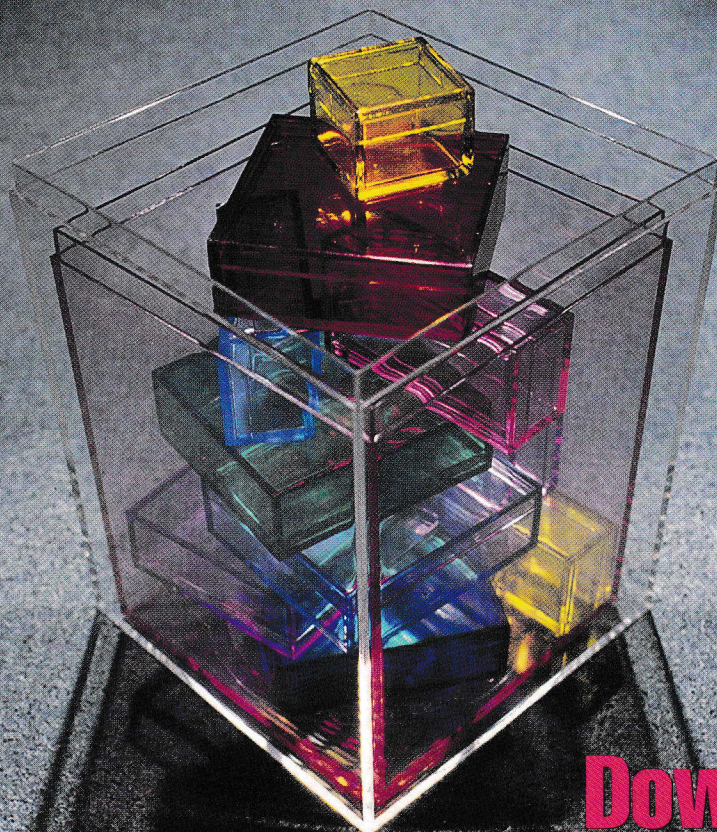


FORMERLY TECH EXEC

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Value-Added Distribution

Distribution: moving things from here to there; the business of delivering goods to customers.

The definition may be simple, but the job isn't. Succeeding as a distributor today is tough. Getting supplies as needed can be difficult; inventory must be managed carefully to keep costs down; and retailers demand ever faster, more accurate service. What's more, many distributors find that efficiently managing and delivering goods is not enough. To stand apart from the competition, they must offer value-added service.

Cardinal Distribution, Inc., and Standard Forms, Inc., distributors in very different industries, are no exception. Cardinal Distribution, a wholesale drug distributor, delivers pharmaceuticals, health and beauty aids, and medical supplies to independent drugstores, drugstore chains, and hospitals. Cardinal is first or second in market share in each of its six regions in the northeastern United States, where it competes against giants like

McKesson and Bergen Brunswig.

Standard Forms, third largest distributor of printed forms in the country, is a much smaller company — \$32 million annual sales compared to Cardinal's \$1.2 billion. Standard Forms manufactures and distributes business forms and printing services ranging from letterhead and invoices to labels and tags. Most of its product is made to order. Standard Forms faces tremendous competition to maintain growth in a declining market.

In both companies, strong IS is an important part of corporate strategy — but how each company handles its information systems differs markedly. To develop and maintain information systems, Cardinal has its own staff of seasoned MIS professionals led by a group vice president of MIS, while Standard Forms has relied on consultants. Despite the differences, each company relies on information systems to not only deliver the basics but also develop customer support services to attract and keep a loyal customer base.

