#### What CFOs need to Know about XBRL

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#### **Abstract**

The purpose of this article is to answer common questions that CFOs may have about XBRL, the eXtensible Business Reporting Language.

#### **Status**

This document is finalized.

#### 1 What CFOs need to Know about XBRL

There is a high probability that XBRL will be part of every CFO's future. As such, CFOs will certainly have many questions about XBRL. XBRL is new; it does have some technical aspects that make it a little challenging to fully understand without a technical background, and the software that uses XBRL is not as mature as it will ultimately be. Think about the first spreadsheet applications and how they compare to what spreadsheets are today.

Yet, it is important to overcome any hurdles required to understand XBRL because XBRL will impact CFOs. For example, the SEC will most likely mandate that CFOs report their financial information using XBRL. Furthermore, there is still time to take advantage of the opportunity for CFOs to influence what XBRL becomes, how the SEC might mandate its use, etc.

This paper endeavors to summarize and provide answers to many of the common questions that CFOs may have, in terms to which a CFO can relate.

Before we start with the questions, let's set our perspective. In a Business Week article, "The Greatest Innovations of All Time", Larry Keeley points out that most of the greatest inventions of all time were "platforms." He defines a platform as

"broad capabilities that have the potential to cut across industries, markets, and applications. Platforms often have some proprietary capabilities at the core, but not always. Indeed, it is common for platforms to integrate many otherwise ordinary ideas into a whole that is collectively remarkable."

He goes on to say that "a sufficiently advanced technology is indistinguishable from magic."

In his article, several platforms are discussed. We will use the example of "limited liability", which is familiar to most business people and it will help provide a sense of what a platform is.

Corporations and limited liability partnerships provide a means of removing personal risk from an individual who participates in a business venture so that the individual will not have to risk everything if the company makes a mistake. This platform of "limited liability" has allowed large corporations and partnerships to separate liability from ownership, and it has allowed large amounts of capital to flow from individuals to companies and business ventures.

For more information, see:

http://www.businessweek.com/innovate/content/feb2007/id20070216\_377845.htm

First, consider financial reporting, or the "global financial reporting platform". I think one could argue that is a platform. Consider what that platform was like in the early 1900's: paper, pencils, no calculators, no GAAP. Consider what that platform was like before the invention of the copy machine and the fax. Consider it before the advent of the computer, or the electronic spreadsheet, before the Internet. Consider it before systems like EDGAR existed.

Now, consider what the global financial reporting platform might look like if there were only one set of financial reporting standards used around the world, rather than each separate country creating its own national financial reporting standards. We are at the twilight of realizing that possibility. Imagine what it might be like if a computer could read and understand that one global set of GAAP. And imagine what it might be like if users of that financial information could exchange the information among themselves, using different software, and being able to use that information without having to convert from one proprietary information format to another.

What would be the impact of this platform, which would basically reduce the "friction" among various reporting systems? What would be the impact on how financial information is created, exchanged, consumed, and otherwise utilized?

#### 1.1 Why should I care about XBRL?

If you work for a public US company, it is probable that you will be required to file to one or more regulators, or other entities, using XBRL technologies. The SEC and others (the FDIC already requires banks to file call reports using XBRL) see XBRL as improving transparency, and even the speed of financial information, for all interested parties.

What the FDIC and SEC are trying to achieve is not a "US thing", but rather part of a global trend. For example, just recently the Committee on Economic and Monetary Affairs of the European Parliament, in an opinion "on a simplified business environment for companies", suggested that XBRL be part of this process. (See http://tinyurl.com/yvbzdd, suggestion 11 of the document). XBRL is not coming, it is here.

Perhaps the most compelling reason to act now is that there is a unique opportunity to participate in the creation of the global XBRL standard and to determine how that standard will be used for financial reporting. This is not for everyone, but for some it can be rewarding in terms of knowledge. However, it is also important for CFOs to express their views because they participate in the financial reporting supply chain, and if they don't express their desires and needs now, they may not be happy with what they get from XBRL. In other words, there is an opportunity to join other non-CFO participants in the supply chain who are currently expressing their views.

Although it is not important for all CFOs to take advantage of this opportunity and help influence the XBRL standard, it is important for some CFOs to participate in these discussions to ensure that the needs of the CFO are considered during the development period of this standard. A second reason is that the best way to understand the XBRL standard is to do just that, to participate in its creation. Some CFOs like to be leaders and on the cutting edge, whereas it is not so important for others.

Those companies that wish to prepare for the use of XBRL, can minimize the cost, the impact, and even more importantly, can benefit faster from this technology.

Benefits of participating early may include:

- being perceived as a progressive, well-run, "tech savvy" company;
- providing opportunities for your staff to learn new skills that will be of increasing value
  in the future, contributing to the "team spirit" of being part of something new, rather
  than working with technologies that have been superseded;
- improving IT department skills, working with less expensive open standards rather than expensive proprietary solutions;
- lowering the cost of financial reporting before your competitors do; and
- providing the opportunity for improvement of internal reporting for both financial and non-financial information.

#### 1.2 What is XBRL?

The Extensible Business Reporting Language (XBRL) is an open standard that supports information modeling and the semantic expression of commonly required terms used in business reporting. XBRL uses the XML syntax and related XML technologies such as XML Schema, XLink, XPath, Namespaces, etc., to articulate the semantic meaning in the form of information modeling.

