InformationWeek
CONNECTING THE BUSINESS TECHNOLOGY COMMUNITY

NEWS

3/4/2003
02:07 PM

Rick Whiting
Features

Business-Intelligence Buy-In

Forward-looking Retailers are putting data to work to increase sales and better serve customers

Hudson's Bay Co. turns 333 this month, making it one of the oldest companies in North America. But the department-and discount-store operator isn't rooted in old thinking when it comes to business intelligence.

Hudson's Bay is in the midst of a multiyear effort to upgrade its information systems. That includes giving executives, store managers, and key suppliers a way to analyze reams of sales and customer data. "We have lots and lots of data. The challenge is how to transform that into useful information," CIO Gary Davenport says.

Access to business-intelligence data at the store level should result in better customer service, Hudson's Bay CIO Davenport says.

With a few notable exceptions (such as Wal-Mart Stores Inc. with its massive data warehouse), brick-and-mortar retailers lag other industries when it comes to IT spending in general and business intelligence in particular.

"Retail tends to spend less on IT in comparison to other industries, especially in the last couple of years," Jupiter Research analyst David Schatsky says. IT spending among retailers has historically equaled only about 2% of revenue, compared with an average of 8% across other industries, according to a 2001 report from PricewaterhouseCoopers. Last year, IT spending by U.S. retailers declined by 3.4%, according to research firm IDC. And what spending takes place is focused on operational projects, such as point-of-sale and supply-chain management systems.

"Retail is always playing catch-up," says Steve Jackson, IS director at Harry Rosen Inc., a chain of 17 men's clothing stores. In addition to limited IT spending, retailers either don't fully understand the value of the data they have or they're simply overwhelmed by the volume of data they have and don't know how to use it, Jackson says.

Executives and buyers at Harry Rosen use data-analysis tools from Cognos Inc. built into a GERS Inc. merchandising system. The system offers more than a dozen sales and inventory reports for analyzing sales and helps the company identify sales trends, manage inventory, and calculate gross profit margins.

Other retailers are catching on as they look for any competitive edge they can get. "We're in a very aggressive industry with razor-thin margins," Davenport says. The goal is to provide the right products in the right location at the right time and the right price. "Having the answers to those basic questions determines who succeeds and who doesn't," Schatsky says.

Mervyn's department stores, a division of Target Brands Inc., uses Essbase analytical software from Hyperion Solutions Corp., along with a broad range of financial, sales, and inventory metrics. The system gives sales managers, financial analysts, and other employees insight into the performance of the chain's 265 stores. Essbase tracks which products are selling and which aren't and calculates gross profit margins using data pulled from the company's general ledger system. "Basically, [it's used] to run the business," finance manager Alan Stowe says.

Saks Inc. is using a number of business-intelligence apps, including Information Builders Inc.'s WebFocus tool, which gives store buyers reports about sales trends and the performance of specific products. That's critical in today's competitive environment, says Bill White, application development senior VP, because the types of merchandise the retailer buys--and the prices it pays suppliers--can have a big impact on Saks' bottom line. Saks also uses Essbase to analyze financial data such as actual versus planned revenue, gross profit margins, and expenses.

Business intelligence is also becoming a priority among large retail chains such as Home Depot Inc. and Best Buy Co., AMR Research analyst Greg Girard says. That's because until recently such chains grew by taking out independent competitors with low prices and big product selections. "Now they are left fighting one another," Girard says, and they need to find new ways to compete.

Last fall, Home Depot began assembling a 10-terabyte data warehouse for analyzing everything from sales to salaries. Last month, Best Buy said it's expanding the number of employees with access to MicroStrategy Inc.'s business-intelligence software beyond the current 16,000. The system, on average, already gets an astounding 100,000 queries per day for merchandise and price management, store and supplier performance, and marketing effectiveness.

TruServ Corp., the parent company of True Value Hardware and Taylor Rental, reduced its "red zone" inventory--products that haven't sold in 180 days--by $50 million over the last two years by analyzing product stockpiles using its data warehouse and Business Objects SA's reporting software. For about a year, the system has also been used to identify products sitting in one of TruServ's 14 distribution centers that might sell better in another part of the country where consumers are responding to a promotional campaign.

