

FULL IT STANDARDIZATION IS WORTH FIGHTING FOR

Future business success depends on it, a lead expert says

Retail Systems Alert recently had the opportunity to interview Ram Viswanathan, president of Nathan Research, Inc., a niche consulting and solutions firm that specializes in advanced product planning, distribution, forecasting and risk analysis for retail and manufacturing companies.

Retail Systems Alert: How effectively are retailers currently using standards for exchanging data with supply chain partners?

Ram Viswanathan: I would start with asking the question of what the rationale for standards is. What is it that made TCP/IP, a transport protocol, or EDI X12, a data-exchange standard, universally accepted as they are today? "Effectiveness of standards" implies several things—context, completeness and relevance. Retailers have to see business value in the usage of a standard. Typically this comes in the form of operational efficiency (reduced costs). Risk avoidance (of losing business) could be another motivator.

Either way, when mass adoption sets in, we have what we may call effective use of a standard. Adoption, in turn, can come through community effort or through market forces determining a de facto establishment of a standard.

Given this background, we can measure effectiveness of data-exchange standards in the retail supply chain in a couple of different ways. One can argue that the means of communication, such as the Internet, extranet, e-mail and VANs, are fairly standardized. We can also safely conclude that the content and layouts of the more common business transactions, such as purchase orders and invoices, are fairly well-standardized. However, when it comes to integrating these transactions with end-to-end business processes, with planning, new product introductions and promotions, we are still in the early stages. Processes and standards are not quite formalized yet.

In summary, depending on what we are measuring, retailers are using standards effectively to the extent these standards have reached a level of maturity.

RSA: How effectively are retailers currently using standards for systems interoperability?

Viswanathan: How wonderful it would be if all systems were

interoperable and we didn't have to deal with the whole issue of systems integration. An entire industry thrives on the differences between my systems and yours. Once again, any standards for interoperability still only deal with data element-level alignment and not so much on business-process integration. It is a fairly difficult undertaking to get agreement on the context and use-case behind transactional data exchange across two different enterprises, let alone an entire industry.

Let me illustrate with an example. One of the best applications that demonstrates the power of interoperability is e-mail. There was a time when an e-mail from one system could not be reliably delivered to another system, until the SMTP family of standards became established. Today, I don't even know or care about what e-mail client you use.

Now imagine something similar in a business transaction.

Can I send a new supplier a purchase order, the most basic of business transactions, through my system and be guaranteed that it is going to be received, processed and fulfilled in the manner I expect, without human intervention? The answer is no. Currently, it is practically impossible to codify all the context behind the transaction within the transaction itself.

So, to the extent interoperability implies data alignment: Yes, retailers are fairly effective in usage of data standards. But beyond that, we have some ways to go before systems interoperability is achieved. It can come about in one of two ways—through a mandated effort by an industry organization or through an organic, market-driven phenomenon by retailers and major solutions vendors, which is more likely.

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RSA: What are the major impediments to the widespread adoption of industry standards?

Viswanathan: I would say the overemphasis on technological aspects without enough articulation of business values. Though this might sound like a recurring theme, I would add that the need for further formalization of business processes is another impediment. Whether we consider the pace of adoption as slow or fast, it is somewhat subjective and doesn't matter so much.

Compare the adoption rates of the ATM and the Internet. One took forever and the other was fairly quick. If these standards are going to gather steam, companies simply have to find value in



Ram Viswanathan,
president, Nathan
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adopting them, and value will have to ultimately show up in the financials—both in the top lines and bottom lines of companies.

Another factor that plays into the adoption rate is the variety of sectors within retail. Grocery chains do not operate like apparel retailers. The processes, metrics and measurements for electronics retailers are different from those of drug stores. Developing common processes within each of these sectors, let alone across these sectors, is not easy.

RSA: Within the next several years, do you think the industry will be more, less or equally receptive to standards as it is today?

Viswanathan: I think it is going to continue pretty much at the same rate. There will, of course, be leaders at the forefront that take up major initiatives that move an entire industry, and there will be those who are quite happy to wait, see and follow—unless a disruptive game-changing event happens to speed the evolution and adoption of standards. Such an event could be a company introducing an all-powerful database-in-the-sky concept when dealing with areas such as item synchronization or radio-frequency-related applications. There are companies that have the capital, power and influence to do such a thing.

What I find interesting about the whole subject of standards is the balance between standardization and differentiation. Fundamentally, when you think about it, a CPG company needs to differentiate itself by the product it makes and how well it makes it, not by how well it describes it. Similarly, a retailer differentiates itself on how well it merchandises its products, not by how well it communicates with its suppliers. In today's world, operational efficiency is not a differentiator or a choice. It is simply a must.

Wal-Mart and other leading retailers have made it clear to the rest of the retail/CPG industry that they have to get their act together and define and implement processes for supply chain, sales and operational efficiency if they want to continue to play the game.

At the same time, however, product planning, price planning, network optimization, forecasting and replenishment are not concepts that can be defined and implemented in a cookie-cutter manner and are far from being standardized, despite all the



advances in these areas. The variations by sector, company and geography are such that they require quite a bit of specialized handling and analysis, and are quite often outside the reach of mid-market companies.

At our firm, we are constantly amazed by the variations in standard models required to solve specific product-flow problems and the opportunities that exist for adapting supply chain models, statistics and mathematical analysis to address unique situations. There is a new paradigm emerging in the adaptation of concepts and for solutions to be developed, deployed and serviced without the usual pain. We are excited to be able to assist companies in their growth and provide them operational efficiencies through a combination of models, tools and specialists. Businesses evolve, and solutions have to, as well.

When all these things get so standardized and are available in shrink-wrap at a Wal-Mart, then we will move on to other problems to solve for customers. **RTQ**

As supply chain partners deepen collaborative efforts, interoperability becomes a priority.