As such, XBRL is a formal language that can be used to express the semantic constraints that information must comply with to be valid.

Now, this definition can be difficult to understand, which means that XBRL can be challenging to explain to business users who are not thoroughly familiar with the terms "semantic meaning" and "syntax". However, to understand why XBRL is so important, it is essential to understand these terms, so they are worth explaining. Not to understand these key terms is

like trying to explain algebra or calculus to someone who does not know how to count or the basic operators of mathematics.

Syntax is really unimportant to us. However, the reason to bring this up is that many people confuse syntax and semantics. Syntax can be described as "the order of the words". XML is a syntax, as is CSV (comma separated values). For example:

This is a line of CSV. You may be familiar with this syntax if you ever imported information into a spreadsheet application.

Semantics is about meaning. An example of semantic meaning is "Cash has a natural balance of debit, and it is as of a point in time. It rolls into the total of Assets". Humans understand this semantic meaning, at least accountants do. What XBRL does is to allow one to communicate this semantic meaning so that a computer program can understand it.

Furthermore, XBRL gives us something that we can agree on. Before there was XBRL, there were many people expressing semantic meaning about financial information, but in proprietary ways. With the arrival of XBRL, there can now be global agreement on the way to do this, and this agreement on financial terms can be leveraged in the exchange of information. This is particularly noteworthy because the world is moving towards one set of financial reporting standards, IFRS (International Financial Reporting Standards).

#### 1.3 Why should I learn more about XBRL?

CFOs should learn more about XBRL for three primary reasons. First, XBRL is currently being built out and being made to work for financial reporting. As such, it is important that some CFOs take the time to grasp what XBRL is, how it works, to determine the particular interests of the CFO community, and to push those interests during the build-out and adoption phase of XBRL.

Second, there is a very good probability that the US Securities and Exchange Commission will require public companies to file their financial information using XBRL.

Third, it is the consensus of most professionals who are knowledgeable about XBRL that the use of XBRL to report information to regulators, such as the SEC, will be less than 1% of the value that XBRL will bring to a company filing with a regulator. Another way to say this is that the real value of XBRL, 99% of the value, will be the use of XBRL within the reporting organization itself.

### 1.4 What is different about my financial reports now and using XBRL?

Simply stated, XBRL makes things better, faster, and cheaper. Currently, financial reports are commonly made available on paper, or in the form of an HTML page, or a PDF page. What each of these formats has in common is that the information within the report cannot be reused by those desiring to use information, unless the information is re-keyed into whatever downstream application is used, such as a spreadsheet model, analysis system, business intelligence system, or another system. The reason that the information cannot be reused is that the information is either not in an electronic format, or that the electronic format is structured for presentation, but not for a computer application to reuse the information. For a computer application to reuse the information, it must be structured for meaning rather than just for presentation.

Consider the following, which is unstructured information:

Purchase order number 1001 for stock item number 9934

which has a price of \$100; the number of units in stock is 2.

The following is information that is structured for presentation. You can read it, and a computer understands how to present this information in a web page, but the computer does not really understand the information:

And now consider this bit of structured information. This information can be presented in a web page or another document, but a computer can also be made to understand the information because it is structured for meaning:

```
<purchaseOorder number='1001'>
  <stock number='9934'>
      <price>100</price>
      <number>2</number>
  </stock>
  </purchaseOorder>
```

So, what does this really mean? Well, the SEC uses the term "interactive data". And that is a good description. Basically, rather than sitting there on a piece of paper, be it a physical piece of paper or what amounts to an electronic piece of paper, such as an Edgar filing, an HTML page, or a PDF file, the information will be able to be dynamic. Why? Well, because a computer application can interact with the data and metadata (the taxonomy). A computer will be able to move things around, sort, search, slice, dice, and filter the data because the computer can get at the data and know precisely and accurately what the data is. The data has context. This is not the case with paper. Once it is printed (on paper or electronically), it is stuck there.

Professionals who may be interested in using XBRL will be from a wide range of stakeholders in the financial reporting supply chain: investors, buyers, suppliers, employees, competitors, etc.

#### 1.5 Why is the SEC involved with XBRL?

One can only speculate as to the motivations of the SEC, and this article certainly does not speak for the SEC, but we will take a stab at why the SEC is involved with XBRL. The SEC is a regulator whose mission it is to protect the investing public. As such, they make information available to investors. They used to do this on paper, literally having a room where those who wanted information could come and obtain information about public companies.

In the 1990s, the paper system was moved to an electronic system, EDGAR. This way, those people who wanted to research the information did not have to go into that room and copy the information (or have someone else do it for them); the information was now made available electronically to those wishing to use the information.

EDGAR was a resounding success, but it did have its limitations. The information was there, but to get at it, users had to still manually read the entire EDGAR filing, and then find the information they were looking for.

XBRL will change that. The SEC coined the term "interactive data" as a description of what XBRL will do for them. Rather than use the EDGAR system, which is an electronic filing cabinet, XBRL will make the data found in the SEC filings more like a database. Computer applications can pull information out, search it, sort it, sift it, and otherwise work with the

data. Computer applications will probably continue to present information exactly as it is presented today, but these applications will be able to do much more.

The analysis capabilities of the SEC will definitely benefit from the use of XBRL.

