Supply Chain Visibility is a Key Part of Delivering Proof of Product Integrity

Attend any major conference on the cold chain logistics industry, and you'll see similar emerging topics for debate, for example around supply chain visibility, temperature monitoring and delivering proof of product integrity.

This was very apparent as we attended this year's annual Cool Chain & Controlled Room Temperature Logistics Europe conference at the LuxExpo in Luxembourg. Discussion topics included "Analysis of global logistics processes to reduce temperature excursions", "Using temperature data improves supply chain performance", "Effectively setting up and rolling out a standardised global temperature monitoring and data collection system" and "Supply chain visibility and continuous process improvement.

The importance of supply chain visibility has particularly grown, and in the broader debate in confidence in ERP systems to provide appropriate supply chain visibility, it is probably not being addressed that well – according to this article in Forbes magazine, "Building The Extended Supply Chain: If Only It was Like Legos". This suggests that most companies are pouring money into ERP architectures believing that it can be as easy as connecting one ERP to their own ERP, but it is not as easy as that; today, only one out of four companies are confident that the ERP logic is equal to the task of delivering supply chain visibility to third-party logistics providers, contract manufacturers and first and second tier suppliers.

The debate is also around big data – and why it is important in the movement of temperature-sensitive products both in terms of visibility as well as the ability to take remedial action. For example, the data can tell you instantly if something is wrong in the supply chain, if a temperature excursion has occurred. With relevant experience of knowing what to do with that data and how to interpret it, the supply chain manager is better informed. In addition to making available instantaneous real-time data, the data recording and analytics also enables the generation of relevant data for GDP and HACCP compliance reporting.

The other big trend for 2014 is the internet of things, or the connections of all kinds of devices and objects using radio connections. This is enabling machine to machine, or M2M, communications and allowing suppliers to the pharmaceutical and food industries to provide more data and monitoring and supply chain visibility, often in real time. Hence the announcement at the conference of the collaboration between KPN, the leading telecommunications and ICT service provider in the Netherlands, and Dyzle, which measures and analyzes business process data for the cold chain in real-time.

The two companies provide an integrated platform for monitoring, tracking, and providing real-time data analytics and visualization for the food and pharmaceutical industries. They combine the M2M and RFID asset tracking solutions of one with the monitoring and analytics platform of the other to track the location of a product in a logistic chain and collect the environmental conditions data during its shipment.

The combination of these various trends indicates a growing need for one-stop shop application enablement platforms, which ease data extraction and normalization activities so that M2M applications and enterprise systems can easily consume machine data. In other words, not many

firms want reams and reams of data, but they want a way in which this ‘big data’ can be interpreted to provide the key information relevant to their business processes. This could be in the form of flags, alerts or indicators that give them appropriate warnings or assurances within the supply chain. The tools and technology to enable this supply chain visibility in a turnkey way are now increasingly available, which then makes it possible to deliver customers and end-users proof that their products are safe.