PATRICK QUINLAN
CEO, RIVET SOFTWARE

PHONE: 720.780.0300
PATRICK.QUINLAN@RIVETSOFTWARE.COM

Leveraging XBRL Technology for Transparency and Accountability in Federal Spending

by

Patrick Quinlan

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What is XBRL Technology?
The role of XBRL in creating accountability and transparency via data standardization

The demand for transparency is also a demand for accountability. To accomplish this goal, we must establish a data standard such as eXtensible Business Reporting Language (XBRL), invented to make data contained within online documents machine readable and instantly available for research. XBRL is essentially a barcode that is fast becoming the global data standard for tagging financial and nonfinancial for machine recognition and analysis. It is an open data standard that is non-proprietary, governed by an international non-profit consortium, and similar to HTML. XBRL is currently used by at least 44 countries to manage data and gives users the ability to quickly identify, understand and analyze information. As more regulators, governments, non-government organizations, and individual commercial organizations adopt XBRL as a standard, a platform for innovation emerges.

Adopting a data reporting standard will give us access to real information so that we can begin to provide answers to important questions. Key benefits of mandating the technology include:

- Enhanced Transparency
- Increased Accountability
- Creating High-Tech Jobs

With these three benefits providing the framework, this briefing concludes with recommendations on how to implement standards-based reporting. XBRL can create transparency and accountability to reduce waste in our government, while creating tens of thousands of high paying jobs.

Enhanced Transparency
The availability of data through the Internet is an essential part of the DNA of transparency. It is obvious that the Internet enables both the automated collection and the automated communication of data. What is often forgotten is that the Internet facilitates the automated connection of data, which is where the most powerful, intelligent information usually begins.

For example, the S.E.C. already collects financial information in an automated way (via XBRL) and communicates that data in an automated way (via an RSS feed). But the real value of this S.E.C. data to information consumers is in connecting it with other relevant sources, *especially if it all uses the same standardized format*, to derive new and interesting information ("Interactive Data to Improve Financial Reporting").

Imagine what might have happened if regulation existed to enable the connection of specific aspects of British Petroleum's (BP) financial data on their Gulf of Mexico rigs with data about the potential impact of oil spills in the region, adding data about tax breaks given to oil and gas companies and other relevant sector data (Rogoff). Someone, out there in the 'cloud crowd', would have been able to compare BP's data 'position' to that of other drillers. And maybe as a result of the discovery, BP's license to drill would have been suspended or at least questioned, avoiding or mitigating a major man made environmental catastrophe.

Websites like *Recovery.gov* collect and then communicate data in the form of exception and comparison reports, charts and mobile apps. These kinds of sites were created as proposed beacons of transparency - yet they continue to operate as transparency silos. Without standardizing the format of the data available from the vast range of initiatives that

Recovery.gov tracks, it's cumbersome enough for the organization itself to make data connections -- let alone for the street information consumer.

While Recovery.com contains accurate information, the system can be improved by using XBRL instead of XML. Rivet developed a taxonomy-creator to test out the use of XBRL on Recovery.gov data sets. The experiment resulted in XBRL allowing the immediate view of information that would have required several manual steps using the current XML format. For example, Rivet would be able to see the spending disbursed by a particular federal agency in our state of Colorado which will be useful in making informed business decisions.

Reports and charts that leverage a data standard, like XBRL, add another level of reassurance to transparency. If you know that a piece of data tagged using XBRL is being used in report A and in report B, you can also ascertain that it means the same thing in both regardless of how it is actually presented in the report, chart or narrative ("Enhance Comparability"). And, you can quickly verify your assumption because the 'definition' of the data – the tag - travels with the data itself, wherever it is used. That's the real value-add of standards-based reporting from a transparency perspective.

We've seen some of this in the UK where data.gov.uk offers over 6000 datasets for information consumers to collect, connect and communicate data. An ecosystem of apps is developing around these datasets as individuals and companies take advantage of the transparency that the site offers (Shadbolt, "A year of data.gov.uk"). The media has also latched on to this data transparency. Quality daily newspapers such as *The Guardian* are regularly tapping the data to provide stories and charts that help communicate how democracy is working in the UK.

