PHILLIP ENGEL DATA FORUM SESSION

We introduced the XBRL Data Forum to reach a technical audience that we traditionally have had difficulty reaching in the past. The main focus of our national conference has always been towards the preparers, filers, and other users of XBRL, but much more business-oriented. Our aim with the XBRL Data Forum is to reach a wider audience incorporating people that work on the development, programming and day-to-day handling of data. The Data Forum offered content more targeted towards that audience. It proved a very popular addition to the conference. It was difficult to gauge how many people would actually



**PHILLIP ENGEL**, LEAD TECHNOLOGIST, XBRL US

## XBRL US CONFERENCE 2012 – IT'S ALL ABOUT THE DATA

participate in the Data Forum itself, and the room had to be expanded after the first session because it was completely filled. The initial room capacity was for about 40 people and in the end, we were probably closer to 60 or so.

### HOW THE FORUM RAN

The first section I ran was on database structures; how, as you're collecting XBRL data, do you represent it in a database so that you can use it for analytical purposes? In our panel, each speaker had some very different approaches on how to store XBRL data.

The second session was looking at building the next great app. So this is where we covered a lot more about the XBRL US Challenge, and discussed what kind of applications are being developed. Four of the five finalists from last year's Challenge came back to talk in some of the sessions which was really great to see: they became part of the conference itself and had an opportunity to talk about the commercial software they are now working on. So there was a lot of buzz about that and the ongoing XBRL US Challenge for which submissions are due at the end of February. This is a month later than we ran it last year to allow another month after the holiday season for people to submit their entries. It usually takes about a month to prep our judges and allow them to work through all the submissions and make their decisions. The results will be announced at the end of March 2013.

The third session focussed on XBRL software and data, covering the kinds of issues related to the data that's in XBRL, and trying to address some of the issues and challenges of working with that rich data now available in XBRL. Don't forget

there's a lot of flexibility in the way people report their information, so although there's all this great data, there are challenges in figuring out how to unify that information across multiple companies who file in different styles, so you can really take advantage of it for analytical purposes. There's a much richer set of accessible data available than there ever was before, so now we've got to figure out how we take advantage of this data set that has much greater context.

There was a business case session run by Eric Gillespie (see inset) and then it closed up with legislative updates, with a discussion on the impact potential government rulemaking could have on XBRL in the future.

### THE ATMOSPHERE IN THE XBRL DATA FORUM

Most of the sessions were conducted by a moderated panel of three or four people with each of the panel members presenting for 10 to 15 minutes each, followed by Q&A. One of the things I've always done when I moderate panels is to prepare some questions in advance in case there aren't a lot of questions from the audience just to keep the discussion going. A really

impressive feature to the Forum was the amount of audience feedback. It was very interactive: in one of the sessions, there was an audience discussion going on in tandem with the panel at the front of the room. We were pleased with the audience size and level of participation which indicated that there's significant interest among the software and developer community about how to work with XBRL data and about the market potential. The conference was our most heavily-attended and the reaction to the XBRL Data Forum clearly indicated that there are so many opportunities for XBRL to expand.

## WHAT NEXT?

We considered the XBRL Data Forum this year to be something of an “experiment”. We intend to hold the XBRL Data Forum again next year and given the positive feedback, we may expand upon the content and perhaps even create a stand-alone conference to focus on the developer community.

Since XBRL was adopted for use for SEC filings, a small, and very active cottage industry has built up around preparing XBRL documents. In the very early days at these events, we often saw a lot of the same organizations and people. But now we’re seeing a big influx of new people getting involved in XBRL, whether it’s on the technical side or the business side. I think that’s a real sign that we have gone past that tipping point where a small group was working on developing and promoting

XBRL; it is now reaching a much wider audience. As XBRL gets bigger it will always get better as it brings new people into the process; whether it’s through building XBRL documents or consuming the documents, developing the specs or running working groups on our committees at XBRL US or XBRL International.

I wouldn’t say we’ve reached the point where we can just sit back and not think about it anymore – there is still a lot of work to do. Over the last few years, especially in the US with the SEC, we have been focused on filer support — helping filers prepare XBRL documents and getting the processes in place to make it easier for filers. I think now, the focus is really on using the data on the analytical side and looking at where that can take us.

## ERIC GILLESPIE

### DATA FORUM SESSION – THE BUSINESS VALUE OF XBRL

Although I've been close to the XBRL and data transparency community for some time, this was my first XBRL US Conference. One of the things I observed at this conference was an emerging dialog about business value. There were both structured and unstructured conversations about new ways to create value, create tools, create products, and about ways to create new businesses centered around the XBRL format. For me, it was like a tidal pool. The standard was emerging from the seas and making its way onto land; we are now in this intermediate tidal pool stage where life is forming.

My interest in XBRL is twofold. I'm the founder of a big-data and analytics start-up and I have spent

*“You can create a business today using Amazon AWS almost for free using a public sector XBRL format data set,...”*

most of my career in data. I'm also an investor who looks for data plays and makes investments in data businesses. My interest started with public sector and governmental data, and with finding ways to liberate that data from the chains of the current reporting systems. First, by taking proprietary systems from which most of that data had originated and creating cross-platform, normalised data sets from longitudinal data sets. And second, by identifying the various types of businesses we can invest in and build using this emerging set of technologies.

