

# Global Standards Propel Retail

BY RICHARD MADER

Technology has dramatically changed how retailers conduct their business. Today, via the Internet, you can buy and sell anything, anywhere. Of course, retailers must still apply the same golden rules that were required for retail success long before there was a personal computer:

The customer is always right.

Stock the right merchandise at the right time and the right price.

It's just that, properly applied, technology enables retailers to better live according to these golden rules.

In the 1970s, retailers used computers primarily to process accounting records and produce reports. Early uses were accounts payable, receivables, stock ledgers and sales reporting at the summary level. POS terminals were mostly off-line devices until the late '70s and early '80s.

Then the Uniform Code Council (now GS1-US) introduced unique product identification numbers in bar-code formats and launched the retail technology revolution. Bar codes were a standard, and all manufacturers agreed to the same code structure so that all POS scanners at all stores could read the codes and identify the products.

The speed and accuracy of scanning bar-coded tickets allowed retailers to monitor and maintain product-level inventories, thus ensuring the right merchandise was on hand for the customer through automatic replenishment. Other applications soon followed: improved returns processing; price management; and detailed sale analysis via a new function — data warehousing.

## Origins of EDI

It is fair to add that the availability of ever-faster computers at ever-lower prices enabled the widespread adoption of bar-coded product identification. Similar advances in communication networks led to electronic data interchange (EDI), the automated processing of purchase orders, receipts and invoices.

EDI is another standard; retailers agreed to send common data that manufacturers, in turn, agreed to receive and process. By automating the process, the retailer's cost of processing merchandise was dramatically reduced, fur-



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ther enabling retailers to provide the right merchandise at lower prices.

The Internet also is a standards-based network: everyone follows the same rules under the guidelines of the W3C standards organization. Successful retailers have expanded beyond their four walls to embrace multiple sales channels; e-commerce continues to increase at a rate of 20 percent annually, with some analysts predicting that it will account for 25 percent of all retail sales by 2010.

The dramatic increase in the impact of technology on retail due to these and other B2B global technology standards has had the unintended consequence of increasing IT costs. These costs are due less to new equipment than they are to the need to integrate an explosion of new applications that must share data.

## Future developments

On the horizon are new standards and standards-based technologies for A2A, or application-to-application integration,

such as XML, SOA and ARTS standards, that you will need to understand in order to continue to leverage technology to increase revenues and reduce costs.

XML, SOA and ARTS are standards that will play a role in your successful future much as EAN, EDI and the Internet do currently. They will enable you to employ common point-of-service policies and processes across all sales channels, consolidate customer information into a single view and extend your investment in existing applications — all the while allowing rapid deployment of new business functions.

Learn more about ARTS XML standards to support POS, e-commerce, CRM, gift cards, inventory management, WFM and other critical business functions by visiting [www.nrf-arts.org](http://www.nrf-arts.org) or contacting me at [maderr@nrf.com](mailto:maderr@nrf.com).