# 1.6 Is the SEC going to require my financial statements (and other filings) in XBRL format?

It is very likely, based on the actions of the SEC to date, that the SEC will eventually require public companies to make their filings to the SEC using XBRL.

The Pozen Committee (Advisory Committee on Improvements to Financial Reporting) in their Decision Draft Memo dated January 11, 2008, recommended that the SEC mandate the filing of XBRL-tagged financial statements. They set certain preconditions and suggested a phased-in approach starting with the largest 500 domestic filers. Others have suggested the top 1000 filers, and even others have recommended against a phase-in. No one is recommending not to adopt XBRL.

Several years ago, the Federal Deposit Insurance Corporation (FDIC) went through the process of evaluating XBRL. The result was that the FDIC implemented the global XBRL standard, and replaced the proprietary way that they were using to receive data from financial institutions, using an electronic tagging format. The FDIC is quite happy with the benefits that they have obtained from XBRL. The SEC has been watching and discussing XBRL with the FDIC. This is surely one of the reasons for the SEC to become interested in XBRL.

Regulators derive a significant benefit from XBRL. If they want to exchange data with those they regulate electronically, which many regulators around the world already do, then the regulator would either have to create something similar to XBRL, or simply use XBRL. Well, prior to the existence of XBRL, there was really nothing else. That is why the FDIC created a proprietary approach.

Imagine how many regulators you need to submit information to. Wouldn't it be better, and make the life of companies just a bit easier, if they all used one format? Well, that is why there are 500 members in the XBRL International consortium. Creating these data exchange standards is both time consuming and expensive, especially good ones.

This is why the SEC will probably adopt XBRL.

### 1.7 If so, when do you anticipate the SEC mandating XBRL?

There is a lot of speculation as to when and how the SEC would require XBRL. Some believe that XBRL will be phased in. For example, some believe that the largest filers, for example, the top 500 filers, would be required to use XBRL first. Others are suggesting the top 1000. Others are recommending against a phase-in. It is very likely that this mandate will occur between September and December 2008, probably closer to September.

But the real question is, why wait? Being an early adopter may reduce costs and put your company in a positive light with regard to key interested parties. Also, the benefits of XBRL are documented, and there is plenty of data to show its benefits.

IT analysts, such as the Gartner Group, Ventura, and others have been monitoring XBRL for many years. What they are basically saying about XBRL is that XBRL will be part of the future plans for most businesses.

#### 1.8 Who is using XBRL today?

Today, XBRL is being used by many regulators and entities. Here are a few examples:

- The **Federal Deposit Insurance Corporation (FDIC)** collects financial information for banks using XBRL. The FDIC went live with their new system in October 2005, and they collect information for approximately 9,000 financial institutions.
- The MIX Market: Microfinance is the practice of providing financial services (credit, insurance and banking facilities) in very small amounts to poorer people, usually in developing countries. In particular, microfinance involves loaning small amounts to entrepreneurs who have no access to credit so that they can establish, operate or expand a business. The MIX is a nonprofit organization created to increase the financial transparency, and therefore accountability, of microfinance organizations. The MIX Market is a Web-based information platform that collects information from more than 1,000 such institutions, including their financial data, audited results, and data relating to their social impact (such as the percentage of women borrowers). Microfinance institutions that join the MIX Market make information about their activities public, and they can compare their performance with that of similar The MIX has basically created an "Edgar-type" system for the organizations. microfinance industry. They did this using XBRL and a lot of off-the-shelf software. They have created some proprietary aspects in their system, but they were also able to significantly reduce the costs of what they were trying to achieve by using XBRL.
- COREP: The Committee of European Banking Supervisors (CEBS) is made up of about 27 regulators from the European Union countries. They are using IFRS for financial reporting for all financial institutions in Europe, rather than 27 different sets of financial reporting standards, as used previously. They are using Basel II for financial institution solvency reporting, rather than 27 different bases for solvency reporting, as used in the past. Many central banks, including those in Spain, France, Norway, Poland and Belgium, have already implemented XBRL. Others are in the process of doing so.
- The Netherland: The Dutch Water Board, an agency of the **Dutch Government**, implemented XBRL a few years ago. The project was so successful that the Dutch Government is undertaking a massive project to collect data from all businesses at one point, using XBRL. The system goes live in 2008. They project their savings to be \$345 million.
- The Korean Stock Exchange, the Shenzhen Stock Exchange (China), and the Shanghai Stock Exchange (China) have already put into production systems that make use of XBRL. The Financial Supervisory Agency (FSA) in Japan is in the process of implementing a system, as are New Zealand and Australia.
- Australian Tax Office: The Australian government has been watching the FDIC and Dutch Government projects. In 2007, the Australian government funded the first phase of a massive project to use XBRL as the standard way to communicate between government and business, between government and consumers, and among governmental entities. This is called the "Standard Business Reporting" project. The first phase of the project will be for the Australian Tax Office to implement XBRL. The cost savings of this project is projected to be \$780 million (Australian dollars) per year!
- The SEC Voluntary Filing Program (VFP): United Technologies, one of the companies participating in the SEC VFP, has seen the benefits of XBRL and is implementing XBRL internally within its organization.
- Morgan Stanley has developed an internal implementation of XBRL.
- Wacoal, a half-a-century-old clothing manufacturer in Kyoto, Japan, used XBRL to help integrate its 36 subsidiaries operating in Asia, Europe and North America. Wacoal estimates that it was able to implement this system using XBRL five times faster, and at a third of the cost of an alternative ERP solution that they had considered.