Today most of the investment community that cares about XBRL cares about it from a reporting standard perspective. They care about how to digest that data and make smarter decisions based on what they do with that



ERIC GILLESPIE, FOUNDER AND CEO, POPLICUS

data. My perspective differs in that I'm looking for opportunities to leverage that data to create new businesses, not necessarily to evaluate the actual content about existing businesses from the investment community perspective. So for me, the vast number of start-up opportunities that exist is probably the most exciting area of XBRL. Over the last few years venture investing has largely focused on data tools but not the data itself, and that's beginning to shift. Now that the plumbing is in place, investments are beginning to orient around the actual data. That's incredibly exciting and that's really why I stay close to the XBRL community. There was a line out the door at this conference

of people interested in understanding how the venture investment community and the start-up community were thinking about data. That speaks of the business value of XBRL, and to people trying to identify where the opportunities are in the XBRL world. Now is the time for small data enterprises out there and to get busy. If there are folks out there who have ideas about how to leverage XBRL data and in start up, they should be looking for financial partners and capital. There's plenty of capital in the market, there's plenty of interest in big data and data sets, and people are beginning to understand how to apply analytics to data in ways that they didn't three, four or five years ago. Think about the confluence of cheap storage, inexpensive off the shelf analytic tools, and ubiquitous data; in many cases XBRL formatted data that just simply didn't exist a few years ago. So if you triangulate those three things it's a pretty exciting time right now. People are starting to create businesses where a few years ago, you simply couldn't. It was either too expensive, or the data wasn't available, or you had to be a data centre expert to ramp something up which would cost millions and millions of dollars. You can create a business today using Amazon AWS almost for free using a public sector XBRL format data set, on a cloud instance that you set up in two hours. You can subscribe to the tools on a monthly basis and pay as you go. That was not possible three, four or five years ago. I don't foresee anything that would hinder this for the next two or three years, and barring macro forces after that, which might have an impact, the constraint is going to be skill sets and people, a shortage of data scientists if you will. It's always exciting to have founders come up at the conference and say, "Look at this cool thing that I'm creating". New innovations that are fun, interesting, and most importantly that create value. It moves the industry forward; to me it is inspiring to see founders putting the right ideas forward. There are many conferences where you don't get that, but there was no shortage of it at this conference; people thinking about how to start businesses or how to break technologies out of existing businesses. **IBR**



# XBRL IN LATIN AMERICA

By **ANA SEPÚLVEDA**, SVS, Chile, **DORIS FLORES**, SBP, Panama, and **IGOR SAKUMA**, SBS, Peru



ANA SEPÚLVEDA, OF THE SVS, CHILE; DORIS FLORES OF THE SBP, PANAMA; AND IGOR SAKUMA OF THE SBS PERU, LOOK AT THE DEVELOPMENT, CHALLENGES AND FUTURE OF XBRL IN THEIR COUNTRIES.

## CAN YOU BRIEFLY OUTLINE THE HISTORY AND CURRENT DEVELOPMENTS OF XBRL IN YOUR COUNTRY?

**ANA:** The Superintendencia de Valores y Seguros (SVS), Chile's equivalent of the SEC, supervises security issuers. From 2009 issuers had to report financial statements under IFRS and XBRL. This has been a step by step process. At the beginning only a small group of corporations reported in XBRL, those with the largest market volume in their shares. In subsequent years other corporations followed suit. Currently all corporations supervised by the SVS report their financial statements in XBRL.

Another characteristic of our process was that until December 2011 it was only mandatory to prepare main financial statements, i.e., Statement of Financial Position, Income Statement, Statement of Comprehensive Income, Statement of Cash Flows and Statement of Changes in Equity. This year we have made mandatory some notes of the financial statements, i.e., Sub Classifications of Assets, Liabilities and Equities, Analysis of Income and Expense, Disclosure of Related Party, Disclosure of Investment in Associates and Subsidiaries, Interest in Joint Ventures, Disclosure of Share, Capital, Reserves and Other Equity Interest, Assets and Liabilities Financial, etc.



**ANA SEPÚLVEDA**, SVS, CHILE



**DORIS FLORES**, SBP, PANAMA



**IGOR SAKUMA**, SBS, PERU

The current taxonomy SVS CL-CI 2012 is an extension from the IFRS 2011 taxonomy. From the beginning, in 2008, we have used the IFRS taxonomy. Each year we issue a new version, always taking the IFRS taxonomy of the previous year. Mainly we use the IFRS taxonomy and we add some requirements according to Chilean rules.

**IGOR:** Currently, there are two XBRL initiatives in Peru: one by the Superintendency of Banking, Insurance and Private Pension Funds (SBS) and another by the Superintendency of Stock Market (SMV). Since 2011, SBS has developed a taxonomy for the banking system, based on Data Point Model (DPM) methodology. SBS has scheduled a voluntary reporting program for banking institutions starting in 2013. In 2012, SMV developed and implemented a taxonomy for its supervised companies, which will start filing in 2013.

**DORIS:** Panama began its adoption of XBRL in 2010 by participating in seminars, conferences and internships in different countries such as Chile, Uruguay and Spain (Bank of Spain).

In July 2011 the SBP convened local and international companies to participate in the tender for developing the XBRL pilot. This competitive bidding involved two Panamanian companies in consortium with international companies with vast and proven experience in taxonomy development aligned to IFRS and the adoption of the XBRL standard.

The joint venture consortium of local companies and international companies was advantageous, due to the limited local knowledge in Panama on the functional and technological concept of the XBRL standard. However, there are several organisations, public and private companies who are interested in learning more about the standard, to find a possible solution to the problem of standardisation in reporting and in turn to the development of tools to facilitate connectivity to systems existing financial information.

### **WHAT ARE THE MAJOR CHALLENGES YOU HAVE FACED?**

**ANA:** The main challenge has been to cope with change. We had to do internal work with the different areas in order to motivate people to make the change. We also have to teach corporations and software providers to prepare and generate XBRL files.

**IGOR:** The first challenge was to understand and grasp the DPM methodology. That presented a new scenario for us, in terms of identifying and organising data and information requirements. Another challenge was to set up a team composed by business and information technology professionals, which could work speaking the same language. Finally, I believe the major challenge is yet to come: implementing a regulation-defined reporting program.

**DORIS:** The main challenge has been to clearly understand what XBRL is; what is the use,

benefit and advantage of the XBRL standard for businesses. Many participants perceive the financial sector as a matter of standard technology, which are exempted from objectively reflecting on the advantages of the standard. Furthermore, the design of the data model for the development of the taxonomy has been discussed with several internal and external sectors, aiming to harmonise concepts primarily in the areas that comprise IFRS, but localised to actual operations in Panama. Our first version of the taxonomy was subjected to the review and evaluation of top accounting firms in Panama, seeking greater contributions to help improve the model to minimise the impact of the conversion.