Several years ago, Hudson's Bay installed two data warehouses, one for its department-store operations and the other for its discount-store division, used for tracking product inventory and sales. Those systems are based on software from NCR Corp.'s Teradata division. The company is now building a database that consolidates information from those systems. "That way, we can see [the data] from a total HBC perspective," Davenport says.

Starting late this year, Hudson's Bay executives, merchandisers, and even managers in individual stores will have access to that data using MicroStrategy applications. Initially, the system will give those users information about store sales, merchandise-category management, financial metrics, and supplier performance. Ultimately, some 5,000 Hudson's Bay employees and key outside suppliers will have access to the system. The expected result: better product assortments and improved profit margins.

At the store level, the benefits should include more-productive use of labor and better customer service. That will put Hudson's Bay ahead of the pack because many of its competitors aren't using business-intelligence tools for store-level analysis.

One of the key ways Save Mart Supermarkets uses Hyperion's Essbase is for product-category management, analyzing product sales to determine how much of specific products to buy from suppliers for its 117 stores, and how much shelf space to devote to growing product categories. The supermarket has used the system to track the rapidly proliferating number of brands of bottled water and consumer demand for those products, improving its shelf-space planning. "This has changed the way we look at our business," says Sandy Strube, financial-analysis manager.

Save Mart provides store managers with printed reports from its Essbase system. But plans call for giving store managers direct access to the application within a year, either with a Web interface or the same Excel front-end application now used by execs.

Mark's Work Wearhouse Ltd., a men's work-and casual-apparel store chain, is rolling out to its 310 stores a Web-based reporting system developed using Crystal Decisions Inc.'s Crystal Enterprise software. It gives store managers and employees about 20 reports with metrics such as sales per employee, sales by product category, and cash-versus-credit sales--both within a store and summary reports of all stores. The reports use data from the retailer's Retek Inc. point-of-sale system and IBM DB2 database. The company chose Crystal Enterprise mainly because it's easy to use, both for developers and store employees, CIO Robin Lynas says.

Ace Hardware Corp. is undertaking several initiatives to give its 5,000 stores business-intelligence capabilities--not surprising, perhaps, given that Ace is a cooperative owned by its store operators. The company's Teradata data warehouse, which contains sales data collected from 1,800 Ace stores, can be accessed by store owners and managers as well as company executives using applications built on the MicroStrategy business-intelligence platform. Owners of the 1,800 stores can view detailed data about their own operations, while all 5,000 stores have access to aggregated data on such topics as product-category management and promotion effectiveness.

One particularly effective analytical application helps store owners set the right price for products, says Brian Smetana, senior business analyst. While Ace recommends prices, store owners are free to set their own. Owners and managers have access to a retail price-variance application that calculates how much profit they're losing if they charge less than Ace's recommended price and how much sales volume they're losing if they charge more. "That has paid for the data warehouse many times over," Smetana says.

Retailers are generally relying on data warehouses of accumulated information for analysis--spotting trends requires historical data. Few are analyzing data in real time. But Ace is developing a business-intelligence system called Eagle Vision, using Micro-

Strategy7i and a DB2 database, that will draw operational data from a new centralized point-of-sale system that's being installed throughout Ace stores during the next several years. That will let store operators see the price and inventory status of any product in their store in real time.

One area in which retailers lag is tying their business-intelligence systems to customer-relationship management applications and conducting analysis at the customer level. Retailers often don't know who their customers are, especially the cash-paying ones (see story, p. 58). Hudson's Bay is an exception: Thanks to its own credit cards and rewards program, the company can trace 65% of all transactions to specific customers. The company plans to look at how that information can be used in conjunction with a CRM or marketing-campaign management system.

"We're continually looking for new competitive advantages and better ways to eke out profits from each sale," Davenport says. Hudson's Bay and other forward-looking retailers are sold on using business-intelligence IT to do that.