#### 1.9 Why are they using this technology?

The fundamental reason for implementing XBRL is to make things better, faster, and/or cheaper. For example,

- The FDIC reduced errors from 18,000 to zero.
- The Netherlands expects to save \$345 million annually as a result of implementing XBRL.
- Australia expects to save AUD \$780 million.
- Wacoal was able to implement a consolidation system using XBRL five times faster and at a third of the cost of an ERP system, which was their next best alternative.

#### 1.10 What is a taxonomy?

A taxonomy is a classification system. The term "dictionary" is sometimes used to describe what a taxonomy is. The notion of a classification system is better. Basically, a taxonomy articulates information or "metadata" about something in a form that is readable by a computer. So, an XBRL-based financial statement contains values. For example, "1000". That value is associated with a concept, for example, "Cash and Cash Equivalents". The concepts, such as "Cash and Cash Equivalents", are expressed in a taxonomy. The taxonomy has other concepts, information about each concept, relations between concepts, etc.

For example, the US GAAP taxonomy is a classification system for US GAAP. Not all of US GAAP, but the portions of GAAP that are used in the reporting of information in a financial statement. This has mostly to do with the line items of a financial statement, information which is disclosed in the notes, and other such information.

As of the writing of this article, the taxonomy is under construction, so it is still possible to influence the taxonomy: what it contains, what it does not contain, the organization and definitions of concepts, and basically everything about the taxonomy. It is in the CFO's interest to be sure that the taxonomy reflects what its stakeholder group wants the US GAAP taxonomy to be. Currently, technical people, analysts, the SEC, the FASB, and other stakeholder groups are influencing the taxonomy. CFOs should also participate, or they may not get what they want or need.

Here is a bit more about what a taxonomy is. The term "taxonomy" is not a new concept. The scientific community has lots of formal taxonomies. For example, a classification system for plants or for animals. A taxonomy basically articulates semantic meaning. For the US GAAP taxonomy, the semantic meaning relates to what is used in financial reporting. This is information, such as:

- "Cash and Cash Equivalents" is a debit.
- "Cash and Cash Equivalents" is part of the total of "Current Assets" (at least in some parts of the taxonomy; in others, it is part of the total "Assets)".
- "Cash and Cash Equivalents" appears on the balance sheet, in the statement of change in cash flow, and in the "Cash and Cash Equivalent Disclosures".
- The references to the authoritative literature for "Cash and Cash Equivalents" are...
- The concept "Cash and Cash Equivalents" has the following label in Spanish, Japanese, and English...

An example of why these things are important is that the taxonomy will enable, or not enable, certain types of comparability. CFOs may want different levels of comparability. The creation of the US GAAP taxonomy is a negotiation process, and if one is not at the table, one's interests may not be taken into consideration.

### 1.11 Are taxonomies country specific? Industry specific? Company specific?

Taxonomies could be country specific in some cases, industry specific in other cases, and company specific in yet other cases where the taxonomy is used only internally within an organization.

If you look at the US GAAP taxonomy, the taxonomy is not really country specific because US GAAP is used in many countries other than the US. The US GAAP taxonomy contains information for several industries, including commercial and industrial, financial institutions, insurance companies, brokers and dealers in securities, etc. Each industry uses many of the components of the US GAAP taxonomy. For example, the commercial and industrial balance sheet is classified (breaking out current and non current portions of assets and liabilities), whereas the banking and savings institution balance sheet is not classified, following that industry practice.

The US GAAP taxonomy is not company specific. Generally, if many companies report certain information, that information has been included in the US GAAP taxonomy. However, disclosures for specific companies were not included. In such a case, the reporting company will probably create its own taxonomy, which extends the US GAAP taxonomy for the company's specific reporting needs. XBRL taxonomies are not static forms; they are dynamic. This is one of the main benefits of XBRL, its extensibility.

### 1.12 Does my company need to develop its own taxonomy? If so, is this proprietary information?

A company is not required to develop its own taxonomy, but it will probably want or need to. Taxonomies do not contain proprietary information, nor would a company want to consider a taxonomy as information proprietary to their company.

By participating in the SEC VFP, a company can start using the US GAAP taxonomy and develop skills by using an established taxonomy. Then, the company can create add-ons and eventually create a taxonomy for its own use. For example, line items such as the IRS, Production material, Sales and Use Tax, Property tax, or any other significant item with high transaction processing and multiple users, are good candidates for additional concepts in a company taxonomy.

#### 1.13 What skills are required to create an XBRL filing?

This question can be expanded to: "What skills should my XBRL team leader have?" and "What skills should my XBRL team have?"

The skills required depend on the approach you will take to make your information available in XBRL. But, one thing is certain: CFOs will want to be able to review the information to be sure that it is correctly articulated.

If a service bureau creates your XBRL for you, that eliminates a lot of the technical understanding required to create the XBRL. If you do it yourself, you will need to understand how to operate the software and how to review your work.

If you want to expand your internal systems to make use of XBRL, you will want to hire a consultant who has expertise in implementing such XBRL systems. XML expertise is not enough.