It is also important to note the need to facilitate access to qualified human resources, either pushing harder to train local talent or facilitating the arrival of foreign talent to develop solutions that support the XBRL standard.

#### **WHAT IS THE GREATEST BENEFIT OF XBRL TO FILERS/INVESTORS IN YOUR COUNTRY?**

**ANA:** One of the primary benefits has been that for professionals from the accounting area XBRL has facilitated the adoption of IFRS norms. Due to the extension of the IFRS taxonomy, this provided us with a model of information for principal financial statements and the notes, where each element defined has a reference into the IFRS norm and its revelation.

It helped holdings in financial statement consolidation because we established a model of information that each firm of the holding must follow.

For investors it allowed them to work with the files of the different corporations, which are readily available on the internet, and which can easily be interpreted with relevant software, allowing analysis both individually and by sector.

**IGOR:** We expect that, once reporting is implemented, we'll be able to sum up some information requirements, so filers will report just what is needed for supervising purposes. Also, there will be a good chance that some information will be filed to both supervisors (SBS and SMV) in one effort. But, most importantly, the fact that information requirements will be reviewed is a good sign in terms of reporting efficiency.

**DORIS:** The XBRL standard will enable the SBP increase the accountability and transparency in the publication of financial statements of the International Banking Centre as standard, comparable and aligned to IFRS for easy understanding of the users of this information.

Similarly, our vision has a range that leads in promoting the exchange of financial information with other regulators in the region.

"I would like that other countries follow the example of Chile, Panama and Peru and adopt XBRL and IFRS."

#### **WHAT WOULD YOU LIKE TO SEE NEXT FOR XBRL IN LATIN AMERICA?**

**ANA:** I would like that other countries follow the example of Chile, Panama and Peru and adopt XBRL and IFRS. I think that adopting these two standards together will enhance the utility of both. That way it will be easy and increase the benefits of having integrated markets. I think that the securities market through the stock exchanges could start the integration.

**DORIS:** It requires the creation of regional jurisdictions to encourage joint work between regulators of all types of economic and financial sectors to create a culture of technology standardisation and accounting.

Panama will strengthen its technological hub to ease the adaption of new technologies and enjoy the privilege of its geographical position. This position provides a competitive advantage to local and international companies, having a huge impact on attracting foreign and local innovation. **IBR**



# USING XBRL FOR ORSA

By MARTIJN VAN WENSVEEN and KARLIJN VAN RIEL, KPMG

## A PRACTICAL APPROACH TO USE XBRL FOR SOLVENCY II ORSA REPORTING.

Solvency II will have to be implemented by all (re) insurance entities operating in the European Union. The main objective of Solvency II is to better protect insurance policy holders, to create a level playing field for all insurance companies by harmonizing the supervision on European insurance firms and to encourage better risk management by implementing risk-based supervision.

Solvency II signals a transformation for the insurance market: it is the most comprehensive regulation ever imposed on the insurance industry across Europe. What should emerge is a more solid foundation on which to construct the pillars of a unified framework for improved regulation of all EU insurance and reinsurance entities.

Solvency II is structured around three so called 'pillars': The first pillar sets out quantitative requirements like risk-based capital models and models of technical provisions. The second pillar set standards around the (risk) governance and the risk management system of insurers and the third pillar sets out the reporting requirements.

### THE 'OWN RISK AND SOLVENCY ASSESSMENT' (ORSA)

The Own Risk and Solvency Assessment (ORSA) is often referred to as the "heart of Solvency II". In the ORSA process a majority of all Solvency II requirements come together. The ORSA covers all pillars of Solvency II.

ORSA is a key management (and supervisory) tool with a focus not only on capital but also on understanding risks, their interdependencies and their impact on the company's solvency position. These risks

should be managed in line with the company's risk appetite. The ORSA needs to consider all significant risks, be forward looking (typically 3-5 years), and be integrated into the company's business strategy.

An ORSA is required for all insurance or reinsurance undertakings. One of the critical requirements of the ORSA is that a company should not only demonstrate that its current capital reserves are appropriate but also that future capital needs will be met over a specified assessment timeframe (through future projections of the balance sheet, capital requirements and own funds over the business planning horizon). The forward-looking aspects of the ORSA should provide the management with a risk-based view on the future and hence the ability to better manage it.

It is the forward-looking nature of the ORSA and the group assessment requirements that present the most likely operational implementation challenges for insurers.

### KEY COMPONENTS OF THE ORSA

An ORSA basically consists of three components. The company specific guidelines for the ORSA process are captured in the 'ORSA policy', the actual assessment is performed by following the 'ORSA process' and the outcomes of the ORSA are captured in the 'ORSA report'.

ORSA policy	ORSA process	ORSA report
The ORSA policy defines what the business should do to perform the ORSA process. This will be used by the business to provide specific procedures and guidelines.	The ORSA process assesses capital requirements and demonstrates how these are linked to the risk assessment and decision making processes.	The ORSA report 'tells the story' of the undertaking's current risk and capital management practices. It demonstrates to the regulators that the undertaking has the necessary available level of capital to sustain significant negative impacts now and in the future.

### EMBEDDING THE ORSA PROCESS INTO THE 'DAY TO DAY' BUSINESS OPERATIONS

The main purpose of the ORSA is to ensure that the undertaking engages in the process of assessing all the risks inherent in its business and determines its corresponding capital needs. In order to realize this, the ORSA requires a well coordinated and multi-functional approach.

To execute an ORSA an undertaking must have adequate, robust processes for assessing, measuring and monitoring its risks and overall solvency needs, while ensuring that the output from the assessment is embedded into the decision making processes of the company.