Cardinal Distribution: A Business Partner to its Customers

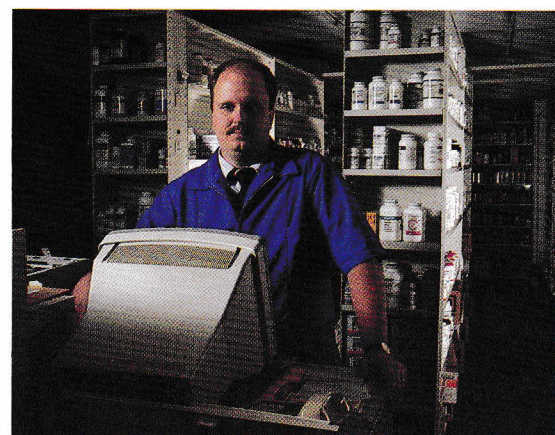
Since Cardinal first got into drug wholesaling in the early 1980s, the company has purchased five neighboring distributors, expanding from Ohio into New York, Massachusetts, Connecticut, and West Virginia. In the last five years, sales have grown from \$100 million to \$1.2 billion, making Cardinal the fifth largest drug wholesaler in the United States.

Strong IS has been an important component of Cardinal Health's growth — first, by providing solid distribution support systems and second, by providing strategic systems. Bill Bottlinger has led the MIS effort since 1985, when CEO Bob Walters brought him in as group vice president of MIS.

Distribution Support: "A Federated Approach"

When Bottlinger was hired, Cardinal had four divisions, in Ohio and New York. "Each division had its own MIS direction," says Bottlinger. "My charter was to centralize and standardize. We located central MIS in Buffalo, upgraded to an IBM 4361 and a S/36, and replaced all business software."

Meanwhile, Cardinal continued to grow through acquisition, and IBM announced the AS/400, which, says Bottlinger, "allowed us to consider a distributed environment as a cost-effective alternative to centralized MIS. The system we are building today is based on decentralized hardware (AS/400s) and centralized systems and programming development." Division managers within Cardinal have a large degree of autonomy. Bottlinger feels that the corporate MIS strategy, which he



calls a "federated approach," recognizes that autonomy, but retains the benefits of networked systems and a common software platform.

Cardinal's seven divisions are already fully networked using Systems Network Architecture (SNA) and display station passthrough. The hub of the network is a 4381 in

Buffalo with a 3270 communications controller. Hooked into the 4381 via leased lines are the divisions' S/38s and AS/400s.

Centralized software development lets divisions share both distribution and customer support software. The corporate software support group in Buffalo builds its distribution support software platform around products from E3 Associates, Turning Point Software, and Software 2000. Each division receives a version of the common distribution software tailored to its special marketing needs. Divisions have their own MIS staff for local support. Centralized development

also lets divisions share an increasing number of strategic customer-support products.

Making the Customer a Business Partner

Customer support in drug wholesaling goes beyond efficient product distribution. "All customers, but especially independent retailers, are very dependent on the wholesaler for computer technology and information," reports Bottlinger. "So rather than have customers, we have business partners."

The special products MIS provides include a pharmacy management computer system, support for

pharmacy point of sale (POS) systems, and a hospital ordering and inventory management system. Cardinal also supports hospital group buying with manufacturer charge-backs.

A pharmacy computer system helps independent drug stores manage the 70 percent of their sales made from dispensing pharmaceuticals. A number of vendors market pharmacy computer systems, but Bottlinger feels that Cardinal's new system, announced last May, "is the best solution in the industry." Cardinal offers a total solution of hardware and software, local support

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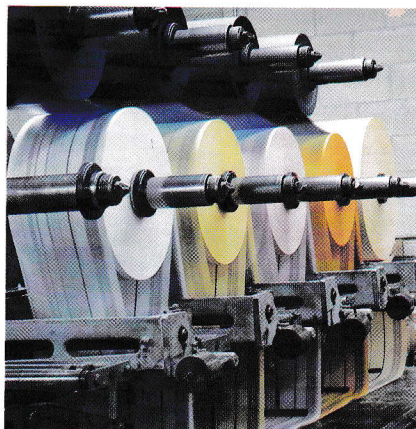
Standard Forms: Managing for the Customer

As far as Tom D'Agostino, chairman of the board of Standard Forms, is concerned, "efficiency is the key to survival in the tough, printed-forms market." Despite the softening market and heavy competition, Standard Forms has increased its efficiency enough to survive — and thrive.