If you simply want to do the work yourself, by tacking the process of creating the XBRL on to the end of your current process, you need to have software, and someone trained to properly use that software. You also need to provide for training in the process of creating and reviewing an XBRL document, and most likely training on how to extend the US GAAP taxonomy. This is all doable, and after you have been trained or have walked through the

process once or maybe twice, your internal staff can take over more and more of the responsibilities themselves. However, it is best to have someone who knows how to do this to lead you through the first time, or at least support you during the process.

Today, the reality is that the software applications can achieve what is needed, but require too much XBRL expertise because the XBRL knowledge is not buried deeply enough into the software applications. As time goes on, less XBRL expertise will be required, but you will still need some. It is important to learn how to create a high quality output.

# 1.14 It seems like the costs and burden of using XBRL are on the shoulders of financial report preparers, while all the benefits go to regulators and investors, which seems unfair. Is this the case?

We believe that those professionals who take steps to be early XBRL adopters will be ahead of the cost curve. Also, it is definitely not the case that all of XBRL's benefits go to analysts (regulators, investors, etc.), and all the burden goes to those preparing XBRL-based financial reports. First, many companies that prepare financial information also analyze their own financial information, prepare benchmarking studies to compare their company to other companies in their industry, etc.

Many of those familiar with XBRL believe that a company's use of XBRL will be something like 1% for external reporting and 99% for other internal uses. Here is a great example for internal uses: disclosure checklists and verification of information within a financial statement. All CFOs understand what a disclosure checklist is, and most have a formal or informal checklist that they use. What if you could automate the checking of those rules on the disclosure checklist? What if you could have XBRL check 100% of the computations found inside a financial statement to ensure that everything foots and cross-foots? What if you could share those business rules, together with the financial statements themselves, so that analysts can see the relations? All of this is completely possible with XBRL because that is exactly what XBRL was designed to do, to enable this type of content validation of the financial statement. XBRL can do this because of the semantic meaning expressed in a taxonomy. And there are thousands of such relations within a financial report, and within the information that is summarized internally (and never shared with those outside the company).

XBRL will actually benefit those preparing financial information significantly. It is difficult to say exactly who will benefit the most, but the benefits will be throughout the supply chain. The losers here will be the data aggregators who are paid to do this manually (and at increased costs) because it is impossible to automate the process without something like XBRL.

#### 1.15 What will it cost me to implement XBRL?

The bottom line is that, over the long term, it will save you money to implement XBRL, if done correctly. The accounting profession had a similar issue when it was going through the process of deciding whether to adopt a new-fangled invention called the computer. Computers cost a lot of money. Many people were reluctant to buy a computer because they cost so much. This is really the wrong way to evaluate such a decision; one must certainly look at cost, but one also needs to look at the benefit and, more importantly, the net benefit or cost of the plan.

XBRL will have a cost. There are basically two approaches to implementing XBRL within your systems. One approach is to "tack it on to the end" or "bolt it on to the end" of the process, even to the extent of simply outsourcing the entire process of creating the end product: an example would be an XBRL filing that you would send to the SEC. This is a viable approach. The cost will be the lowest of all the other alternatives, but the benefit will also be the lowest or even nonexistent.

An alternative approach is an "integrated approach", or to embed XBRL deeply within your systems. The more deeply that XBRL is embedded, the more it will cost. But, the more deeply that XBRL is embedded, the more significant the benefits will be.

The "integrated approach" has two sub approaches. The first option is that a company invests and adjusts its internal systems to use XBRL. The second option is that companies can purchase software which is XBRL enabled, such as your ERP systems, your BI (business intelligence) systems, etc. Getting these features in off-the-shelf software is a Catch 22 situation. Software vendors will not implement this feature until customers ask for it, but customers won't really appreciate how valuable it is or ask for it until they can see it work within their software.

There is no right or wrong answer, and different companies will make different choices. The ultimate integrated approach is to tag information at the source transaction and let it flow throughout the entire system, but this tends to be the most costly approach, unless your software supports XBRL. The "bolt on" approach tends to be the path of least resistance, but it tends to have the least possibility of controls and audit trail, and there is still re-keying of information, which increases the cost and probability for errors. The best option will be when software vendors provide robust support for XBRL, but that will take time.

The Pozen Committee (Advisory Committee on Improvements to Financial Reporting, Draft Decision Memo, January 11, 2008) stated that when using the "bolt on" approach, the time it took to create a financial report using XBRL was approximately 80 to 100 hours for the first time, but that the number of hours dropped significantly for subsequent reports because it was not necessary to replicate the tagging process for most items.

In a letter to the Pozen committee, Edgar Online (letter dated February 7, 2008) and their partner R.R. Donnelley stated that their automated approach of creating the same tagged information is less than 10 hours, on average, including the time to review the statement with management and their auditors.

The Edgar Online letter goes on to say that they already provide XBRL tagged information for 12,416 publically traded companies to their customers every quarter.

In an article published in the June 2007 edition of the AICPA Journal of Accountancy, United Technologies disclosed that they first started to adopt XBRL by taking the "bolt on" approach, but they are now integrating XBRL into their systems. They state that XBRL can be implemented for a reasonable price and that XBRL provides many other tangible benefits. They believe that they already have a positive ROI. When they started, they invested about 80 hours creating their filing, learning the tools, etc. Their current effort is about 4 hours.

So, costs can vary, as can the benefits and the ROI. There are many approaches. A good way to start is to do a prototype and participate in the SEC VFP. The potential upside is so great and the initial costs are so low that it is worth experimenting with XBRL a bit and figure these things out for oneself.