Most elements of the ORSA process are already existing activities currently being performed in isolation by the business (e.g. product development, pricing, claims handling etc.) and before the



control functions (e.g. the Finance or Risk or Internal Audit departments). The challenge of the ORSA process is to bring all these elements together in one well-aligned, smoothly flowing, process where all functions involved are working closely together in an integrated manner, using the same timelines and definitions. This multi-functional process requires clear agreements on roles and responsibilities and strong coordination. The risk management function will normally perform this coordinating role, working closely together with the other business support and control functions involved. The Board is the ultimate owner of the ORSA and must demonstrate this ownership by explicitly using the results of the ORSA in their strategic decision making and monitoring. In fact, ORSA provides a great script for board members to properly understand how the risk management framework and its inputs/outputs are affected.

It is important that the ORSA becomes part of the 'business as usual' operations of all the functions involved. This requires that the roles and responsibilities, key activities and timelines of the entire ORSA process are well aligned and embedded in the day-to-day business operations as far as possible (preferably as part of the overall Enterprise Risk Management (ERM) framework).

### THE ORSA PROCESS

Input for the ORSA process is generated from business as usual activities performed by the operations, finance, risk and capital management functions.

There should be a clear distinction between the first line of defence business related activities as performed by the risk owners and the second line of defence standard setting and monitoring activities as performed by the control functions.

In practice there are often unclarities within the business support and control functions on the deviation of first and second line responsibilities. This can result in misalignment leading to operational inefficiencies and ineffective controls.

### ORSA REPORTING

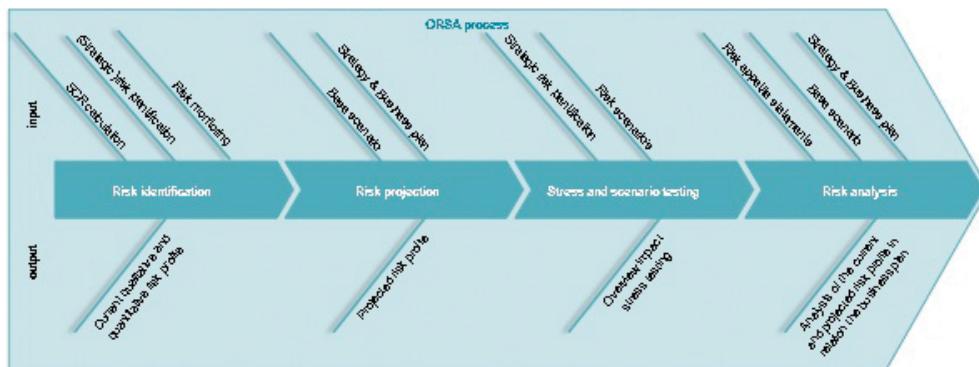
The focus of the ORSA should be on the process, not primarily the ORSA report. However in order to fulfil external reporting requirements and in order to have a complete document for internal reporting purposes, a report will have to be generated.

There is in most cases no standard format for the ORSA report provided by regulators. However, everybody agrees that the ORSA report should clearly demonstrate the steps the insurer has followed throughout the ORSA process.

The inputs for the ORSA must be included in the report. This can imply that references to other (already existing) documents are added to the ORSA report. The ORSA report must include a description on how the ORSA process was performed by the company. This description should both cover a summary of the actions performed during the ORSA process steps and an overview of the involvement of the various business support and control functions and also the Board. It should also cover an initial evaluation of the quality of the ORSA process performed (preferably validated by the internal/external auditors).

The outputs of the ORSA process should be fully captured in the report. These outputs should contain both quantitative and qualitative data. Specific attention should be paid to the analysis of the results of the assessment.

Finally, the ORSA report should also cover the



recommended management actions that follow from the ORSA results.

Some areas of the report would remain largely static (for example the risk appetite section, the ORSA process steps and the Risk Management System details) whilst others will be more dynamic (for example the identified key risks, stress test results and the capital profile).

### **WHY USE XBRL FOR ORSA REPORTING?**

Looking at a typical ORSA report (which may in our experience significantly vary in size from a short executive summary to an extensive risk report containing close to 100 pages), most of its content will be text-based and qualitative in nature. There will be some tables containing risk and capital data and stress test results, but this will represent most probably less than 20% of the total report volume. So why bother to use XBRL? Well, for a couple of reasons:

Supervisors will be receiving hundreds of free-format ORSA reports at least once a year (but could be more frequent depending on the triggering of specific ORSA events) from all the licensed insurance companies they supervise. Because Solvency II does not stipulate specific requirements with regard to the structure of the ORSA report, the supervisors may struggle to consistently and efficiently interpret and analyze the ORSA results and decide on follow-up actions, given the large volume of unstructured data. Hence it may be beneficial for supervisors and the insurance industry in general to introduce more structured ORSA reporting requirements once Solvency II has been enforced.

Insurance companies also stand to benefit from more standardized ORSA reporting because this will enable them to automate parts of the ORSA process and produce the reports more efficiently, using the latest generation of integrated reporting tools linked to their financial, risk/actuarial and capital management source systems.

Last but not least, even investors and analysts stand to benefit from more standardized ORSA reporting, assuming that (parts of) the ORSA report may eventually be made public (and why not?). Not only will they be able to run their own risk assessment models on the provided data, but it will

also enable them to use sophisticated new software techniques to analyse large quantities of properly categorized text to recognize certain unusual patterns or unexpected events in the ORSA report that call for further (human) analysis.

### **DEVELOPING AN XBRL SOLUTION FOR STANDARDIZED ORSA REPORTING**

To be able to use XBRL for ORSA reporting purposes, we first need to define and agree a standard format for a typical ORSA report and then design an XBRL taxonomy that defines both the structured (tables) and unstructured (text) elements of the ORSA report. As there exists no formally recognised taxonomy yet for ORSA reporting, this needs to be developed and tested first before it can be considered for endorsement by the relevant standard-setting bodies such as the European Insurance & Occupational Pensions Agency (EIOPA). Developing

such an ORSA reporting taxonomy requires the cooperation of specialists in the areas of Solvency II / ORSA framework, actuarial reporting, finance/risk/ capital management, XBRL taxonomy design and software development. Currently a multi-disciplinary team of such experts is doing exactly that under the auspices of the Governance, Risk & Compliance (GRC) solutions initiative of the Open Compliance and Ethics Group (OCEG).

