

Collaborative Planning & Social Business (<http://social-biz.org>)

[How FIBO will clean up Finance](#)

Posted on [October 18, 2013](#) by [kswenson](#)

[Dennis Wisnosky](#) is working to save the financial industry and the economy. He gave a keynote on the second day of the iBPMS Expo 2013 in Chicago and touched on the Financial Industry Business Ontology (FIBO) and what that will mean.

Common Terms

Nobody doubts the need for a common language for people to manage things. The common language for airline pilots is English — or at least based on English, with a smattering of specialized terms thrown in — and this is vital for the safety of all the people flying today. What about the financial service industry, particularly in light of the crash in 2007? There was a lack of common meanings of terms in the financial field: “They did not know the provenance, the truth, in their data.” Nobody could understand the situation, because the different organization used terms that were different and in some cases specialized terms unique to certain organizations.

What difference does that make? There are two problems. The first is that you can not manage what you can not measure. Assessing the risk of a collection of assets is impossible when the relationship between those assets are vague. Assessing the value is equally difficult. Basically, the banks had no way to really know what they had on hand, and they lacked a standard that would allow them to collect this understanding. If they did know internally what they had, they lacked a way to communicate that to other businesses.

The second and more pervasive problem is about regulations of the industry. Those regulations must be described somehow in terms that carry the same meaning by all the main players. The existing laws are flawed by ambiguous category definitions, particularly when different organizations use terms differently. Some organizations will purposefully manipulate the language to game the regulations, but many of the existing derivative instruments were simply so complicated that it was not clear at all where they should fit and how the laws applied.

Why Ontology?

Another way of looking at this problem is that you want to be able to *ask questions* about the assets that a company holds, and get correct answers. How many of the assets are taxable? and what is the tax liability? are relatively easy examples of such questions. More interesting questions are along the line of: “if this asset became worthless today, which of these other assets would have their value affected and what other things would be affected in turn by that.” To run the business, and to regulate it, you need to get accurate answers to these kinds of questions.

To battle this, Dennis is an advisor to the [Enterprise Data Management Council](#) (EDM Council) in order to develop the [Financial Industry Business Ontology](#) (FIBO). The council is formed from financial and semantic representation experts together with key participants from the main global financial institutions. FIBO was endorsed two weeks ago as a standard by the OMG.

FIBO provides a standard semantic representation of the financial instruments with precise meanings of the assets, and the relationships that exist with all other assets. Thus a derivative will have a clearly specified relationship to the assets it is derived from, and a credit default swap will be tied in different ways to its related assets.

How it Works

Dennis reminded us that the repeal of the Glass-Steagall Act by the Gramm-Leach-Bliley Act opened pandora’s box in the financial marketplace. Since then the proposed solution, the Dodd-Frank Act, is nowhere near adequate. Dodd-

Frank is very long and very complex. Each page of Dodd-Frank law translates to 10 pages of rules in practice. It has been three years, and we have not begun to get a handle on this problem. It is a mess.



However FIBO offers some hope. Given a standard ontology, the rules and regulations can be expressed in terms of these semantics as well. Financial institutions go through all their assets and assign semantic meaning by representing those assets in the ontology. The resulting data set can be queried with [SPARQL](#), and a clear meaningful answer results. This FIBO semantic map will return the same result for the bank and for the regulators. It will provide tremendous clarity both to the leadership of the bank, and also to the regulators.

XBRL

Another important standard in finance is eXtensible Business Reporting Language (XBRL). This standard is used by all publicly traded companies to report their financial statements to the SEC. XBRL relies upon taxonomies to provide the definitions of the values in the report. The SEC provides a standard base taxonomy for generally accepted accounting principles, and that taxonomy can be extended by industry groups and by individual companies.

What is the relationship between these two standards? The FIBO is a direct model of all the financial instruments that a bank or trading company might have. The financial reports will be partially dependent upon these, but also dependent upon non-financial aspects of the company: sales, costs, inventory, etc. While the FIBO attempts to be a complete model of all financial assets at the current time, an XBRL report represents a summary of the business activities over a specified time period, and includes standard aggregations of values calculated in specific ways. These two standards are different and complimentary.

Summary

FIBO seems like obviously important, possibly even critical, development. It will give an unprecedented level of clarity to the business of finance, and to the regulation of finance. Undoubtedly some parts of the finance industry benefit from the ambiguity, so don't be surprised when pundits from Wall Street start complaining about intrusive and overbearing government rules. This is the same kind of thinking that caused the mess in the first place. Honest bankers will recognize that transparency is the best road for the long term, both for managing their internal business, as well as the functioning of the marketplace overall.

Links:

Online report <http://social-biz.org/2013/10/18/how-fibo-will-clean-up-finance/>

Dennis Wisnosky http://en.wikipedia.org/wiki/Dennis_E._Wisnosky

EDM Council <http://edmcouncil.org/>

Financial Business Industry Ontology <http://edmcouncil.org/financialbusiness>

SPARQL <http://en.wikipedia.org/wiki/SPARQL>