#### 1.16 Does XBRL Work? How do you know?

XBRL does work; there is ample evidence of that. There are many systems up and running that make use of XBRL. For example, the FDIC system has been up and running since October 2005, and they are very pleased with their system.

However, there are some things that do need to be better tested and shown to work. One is the US GAAP taxonomy, which has really not been put through the ringer. Another is the SEC's system for accepting, storing, and making XBRL data available to investors and others.

There could be nothing better than 15,000 public companies filing XBRL documents with the SEC in order to test both the US GAAP taxonomy and the SEC systems for using XBRL. Now, we don't think that the SEC is going to go "cold turkey" and wait to use a massive number of filings to test their new system.

Will everything go perfectly? Probably not. Is XBRL perfect? No. Cautious optimism and participation from all parties to ensure that the system operates for the benefit of all

participants, in addition to a thorough testing program, would be very good. That is why it is important for CFOs to participate in the SEC Voluntary Filing Program: to get exposure to the process and to understand the specific issues that will need to be addressed.

# 1.17 It seems like XBRL will be just another boon for consultants whom we have to hire to help us get the financial information into XBRL. Is that the case?

Like any new mandate, there will be individuals who will capitalize on the decision. The key will be minimizing the cost and maximizing the benefit. In the short term, it is possible that consultants who understand XBRL will benefit and make money helping companies get their financial information into XBRL, if XBRL is required by the SEC. Also, many prefer the "service model", where a company does not deal with getting their information into an XBRL format; they just farm it out and let someone else deal with it.

For some, this service model, or having a consultant do the work for them, may be a necessary option in the short term, and it may even be a viable option in the longer term. Different businesses will chose different approaches for a variety of reasons.

However, if XBRL is simply "tacked on" at the end of the process, submitting companies may get some benefit from XBRL, but they will never be able to realize its full potential within their organizations.

To look at the other end of the spectrum, some believe that XBRL will start at the beginning of the accounting process, when transactions are entered into the accounting system. There is already one software vendor who enables this. Hypothetically, let's say that a company does take this approach and uses XBRL throughout the process exactly as how XBRL was designed to work. How difficult do you think that it would be then, at the end of the process, to generate financial statements in an XBRL format? Not that hard.

So, there are two extremes, a service model and a fully embedded model, and then there are many approaches in-between. Companies may choose all these approaches. Companies may start with a service model, as that is easy to do, and then develop their systems for a greater use of XBRL as they gain more and more insight into what XBRL is capable of.

# 1.18 Is XBRL the only thing I will have to file, or will I continue to submit the current EDGAR type filings?

An unresolved question is whether a company will (a) continue to file what it files now, and then also submit XBRL, or (b) submit only XBRL. There is one additional distinction that should be made. Using the Pozen committee terminology, XBRL could be "filed" or "furnished". "Furnishing" would mean to provide the XBRL document to the SEC, but it has no real status because it is simply furnished, and there is no legal liability or scrutiny. However, what is the value of something that one cannot really trust? "Filing" would mean that the information is officially filed, and XBRL is the legal filing format.

So, it looks like there are three options available:

- a. Continue filing as currently filing, and also file XBRL.
- b. Continue filing as currently filing, and furnish XBRL.
- c. File only XBRL.

Most other countries that are mandating the use of XBRL do not differentiate between filing formats. They either require only XBRL, or give XBRL the same status as other filing formats, as XBRL is phased in and as the older filing formats are phased out.

# 1.19 Clearly, XBRL is new and certain things will likely need to change with regard to financial reporting. What will need to change relating to financial reporting?

Currently, we are using a paper-based model for financial reporting. Even the current electronic EDGAR filings have more in common with the paper-based reports, which were developed in the early 1900's, than the XBRL-based system to which we will likely move over the coming years.

Paper-based reports are so "20<sup>th</sup> Century"! We are in a new era. The Internet, the computer, and other new technologies offer new possibilities. Also, it is not sure that the accounting profession will be receiving a "get out and change" card. Fact is, it was very progressive for the AICPA to get behind XBRL so early, only a few months after XML was even made available.

The accounting profession, and others in the financial reporting supply chain, will likely have to make many choices relating to what needs to be done to bring forward the "paper-based" reporting model to any new "XBRL-based" reporting model. It would be a mistake to drop everything that was learned from the paper-based model and start from scratch. It would be just as much of a mistake to bring everything from the paper-based model forward to the new XBRL-based model being developed, and burden it with "legacy" features and functionality that hinders the new model.

Here are two examples: The notion of "presentation on the face of the financial statements" and "disclosure in the notes to the financial statements" does not fit well into the new model. With XBRL, it is a collection of concepts, values, and contexts all together within one file. Can the distinction between "presentation" and "disclosure" be made with XBRL? Should it have to be? Who knows what the right answer might be.

Another example is the notion of "financial statements taken as a whole". Today, a financial statement is a specific number of pages, a combined report on which an auditor expresses an opinion. That does not work as well with XBRL, which makes it easy to grab only portions of that financial report and use it.