In the next iBR magazine, we will publish an article with the first results of the ORSA taxonomy development work being undertaken by the above team. **iBR**



MARTIJN VAN WENSEVEN, KPMG



KARLIJN VAN RIEL, KPMG

# INDIA'S XBRL JOURNEY

By GARGI RAY



GARGI RAY, MEMBER OF THE iBR EDITORIAL BOARD, TRACES THE ROOTS, GROWTH, AND FUTURE OF XBRL IN INDIA.

The heat started in 2007 when the Institute of Chartered Accountants of India (ICAI), the premier accounting and auditing standards setting body in India, recognising the need and importance of XBRL in reporting requirements, took the lead by forming a core group involving the Indian regulator that had oversight functions of registered companies, banks and listed companies.

The first year was primarily on information gathering and a self-assessment of the level of awareness and expertise that already existed in India. Being a large country with a population of over a billion in 2007, and 150,000 accountants, it took a while to get the terminology to spread. The first year saw a series of knowledge articles being published regarding XBRL and numerous

conferences and meetings being held in the country to spread awareness.

Another year progressed and in the year 2008, ICAI applied to XBRL International Inc (XII) to establish the Indian XBRL Provisional Jurisdiction. The Institute's application was approved in December 2008, leading to the establishment of the XBRL India Jurisdiction. The purpose of establishing the XBRL jurisdiction in India was to have a formal forum for the promotion and development of XBRL in India. In 2010, XBRL India was awarded the status of an established jurisdiction having a seat at XBRL International representing India's interests. To maintain its independence and objectivity, the ICAI has also floated a company 'XBRL India' registered under Section 25 of Companies Act, 1956. The company had a mandate primarily to facilitate the education and marketing of XBRL, develop and manage taxonomies and liaise with XBRL International for international updates.

#### **RESERVE BANK OF INDIA**

The RBI (India's central bank) had introduced a XBRL based data submission process for banks using the internet and Indian Financial Network (INFINET).

In the Phase I, in 2008 a sizable portion of the domestic banking business (seven returns) was covered, and the XBRL taxonomy developed in this process provided a considerable coverage of elements pertaining to the reporting of information of the Indian domestic banking system. All the scheduled banks in India were required to report through this platform. The banking taxonomy has been acknowledged by XBRL International.

Currently, RBI is working on Phase II. The objective of RBI XBRL Phase II is to bring the external sector business information and offsite surveillance and monitoring information (42 returns) to the

centralised XBRL database. This phase is expected to be complete by 2014.

#### **SECURITIES AND EXCHANGE BOARD OF INDIA**

SEBI is developing an XBRL filing and dissemination platform (SUPER-D Project) which can be used by Registered Intermediaries as well as by companies for filing their returns/reports with SEBI or with stock exchanges through SEBI. For this purpose, they will use the Commercial & Industrial (C&I) taxonomy developed by ICAI as financial statements are concerned.

SEBI formed the XBRL Technical Advisory Committee (X-TAC) for guiding its efforts in the development of the platform, and it is also working on implementing XBRL in mutual funds filing.

"The mandate was given a big launch, where the requirement to report financial statements in XBRL covered approximately 25,000 companies."

#### **MCA – REGULATOR EXPERIENCE ON IMPLEMENTING THE XBRL PROJECT**

The Companies Act in India requires companies incorporated under the Act to file various forms, returns and documents under various sections with the Registrar of Companies (ROC) in an electronic mode within the prescribed time along with the prescribed fees.

In September 2006, the Ministry of Corporate Affairs (MCA) introduced e-governance Project, named MCA21, which fully automated all processes related to enforcement and compliance of legal requirements by companies to the central government, resulting in a fair, transparent and efficient discharge by the Ministry. The MCA21 system mandated the financial statements be filed with the MCA as a portable document format (pdf) attachment to e-forms 23AC and 23ACA.

With resounding success in MCA 21, the MCA decided to adopt the next generation of facilities for all stakeholders with the implementation of XBRL for the filing of financial statements by

a class of companies. The MCA proposed to include all companies in a phase-wise manner to file their balance sheet and profit and loss account statements in XBRL from Financial Year 2011-12 onwards.

The mandate was given a big launch, where the requirement to report financial statements in XBRL covered approximately 25,000 companies including;

- All companies listed in India and their Indian Subsidiaries,
- All companies having a paid up capital of Rs. 50 million and above, and
- All companies having a turnover of Rs. 1 billion and above.

In the initial phase non-banking financial corporations, banks, insurance and power sector companies were exempted as those had special regulatory reporting requirements.

For this filing the MCA adopted the taxonomy for Commercial & Industrial (C&I) Companies developed by ICAI for the reporting of annual financial Statements. This taxonomy had been developed to enable companies to prepare their financial statements (the profit and loss, balance sheet and cash flow statement) in XBRL, based on the requirements of the Accounting Standards and Indian Company Law. A few special elements were added to the base taxonomy to cater to the reporting requirements of the MCA forms.

With the fundamental purpose of enhancing the usability of financial data (being reported as a statutory obligation by companies) the Ministry had taken up XBRL. It was a new concept in India so the MCA gave high priority to bringing about the fast track implementation.

Steps taken included:

- Several training workshops, seminars, and webinars, were conducted by the ministry in coordination with professional institutes (ICAI, ICSI, ICWAI etc) and industry bodies (CII, FICCI, ASSOCHAM etc) to orient professionals as well as companies.
- A dedicated website for relevant information, including notifications, messages, training schedules, etc was launched.

