

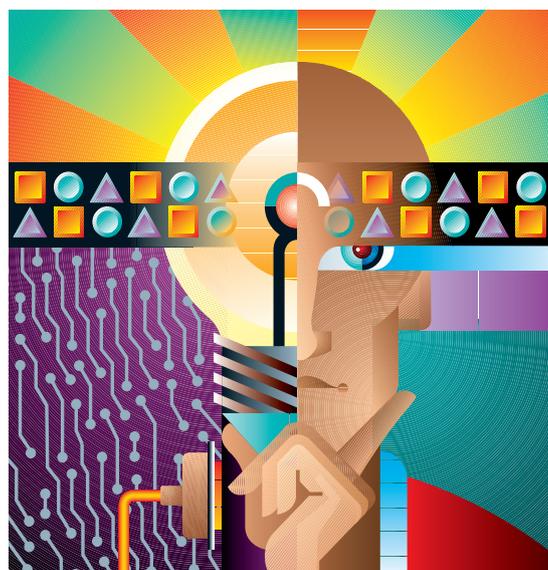
Exposing Enterprise Data: XBRL GL, Web Services, and Google, Part 2

BY GIANLUCA GARBELLOTO

▶ Last month in this column I discussed Web services-oriented architectures as the logical solution to critical new challenges in corporate data access and distribution. These challenges can't be met by a closed system such as an ERP application, and the XML format by itself is insufficient. XML can make data "available" across systems and entities, but it can't make data

"understandable" unless all the players share the same XML dictionary. The solution is XBRL GL, the Global Ledger, which is an international, standardized agreement on how to use XML and related technologies to represent business and financial data and documents consistently. As such, it is the ideal payload to build truly universal Web services. Now, in part 2, I will discuss Project Nunavut, the fulfillment of the benefits of exposing enterprise data using today's popular standards.

With XBRL GL, business and financial information is accessible and understandable within the enterprise and beyond, no matter



from what application (or applications) it was originally generated or currently resides in. But how can it be made available to users in a way that is just as powerful and effective?

The market has already provided widely adopted proprietary solutions, such as business intelligence applications, but they are not always the best answer. The new challenges resulting from more open and interactive business environments require innovative ways to make data available to its consumers and make existing solutions more effective and fit broader purposes.

What if a secure search engine could intuitively access all corporate data within the enterprise and beyond? Project Nunavut is a proof of concept on how to bring enterprise, operational, and accounting data to the appropriate user's fingertips—no matter how big or small that enterprise happens to be—with no need for training and a minimal learning curve. The first two elements of Project Nunavut, XBRL GL and Web services, were covered last month. Like those, the third component of Project Nunavut is yet another standard, though of a different kind: Google™, the market de facto search engine standard, and its product offering for enterprise search solutions, Google OneBox for Enterprise.

While most applications provide ways to search for information, and business intelligence solutions exist that are focused specifically on retrieving data from different applications in different formats, users commonly take it for granted that retrieving the information they need across the corporate information system is difficult and sometimes impossible. Various factors contribute to this common misperception:

- The existence of “stovepipes” and multiple information silos within a corporate information system mean that finding the application associated with the desired data is difficult, cross-application searches is much more difficult.

- Effective content management requires meta-tagging, foldering, publishing, and other complex and costly technologies and procedures, which often results in compromises and lower-profile solutions.

- In general, different applications aren’t really expected to be integrated effectively.

Search utilities within applications and corporate search solutions are designed by and for experts of the specific systems, focus on technology rather than on users, and aren’t perceived as delivering accessible results. Users tend to see these applications as the last resource for the information they need. Instead, they may first call a number of coworkers who “own” pieces of the information. This is also one of the causes of “spreadsheet hell,” where people who regularly have to search for the same information and/or report on it create their own informal and unsearchable systems to keep track of it.

Those same users, however, can find consistent information quickly and easily on the Internet when they turn to their favorite search engine,

such as Google. Google has raised the bar of expectations in this respect. And now it’s leveraging its reputation as a provider of reliable results in an extremely accessible way by entering the corporate data search market with Google OneBox for Enterprise, an appliance that can search unlimited data sources and applications inside and outside the corporate environment. Google OneBox for Enterprise is triggered by the same familiar, intuitive one-field search interface and delivers results with the same look, feel, and features of the Google search results page.

