Wholesale Change in Wholesale Electronic Standards

BY GIANLUCA GARBELLOTTO

XBRL GL can bring wholesale change in the distribution of business reporting information for wholesale and distribution businesses. In this second chapter of the "XBRL Global Ledger by Industry" series, I will discuss the value of the Global Ledger for the wholesale

distribution sector. There are many specific features of XBRL GL that are particularly fit for the requirements of this business activity.

The financial services industry, which I analyzed in the April column, offered the chance to highlight data interoperability, one aspect of the XBRL GL value proposition that's particularly meaningful in a context where many structurally different business lines and markets coexist under the same roof. This month's choice is particularly suitable to put another important feature of GL on the spot: the value of XBRL GL in terms of a multi-tier, very flexible yet standardized framework that can help meet the challenges originated by the need to represent multidimensional, many-to-many relationships among warehouses, locations, clients, vendors, inventory items, and so forth in a

nonproprietary, application-independent format.

The goal in analyzing the common requirements of the industry—and the XBRL GL features and tools that can help meet those requirements—is to provide a guide to possible areas of implementation of XBRL GL within the industry while using a focused and practical approach that can easily be extended to similar contexts in other industries.

Tracking Warehousing and Addresses

Wholesale and distribution businesses are different from financial services in that they concentrate on pricing and delivering goods, sourcing, storing, and keeping customers happy. Warehouse management is an important part of a meaningful solution. Unlike other standards in the accounting space, XBRL GL tracks a

company's warehouses as well as customer and vendor locations, and it offers a very sophisticated structure for creating and maintaining cross-references among multiple warehouses, locations, and addresses in general.

For those keeping score at home, it's possible to define different locations either in a master file or as an attachment to a batch of entries. By linking to the [organization AddressLocationIdentifier] element from different structures of the GL framework, each location can be tied to a contact or to an entry. For example, the [shipFrom] element can directly link each line of an entry/document—or the document as a whole—to a particular location.

By extension, this mechanism allows physical locations to be associated with virtually everything that can be represented with different structures or sets of elements within XBRL GL. For example, it's possible to define a list of inventory items that are located in a specific warehouse. A similar mechanism, again based on the [organizationAddress LocationIdentifier] element, allows data integrators to track and cross-reference multiple customers' and

vendors' locations.

Expediting Dates

XBRL GL tracks many different dates. For each line of a document represented with XBRL GL, a separate date can be indicated for confirmation of goods shipment, acknowledgment of goods shipped/received, and actual shipment and receipt.

Each of those dates is associated with some manner of documentation. XBRL GL can represent the entire flow of documents of the purchase/sale process from order to bill of lading to shipment, and each line in each document can be linked to one or many originating documents through the [originatingDocumentStructure] element. Leveraging these links and dates, it's possible to represent the whole purchase/sale cycle and to capture and track the complex network of relationships generated along the way.

This is another great example of how the multi-tier, flexible structure of XBRL GL exponentially broadens its representational capabilities in a context where complex relationships need to be represented.

Inventory

Of course, companies also need to be able to track the goods. The [measurable] structure is a very powerful tool to represent inventory items—including supplies, fixed assets, intangibles, and performance metrics—either in an inventory master file or as part of an order, invoice, or other types of documents.

Each item can be associated with three different identifiers, which typically may be used for an internal and/or external ID (barcode or standard identifier). It also provides quantity, unit of measure, cost per unit, a qualifier for classifications,

grading, status, etc., and an "active" flag.

XBRL GL allows for multiple [measurable] structures for each row of the document/entry represented.

Lists of Authorized Products or Categories

It's important to know what to buy from different vendors and sell to different customers. XBRL GL can represent lists of approved (or prohibited) relationships between entities, items, documents, and so forth. Multiple [measurable] structures, representing inventory items tied together with one or more vendors or clients or with one or more locations, can be used to represent the concept that those inventory items can or can't be purchased/sold to those counterparts or stored in those facilities.

This application of the representational capabilities of XBRL GL should be of interest to many organizations, and it can be used for many important purposes beyond its application in the distribution context. Consider the possibilities offered by a standard representation of a user's privileges across information systems, for example, and the possibilities in terms of standardized analysis of segregation of duties.

Cross-System Analysis

It isn't unusual to see one entity use different software packages to manage different groups of customers/vendors or different products. The reasons can be many: logistics, geography, history, or depending on specific features of the inventory items.

XBRL GL provides a consistent, standardized, and application-independent representation of these records, wherever they were generat-

ed from or reside in, with all the features that have been described here. This standardized representation either can be imported into yet another application to be analyzed, or it can live independent of the source systems as a "virtual repository," available when needed and analyzed through standardized processes and/or Web services.

Unique Consignment Reference

The XBRL GL Working Group worked with various customs authorities around the world to include in the GL taxonomy an element specifically devoted to store the "unique consignment reference" (UCR), an "origin to destination" reference code for international consignments. UCR was developed in cooperation with the World Customs Organization and EAN International, and it includes all the relevant information about a trade transaction, the movements of the goods, and the parties involved—from initial order to final consignment.

Handling Complex Relationships

The complexity of the relationships among the various elements of the wholesale distribution industry's business processes makes it very suitable to showcase the representational powers of the GL framework and to examine some of its lesser known elements and structures. The next column in this series will look at the construction industry and job costing in particular. ■

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