- Frequently Asked Questions, training module, and helpdesk contacts, as well as technical guidance regarding XBRL, such as taxonomy, business rules, and filing manuals, were also published on this website.
- A team of officials from ICAI, software consultants and the MCA were designated to respond to queries raised by stakeholders on a real time basis.
- The MCA proactively engaged with stakeholders, inviting their comments, suggestions, and clarifying their doubts with respect to the advantages and implications of XBRL.

### COMBATING THE COST OF XBRL SOFTWARE

Apart from training and awareness, the availability of XBRL to companies at a reasonable price was another major concern of the ministry. The main purpose was to make it accessible and usable. As a regulator the MCA played a pivotal role in negotiating with software vendors to make the software available at a reasonable price.

Further, the MCA decided to encourage other software firms to develop their own XBRL software products to cater to stakeholders' requirements, as the price of the software was still too prohibitive to be adopted by the masses.

Accordingly, apart from engaging in consultations, the MCA decided to publish a list of XBRL software vendors, along with their offer price for XBRL services. The names of these vendors/firms were published on the portal only after basic scrutiny about their credentials and their XBRL related competency. Such measures by the ministry resulted in a rapid expansion of XBRL software vendors and consequently a steady decline in the cost of XBRL filings by companies. This model is now reportedly being emulated by regulatory authorities in countries like Singapore. By empowering and encouraging new XBRL vendors in the Indian market, the responsibility of training and awareness was also shared by these vendors. This resulted into a much higher compliance rate as well as a better quality of XBRL filing.

### USER EXPERIENCE

Users had to learn XBRL from scratch. As there were very few professionals in India, and there was

no precedence in filing in XBRL, the users had to depend upon consultants. From a users' viewpoint the benefits were unclear as there was no common portal where people could access analytical data for usage of the information. It was being used only as a compliance tool.

Furthermore as there were only a few software vendors the software prices and consultancy rates were prohibitive. Users were even unsure whether the taxonomy was stable and whether the software would be able to support future versions of taxonomies. Amidst all these uncertainties a substantial number of companies complied with the statutory requirements.

### **COMMERCIAL & INDUSTRIAL TAXONOMY -VERSION II**

In India the format for the preparation of the financial statements revised schedule VI was changed with effect from April 1, 2011. Consequently the taxonomy was required to be modified.

Earlier this year, a group was formed involving the MCA, ICAI, XBRL India and Infosys to revise the C&I taxonomy. The group decided to build the revised C&I taxonomy from scratch and follow the latest commercially used international taxonomy architecture. The group deliberated on whether the taxonomy should be extendable or closed, like the old C&I taxonomy. The merits and demerits of allowing extensions were discussed and finally the group decided to keep the revised taxonomy as a closed taxonomy. Furthermore a significant change from the old C&I taxonomy was replacing tuples with dimensions.

The architecture for the revised C&I taxonomy was primarily based on the IFRS 2011 taxonomy, however a few changes were made to adhere to the local MCA requirements. One such change was the inclusion of typed dimensions in the revised taxonomy. From the MCA's perspective this change was done considering the fact that the Indian XBRL

users were relatively new to the concept of XBRL and allowing the taxonomy to be extendible would have been confusing as using explicit dimensions requires the inclusion of extensions.

The exposure draft of the revised C&I taxonomy was published by ICAI for public comments and consultation. Post receipt of the comments from the various stakeholders they were discussed and deliberated by the group and the final taxonomy was issued in August 2012.

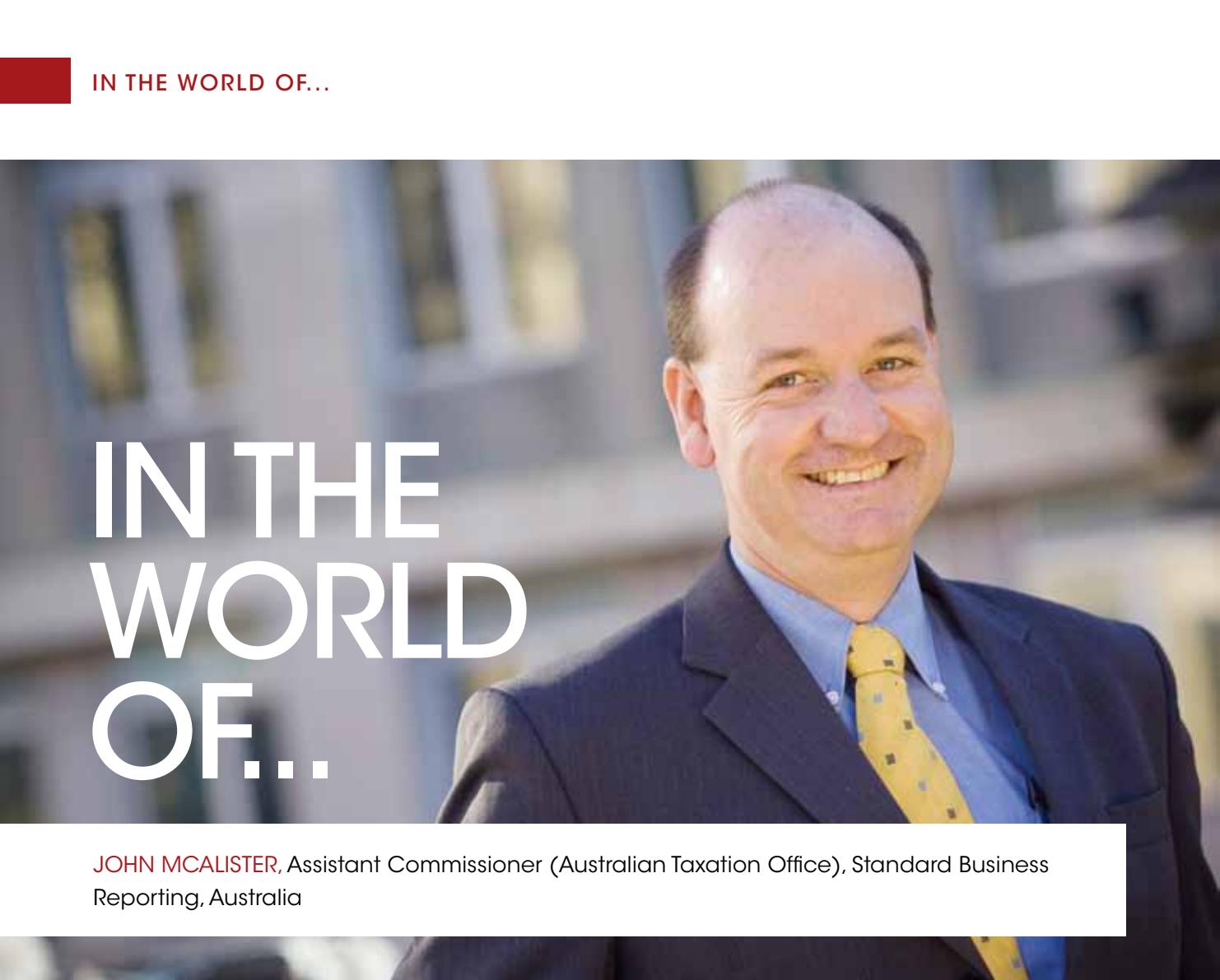
The current taxonomy has been developed to enable companies do a detail tagging of their financial statements and notes on accounts, based on the requirements of the revised schedule VI, Accounting Standards and Indian Company Law.