When you type the words “weather Washington DC” or “flight DL74” in Google, you get an initial level of highly relevant results formatted in a way that is particularly efficient for your specific search—synthetic information and images that represent the weather in the next four days or links to different providers of information about the status of that particular flight—and then the list of all the other relevant results. That first level of highly relevant information is the result of a standard OneBox module and is triggered by keywords—in this case, “weather” or “flight.” In the same way, there are Google OneBox modules that deliver results from a number of enterprise applications (Business Objects™, Cognos®, and Oracle® are only some of the active Google partners that have already developed OneBox modules) and that respond to triggers like “sales in northeast” and “customer john smith.” Custom modules can be developed to access the data from just about any application. (For an exhaustive description of the features and capabilities of Google OneBox for Enterprise, see www.google.com/enterprise/index.html.) Key benefits

of the OneBox approach include:

- A single, familiar search page, with only one text box to search all corporate data wherever it resides, as opposed to complex search interfaces or a busy enterprise portal.

- There is no need to master a corporate search with completely different interfaces and rules for each different application.

- Learning is based on a discovery process more than formal instructions/training, just as for a normal Internet search.

- The greatest problem with business intelligence is that few know it’s there and how to use it. In this approach, business intelligence becomes available where you need it, when you need it, and at every level of the structure and outside it.

- IT investments are preserved, making them more usable and accessible and minimizing the need to train and retrain employees on how to use complex host applications.

- Useful, familiar Google features such as spell check (self-learning with company-specific misspellings), Query Expression with synonyms, and automated and/or customized suggestions (Did you mean...?) are included.

- Integration with Google Desktop can unify on one page results from provider applications as well as documents residing in the machine from which the search is run, in other parts of the intranet, and on the Internet.

The obvious bottom line is more comprehensive and accurate results, lower training costs, and more efficiency.

This surely looks like a very effective approach, but where does XBRL GL come in? If there are Google OneBox modules to access many broadly used applications—and

those that don't exist already can be built—then what is Project Nunavut all about?

Again, Project Nunavut is a working proof of concept in which Web services are used to remotely access and update inventory data in Intuit QuickBooks® and to standardize that data in XBRL GL instance documents, just as it would happen if you wanted to make your data available inside and outside your corporate environment and the application in which the data resides. An XBRL GL-enabled Google OneBox module can search and manipulate the XBRL GL files and show the results in the standard Google search results window with the same relevancy and effectiveness that a Google search has when it delivers weather forecasts. QuickBooks was chosen because it is the accounting software used by the vast majority of small/medium businesses in the U.S.—the same concept can be applied to any other application or multiple applications simultaneously. Work is in process to extend the proof of concept—adding support for another widely adopted application—and demonstrate how data from the two sources can be merged and searched together using XBRL GL. Updated information on Project Nunavut and an online demo are available at <http://iphix.net/resources/nunavut.htm>.

The vision behind Project Nunavut is simple, yet powerful. In the same manner in which XBRL GL is the standard that allows truly universal Web services, it also makes it possible to have only one universal Google OneBox module that, instead of accessing a specific application, can search and render XBRL GL standardized data no matter where it comes from. You don't need to build multiple OneBox modules to access

Oracle Financials, QuickBooks, and your payroll module developed in-house. A Web services-oriented architecture can make data from each of the applications in use in your corporate environment available in XBRL GL format, and the XBRL GL-enabled OneBox module will be able to access them all. Google OneBox optimizes the user experience; Google OneBox with XBRL GL optimizes the user experience *and* the overall efficiency and cost effectiveness of the system.

Of course, you don't undertake the effort of representing all your data in XBRL GL just to feed your Google search, even though there are many advantages to that. The key is interoperability and reusability of data. Feeding a Google search is only one of the possible uses of the standardized data. It was chosen for its significance in demonstrating how far the use of standards, whether de jure or de facto, allows us to go. With or without Web services and Google, XBRL GL data can serve many purposes and be used and reused in many different processes,

which makes using it as the standard representation of business and accounting data well worth the effort.

These ideas aren't intended to replace existing IT investments necessarily, but applying all or part of these concepts can generate substantial savings in the overall efficiency of the organization and its information system and help optimize new investments. Project Nunavut is a vision of a comprehensive and effective way to put standards to work. And it can be done today. ■

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