Also, current financial information is structured in ways that humans can use, but it can be challenging for a computer to use. For example, a disclosure in the financial statement may be organized as one or several paragraphs of text. That paragraph may contain a number of discrete data values. A computer will not be able to access or use these values if they are buried in paragraphs of text; computers would have an easier time getting at the information if the data were discrete values. The discrete values can always be rendered in a paragraph of text, but a paragraph of text cannot always be parsed into discrete values. An extreme way of looking at this is to ask the question, should a financial statement be more like a letter or more like a database? Again, remember that a database can be used to generate that letter, but it is not possible to parse the letter into discrete pieces of data. If we could do that now, XBRL would not be necessary. The bottom line here is, what should a financial statement "look like" in the future? This is about the underlying architecture, not the presentation of the statement.

Actually, there are more unanswered questions than answered questions at this time. So, once again, it is important for the CFO to understand the details of what XBRL means, what it could be, and then weigh in on these questions. Holding on to the past too tightly could jeopardize the future, as could moving ahead too fast.

#### 1.20 Are private companies going to have to use XBRL?

For the most part, the SEC does not regulate private companies, only public companies. The US GAAP taxonomy was built mainly for public companies. For example, there is no "owner's equity" concept used by proprietorships. Additional concepts can easily be added via taxonomy extensions, and in fact, there are only a handful of concepts for private companies

not included. For the most part, there are major sections of the US GAAP taxonomy which a private company can ignore, as those sections are not applicable to private companies.

Private companies are "regulated" by the financial institutions that provide them with capital in the form of commercial loans. It is very likely that private companies will be reporting in XBRL to the financial institutions in the near future.

In the world of microfinance, for example The MIX already makes use of XBRL; see http://tinyurl.com/28cg6b. It is just a matter of time before commercial banks begin using XBRL. Several banks have already experimented and created prototypes using XBRL.

#### 1.21 How will XBRL be audited?

This is a good question, and there is no definitive answer at the moment. There are many questions about how XBRL will be audited, lots of opinions, and lots of discussion still needs to take place. Again, holding onto the past too tightly would be a bad thing, as would moving ahead too fast without working out all the details.

The Pozen Committee is concerned about the cost of providing assurance. Others are concerned about the value of the information if no assurance is provided, saying that it could render the XBRL unusable or unreliable. The recommendation of the Pozen Committee (as of January 2008) was that the SEC should initiate a pilot program to test the costs and benefits of assurance, and answer any other outstanding questions.

Furthermore, questions remain relating to what assurance means. The Pozen Committee questions whether assurance should provide information relating to the following: Whether the proper taxonomy was used and if the financial statements are accurately tagged; the reasonableness of a company's extensions; compliance with SEC content and format requirements; validation of computations; if there is any duplication of information and, if so, if the duplicate information is consistent; and, finally, to determine if the information in the XBRL instance document is consistent with originally filed documents.

Some have the view that the current approach to auditing should be rethought, perhaps using an approach such as "continuous auditing" which some promote.

# 1.22 What are the risks of moving to required filings to the SEC in XBRL and how are those risks being mitigated?

First of all, there are risks to moving to XBRL, but there are also risks related to not moving to XBRL. Stock exchanges in other countries already require reporting in XBRL, and the US is seen as being somewhat behind.

However, to answer the question, there are risks to moving to XBRL, but there are ways to mitigate the risks. A thorough analysis of all the risks is beyond the scope of this article, but we would think that the SEC is undertaking such an analysis. The SEC certainly does not want to fail.

Probably the biggest risk that could occur is for the average investor to have less than they have now, or that it becomes harder to do the things that they want to do now with any new system. The large institutional analysts can likely deal with anything.

One could speculate that the SEC will err on the side of having certain things be harder for the SEC, but easier for preparers and investors, in the short term. Then, the SEC will let the system evolve as the learning curve becomes less steep.

# 1.23 What are the benefits of adopting XBRL before the SEC requires it? What are the reasons not to adopt XBRL before the SEC requires it?

To start with, XBRL has benefits for business whether the SEC requires companies to file in XBRL or not. So, in principle, there is really no reason for a company to wait for the SEC to require XBRL. However, in reality, it is usually difficult to change the status quo, as everyone has probably experienced at some point in time.

Therefore, while XBRL may offer benefits to business beyond filing with the SEC, it is likely that companies will not adopt XBRL until the SEC actually mandates it, or until there is an increased amount of data available to articulate the benefits of XBRL, as well as more software on the market to help business take advantage of those benefits, etc.

### 1.24 Is the public accounting profession ready for XBRL if it is mandated?

No, the public accounting profession is not yet ready for XBRL if it is mandated. However, a mandate will certainly motivate the accounting profession to become ready. Again, this is a Catch 22 situation. Frankly, the accounting profession is not known for being early adopters. But then again, it was the accounting profession that invented the notion of what was to become XBRL, and the AICPA played a major role in nurturing XBRL.

There are a lot of things that are not ready. However, when XBRL is mandated, things will move quickly. For example, software vendors are in the business to make money. They would be far more motivated to develop software that supports XBRL, or to implement XBRL within their existing software, if their customers request the feature. The biggest clue to indicate that XBRL will be needed is an SEC mandate, or some other mandate for its use. Short of such a mandate or another strong clue, implementation of XBRL within software will take more time because there is more risk in thinking that it may never be mandated.

Regardless of whether the SEC mandates XBRL or not, XBRL is quite a useful tool for CFOs. The future will certainly prove this to be true. One can see evidence of this now, if one simply looks. For example, look at what the FDIC is saying about their new call report system, which makes use of XBRL; remember that the FDIC already had an electronic reporting system, but it was proprietary.