**"By rationalising the XBRL software prices and by creating a pool of XBRL literate professionals, the regulators have brought XBRL within reach of companies who can now improve upon their own internal reporting systems."**

of companies who can now improve upon their own internal reporting systems for their enhanced productivity and profitability.

The vision is to use XBRL data freely for analytical information. To meet this end, data would need to be stored as a common repository for all regulatory bodies with each of them using the common taxonomy base and having a set of additional specific elements to meet their reporting requirements. Once all regulatory reports reside in a common repository, a strong data analytical engine will be able to search for information in a targeted manner and sieve out relevant data to benefit the users. It will soon become as common and versatile as email today. **IBR**

# IN THE WORLD OF...



**JOHN MCALISTER**, Assistant Commissioner (Australian Taxation Office), Standard Business Reporting, Australia

MY JOB, AS OPERATIONAL LEADER OF THE SBR PROGRAM, IS TO ENSURE THAT THE BUSINESS OUTCOME OF REDUCING THE REPORTING BURDEN ON THE BUSINESS COMMUNITY IS BEING SUPPORTED THROUGH THE TECHNOLOGY SOLUTION, DIRECTION AND KEEPING SOFTWARE DEVELOPERS AND AGENCIES ENGAGED, ALIGNED AND FOCUSED.

#### **MY WORLD**

As SBR is a multi-faceted, multi-agency, multi-jurisdiction program that delivers a streamlined reporting system from business to government my role requires me to be business leader, stakeholder manager, relationship leader, technically aware and, above all, business thought leader and integrator.

The SBR single reporting language (the SBR XBRL Taxonomy) is at the heart of the SBR Program

and it is my direct responsibility to ensure the quality and integrity of the SBR taxonomy. This is achieved through the development of relationships with government agencies, developers, intermediaries and users. I led the collaboration of these geographically and legislatively disperse communities to provide an integrated solution.

The SBR solution, largely based on the use of XBRL (for the taxonomy), is, from a technology

perspective, a pioneering undertaking. This included the development of capability and skills that now exist within SBR and the broader user community. This is achievement that has been recognised as a key capability for the Australian government.

### WHAT MAKES MY JOB EASIER

Automation! Automation that abstracts from the technical specifications and allows developers to focus on the business outcome and message requirements, without the need for detailed technical knowledge.

The taxonomy testing platform is an example of this. It is managed, maintained and hosted externally, enabling my team to concentrate on what's important: ensuring the conformance suite of tests

Four years ago we started a journey, a journey that not many (if any) had gone before. Everything was hand crafted. We had no automation beyond 'cut and paste'.

is up to date and offers complete coverage. This automation eliminates human testing error allowing analysis of results that in turn feed back into the growing library of conformance tests, constantly improving quality.

### HOW HAS MY JOB CHANGED

Four years ago we started a journey, a journey that not many (if any) had gone before. Everything was hand crafted. We had no automation beyond 'cut and paste'.

Today we are moving toward consistent quality, driven by constant-continuous testing not as an afterthought to taxonomy development, but inherent within it. Quality is now more consistent and not as subject to differing human interpretation.

Our future direction includes SBR being the standards agency and centre for expertise supporting a federated model of taxonomy development, using tools that are provided online.

We see an environment that enables stakeholders to contribute more readily to an ever expanding SBR Program. Changes impacting reporting obligations can be readily updated, injected into the test suite, and published, ensuring SBR reporting taxonomies capture the detail needed.

We have learnt a lot, often through mistakes, consistently through listening and co-designing with those who are using the taxonomies and those who have gone before us. Yet we still have a way to go! 

## THE SBR PROGRAM

The SBR Program is an Australian whole-of-government initiative to improve productivity by supporting business participation in the digital economy: streamlining interactions, reducing effort and creating efficiency.

Based on data standards and messaging protocols, SBR is simplifying business-to-government reporting. The SBR AU Definitional Taxonomy is a whole-of-government single reporting language, defining terms which can be used across government agencies. From this, specific obligations can then be defined as messages.

SBR is aimed to directly reduce the tens of billions of dollars the banks report concluded that business spend on regulatory compliance each year.

Simply, SBR is implemented into record keeping software, reporting information is populated from the underlying financial and payroll records, reducing the need for manual data entry. This reduces both potential input errors and time spent to complete forms. Unlike current online channels in place to submit reports to government, SBR enables lodgement of reports directly from that software, to SBR-enabled agencies, without logging on to separate portals and systems and re-keying information already held in your system. In essence, making reporting part of the 'natural' system.

### WHAT WAS YOUR BEST WEEKEND THIS YEAR AND WHY?

The next one because I don't know what it will bring.