Over in Australia, the Standard Business Reporting (SBR) initiative is delivering on the promise of standards-based reporting to offer businesses a streamlined approach to meeting the various reporting requirements of different government agencies throughout Australia (Foo, "SBR Goes Live").

Over time, this effort to collect business data in a standardized way across multiple agencies will allow the Australian Government to communicate information based on trustworthy data. Australian information consumers and businesses alike will benefit from the analysis tools built to leverage a new information infrastructure based on standardized data.

Increased Accountability
The federal government is constraining innovation, wasting funds, and obscuring information—all in the name of data transparency. In this era of massive deficit, there is no time to deal with fuzzy numbers. We must begin tracking where our money goes and know when it's being wasted.

XBRL reduces the time and cost to produce and consume financial filings by corporations and can do the same for the federal government. If a universal taxonomy is available, the corporation can use a single software solution to produce its required filings, reducing the man hours needed for reporting. No longer does a financial reporting professional have to spend all of their time rekeying data and reformatting a document. They can spend more time analyzing the data they report, making insights and answering tough questions with numbers. On the consumption end, XBRL can reduce or even eliminate the data collection effort because filings submitted by corporations are already in "data" format.

In a recent Price Waterhouse Cooper Webinar, guest speaker Sara Noble discussed how financial analysts pulled data pre-XBRL. Once a filing was submitted to the SEC, an analyst would pull the numbers and update their software tools accordingly. This means analysts had to manually find and insert each data point for each company in every filing.

Now, the data is open via RSS feed from the SEC's website. As financials are filed, XBRL pulls all the data points and anyone can consume it for free. Grandma in Iowa gets information at the same time as Yahoo and Bloomberg. No longer must an army of analysts key in the same information across investment platforms; instead of data entry, analysts can focus on real data analysis.

The Bonus - Creating High Tech Jobs
The benefits of this new technology and open standard are lower costs, increased sharing, and enhanced communication. Federal registrants already spend too much time and money on compliance reporting. Early XBRL adopters understand that standardization makes compliance easier and reduces manual work. Data standards will increase productivity and drive efficiency.

Creating open source data as opposed to open source fragments of financial reports will allow developers to create tools to level the playing field for all. This new standard creates opportunity to service new markets in a new way, thus creating jobs. Further, this allows the governing bodies to crowd source the talents of the masses and emerging technologies to meet their regulatory needs.

The point is that with a data standard as a platform, who knows what great technology smart people can create? Barcodes drove a whole new industry to provide the hardware and software needed to make barcodes usable. GPS created a new industry to produce devices, not possible without the availability of GPS technology.

GPS was originally created for military use and now a myriad of applications and businesses have been created by leveraging this data. Savvy entrepreneurs found their way in into the technology of satellite and used it to create new and highly functional services to mass markets. Today, GPS is built into the dash of nearly every automobile and we are also able to use location-based services on our cell phones. How many jobs have been created? How much revenue has been generated? How many tax dollars have been sent to the government as a result of industry access to GPS?

XBRL barcodes as a financial data format have the same potential for new products as GPS co-ordinates describing locations. The truth is that XBRL will also drive new industry once it is established as a data standard. Smart people will innovate because of the need to create and consume information in XBRL, and thousands of new jobs will be created.

Once you set data reporting standards to track federal spending there is access to real information and we can begin to provide answers to important questions. Private companies can compete to provide data in standardized formats delivering increasingly high value to the public; a new, self-funded industry will be formed, high tech jobs will be created, and true transparency and accountability will be achieved.

Call to Action

The U.S. Government operates one of the world's largest, if not the largest, data warehouses in the world. It's a warehouse that grows dramatically every year but the inventory is stuffed full of raw materials (*data*) rather than finished goods and products (*information*). In reality, no business could operate this way.

By adopting XBRL as the new reporting standard, we will be able to consolidate reporting requirements among government agencies and have access to standardized and structured data. We can use facts, not spin, to make informed decisions that will create transparency while decreasing government waste, fraud and abuse. If we do it right, we will start a whole new industry, creating tens of thousands of high paying jobs while answering the need to reduce spending and waste in our government.

This is not a small project. The return is probably in the billions, but it will take all parties involved to make a strong commitment for successful implementation.

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