# 1.25 The adoption of XBRL will be a move from a "paper-based" reporting scheme, which is unstructured for the most part, to an "XBRL-based" reporting scheme, which uses structured information. That has got to cause some sort of impact on financial reporting, it seems. What will the impact be?

Yes, there will be an impact, and many people are actually understating the impact. The better question though is, "What sort of impact does the supply chain want XBRL to have?"

There is a spectrum of options. One option is to drop everything that we know about financial reporting today, and not bring any of the "baggage" from the current approach into the future, starting with a totally clean slate. Another option is to bring everything from the current approach into the new approach, thereby probably making the new approach less functional, due to the legacy burdens brought forward.

Neither of those two extreme options is a good solution; the answer lies somewhere in the middle. It is up to the participants who have a stake in this transition to weigh in and express their views, which is best done by gaining an understanding of what might be possible with the new system, i.e., by using and understanding the new system. We do understand the way that things work now. However, hanging on to the status quo too tightly is not good, nor is throwing out everything we have in the current approach to financial reporting.

Not every CFO needs to participate, but the more who do, the better the needs of CFOs will be addressed in the future.

Another example of what might change is what is filed with the SEC. Currently, filings are "document centric"; they are electronic, but they are basically electronic copies of paper documents that have been used for years. However, consider these two examples and how they might be handled by a new system. Let's take a balance sheet. A balance sheet is submitted showing both the current period balances and the prior period balances. For the following period, what was the current period now becomes the prior period, and new data is added for the new current period. If both of those "documents" are filed, the data filed is duplicated. Analysts querying the database would basically have "two versions of the truth". Is this a good idea?

Another example is the policies relating to a balance. Polices are disclosed for the current filing period. However, what if you wanted to look at prior period data and you wanted to know what the policy was then? Currently, you would have to go to a different physical document to get the data relating to the policies of a prior period.

The point here is that different people and different stakeholders have different ideas on what the best solution is. It is a good idea for CFOs to weigh in with their ideas and thoughts about these types of matters.

#### 1.26 What impact will XBRL have on BI?

XBRL will play a key role in business intelligence platforms in two ways: first, as a means of exchanging data between heterogeneous (varied) systems; and second, as a way to articulate and exchange semantic meaning within and between organizations.

Business Intelligence ("BI") is now in the AICPA Top 10 Technologies for 2008 (http://tinyurl.com/yr2ksd). The process of collecting business intelligence is transitioning.

Business Intelligence refers to practices for the collection, integration, analysis, and presentation of business information to support business decision making. See http://en.wikipedia.org/wiki/Business\_Intelligence for more information. This information is both financial and non-financial in nature.

In the early days before computers, information that was used for business intelligence was collected on the "technology" of the time – the 10 column pad. A major improvement to this approach was the electronic spreadsheet application in the early 1980's, a new technology at the time.

In the 1980's and before, businesses were more disconnected both internally (among departments) and externally from other businesses. As a result, business intelligence was limited to whatever information was available, or whatever could be gleaned from any particular source. The vast majority of this information was internally oriented, based on the information a department would collect and maintain with the resources that department had available for this task.

In the mid 1990's, with the trend towards the integration of enterprise applications, a second approach to business intelligence began to be used, i.e., data warehousing or data marts. This information still tended to be internally oriented, but it did begin to cross departments and it generally used relational databases.

At the beginning of the 21<sup>st</sup> century, with the world well on its way towards ubiquitous connectivity by way of the Internet, business intelligence started to use more external information. Information from both public and private sources external to an organization,

which was heterogeneous in nature, needed to be integrated into systems built to handle homogenous information.

Today, business intelligence systems continue to attempt to reduce the "friction" among the systems used to collect information from literally all over the world. Systems are attempting to make the information more interactive, i.e., created once and used in many places or sets of renderings. Users want to adapt the information and create ad hoc presentations for their own specific purposes (i.e., like they can with spreadsheets), but the controls surrounding this information (audit trail, security) must still be achieved.

Much of this BI information is high-quality financial information subject to third party verification, and a rigorous process is used to collect and maintain the data; therefore, this information is of a higher quality than information not subject to such processes.

What a typical system tries to achieve can be exemplified by the goals of one BI system, the FDIC's, which were the following:

- Reduce total cost of capturing data
- Improve timeliness of data
- Increase flexibility of data collection
- Improve quality of data
- Enhance reuse of data

These objectives are quite similar to corporate BI systems. XBRL assists in virtually all of these areas.

#### 1.27 How do I get started? How do I try XBRL?

A great way to understand XBRL better is to try it out. The SEC has a voluntary filing program which provides SEC filers an opportunity to express their financial information using XBRL and submit it to the SEC. The SEC web site and XBRL US have more information on how to participate in this program.

Another way to understand XBRL is to build a prototype. Identifying a specific reporting situation, and trying to do it better using XBRL, helps one learn what XBRL is and its capabilities.

Participating in the process of reviewing the US GAAP taxonomy during its public comment period is another way to learn XBRL. Note, though, that this process will be ending April 4, 2008.

There is plenty of help available if you need it. Check the XBRL US web site for more information. The following web page provides information about nine software vendors and service provides which can help you get started with XBRL:

http://xbrl.us/USGAAPreview/Pages/Products.aspx