### WHAT ARE YOU READING?

I currently have three books on my iPad that I jump back in forth with:

- Everything Is Miscellaneous: The Power of the New Digital Disorder
- Ignorance: How It Drives Science, and
- The Power of Habit: Why We Do What We Do in Life and Business

I need to devote more time to the last one.

### DO YOU PREFER CROSSWORDS OR SUDOKU?

Neither. I get all the puzzles I need thinking through taxonomy modelling requirements.

### WHO IS YOUR FAVORITE TELEVISION CHARACTER, PAST OR PRESENT?

Oh how do I answer this? I watch way too much television today and very little of it stands the test of time. But my favorites have to be:

- Carol Burnett in "The Carol Burnett Show" and at its best with Tim Conway. Some of the best comedy ever.
- Lucille Ball in "I Love Lucy"
- Johnny Carson was a class act.
- And I have to admit I really enjoyed Kiefer Sutherland as Jack Bauer in 24 although I really didn't care for what he represented.
- And my all-time favorite: Lassie in "Lassie" and of course best episode was "Lassie Come Home"

Clearly I'm over 30. ;-)

### WHAT DO YOU LOOK FORWARD TO MOST ABOUT THE TIME OUTSIDE THE OFFICE?

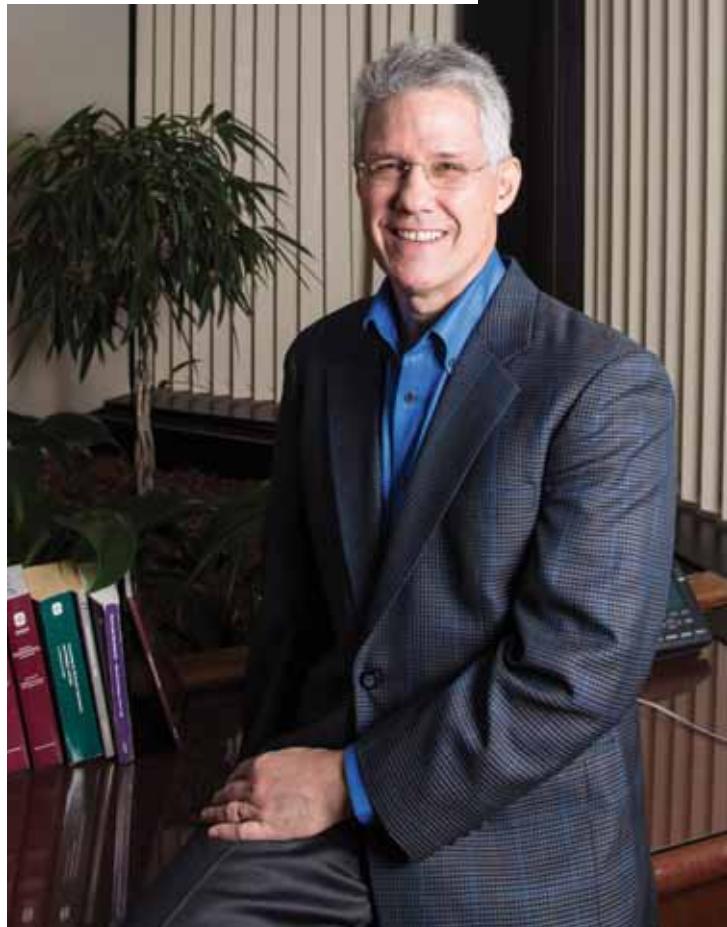
I'm a tinkerer at heart and I'm always messing around with a new project at home. My wife would tell you that none of those projects ever get finished but that's not the point of being a tinkerer.

### WHO IS YOUR FAVORITE HISTORICAL FIGURE, PAST OR PRESENT?

None come to mind although there are many people that I cross paths with that I respect and learn something new from each and every day.

# OUT OF OFFICE

By LOUIS MATHERNE, FASB



### WHAT IS YOUR FAVORITE BOOK OF ALL TIME?

This will be a big surprise ... ;-)

The Innovator's Dilemma, and Crossing the Chasm. I've never had much time for novels although I really enjoy watching a good story play out on the big screen.

### OUTSIDE OF THE OFFICE, WHAT IS YOUR MOST SIGNIFICANT PERSONAL CHALLENGE?

Making time to stay fit and getting out from behind the computer. **IBR**



**Millions of companies  
Countless investors,  
regulators, analysts,  
accountants, and  
technologists**

**One Standard**

**XII is committed to cultivating market opportunities and value for XBRL and the global XBRL community through:**

**Protecting current investments in XBRL**

**Encouraging the adoption of XBRL worldwide**

**Preparing XBRL for new opportunities in the future**

XII is currently undertaking a series of strategic initiatives that will enhance the XBRL specification and ensure that the standard is flexible enough to adapt to current trends, evolving standards, new markets, and emerging technologies – **preserving** and **promoting** XBRL for the future.

**Create an abstract model** to provide a conceptual framework for understanding XBRL and give developers a strong foundation for implementing XBRL solutions. *\*Public Working Draft 2.0 Now Available for Review and Comment\**

**Produce training materials** to lend support to developers and those new to XBRL.

**Define standard API signatures** that will assist developers with their implementation of XBRL solutions. *\*Get Involved by Sharing Your Experience and Insight. Go to [xbrl.org](http://xbrl.org) and Take the APITF Survey!\**

**Reorganise the existing specification** to make it easier to understand.

**Enhance data comparability** to widen the applicability of XBRL data across project and international boundaries. *\*Get Involved!! Business Requirements Available for Review and Comment\**

**Develop application profiles** in order to reduce the scope of XBRL implementations by breaking up the XBRL specification into components.

The final part of the equation is you! **Your participation** is critical to the future success of XBRL. Numerous committee and task force appointments are open now!



**Find more information at [www.xbrl.org](http://www.xbrl.org) or join XII today at [www.xbrl.org/HowtoJoin](http://www.xbrl.org/HowtoJoin)**

INTERACTIVE BUSINESS REPORTING



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