Over the last three years, D'Agostino has managed to expand his territory through acquisition and to increase annual sales from \$6 to \$32 million. "If we hadn't improved our use of MIS," he says, "we would never have been able to do what we did." Four years ago, Standard Forms began installing information systems that support sales and distribution and offer extras — reports, forms management, and customer order systems — that increase volume with current customers and attract new customers.

MIS from Scratch — with Consultants

In 1986, Tom D'Agostino realized that he needed to automate his New York-based forms distribution company, Forms and Peripherals, Inc. At the time, the company used computers only for billing — and that computing was done by a service bureau. D'Agostino contracted with SMC Data Systems to design and install software. Consultant Dani Kaplan recommended starting with



a small S/36 and MAPICS II for financials. Kaplan then designed and added, in phases, custom software for customer service, purchase orders, inventory, and billing.

By 1988, the new system had increased efficiency and control to the extent that D'Agostino felt ready to expand his business. He acquired Standard Forms, Inc., of Norfolk, Virginia (the fifth largest forms distributor in the country), and kept the Standard Forms name for the combined company. Standard Forms now covers a territory that extends south to the Carolinas, west to Pennsylvania, and north to Maine. Headquarters and a manufacturing facility are in Norfolk, Virginia, and the executive sales office is in New York City.

SMC set up a networked computer system to accommodate the

acquired business. The main computer operations are in Norfolk, where the S/36 (upgraded to a model D) runs financials and an AS/400 runs order and inventory functions. A 5363 in New York serves as traffic manager and data coordinator for the network. The three CPUs share data files using IBM's Distributed Data Management (DDM), passthrough, and Advanced Peer-to-Peer Networking (APPN).

The customized software enables Standard Forms to handle 6,000 customer orders a month and still keep tight control on inventory and distribution. The sales force of 80 people has a broad product line to offer the company's 12,000 customers — everything from envelopes and letterhead to receipt books and advertising specialty products. The production facility in Norfolk fills about 15 percent of the orders, and remaining products are purchased from other suppliers. Although the company carries some stock products, such as computer paper, 80 to 85 percent of its sales are customized.

SMC recently added a sales support system for Standard Forms' eight remote sales offices. The system runs on PS/2s with IBM's RPG II Application Platform and Emerald's 5250 remote emulation and

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Cardinal *Continued from previous page*

from division staff, and interactive file updates.

Cardinal's system includes everything the pharmacist needs to process prescriptions — doctor files, patient files, drug interaction files, generic drug cross-references. The Cardinal system also handles claims processing, which is involved in 90 percent of prescriptions filled. Cardinal dials pharmacy computers on a nightly basis, uploads claims information from orders filled during the day, and, in turn, transmits the billings to insurance or government agencies. The same nightly sessions update pharmacy system files with new drug interaction codes and price changes. Pharmacy system customers are supported by MIS staff at the division level.

Cardinal's POS direction, says Bottlinger, is "to align ourselves with the major players in the mar-

ketplace and support them from a wholesaler standpoint." Wholesaler support involves providing customers with product file updates, including pricing changes and new item information. The first vendor alliance — with IBM — has already been formed, and others will follow. Eventually Cardinal will add consultant services to help customers select POS systems.

With Cardinal's hospital ordering system, Accunet, customers can check product pricing and availability, place orders, and receive order confirmation within 15 minutes. The customer predetermines what drug or medical supply substitutions, if any, are allowed. Accunet's Release 2.0 makes just-in-time (JIT) inventory available to customers: this option triggers an automatic reorder when a hospital's supply of a product falls below a predetermined minimum.

Manufacturer charge-backs, which

are peculiar to drug wholesaling, serve hospitals that have grouped together to negotiate discount prices with manufacturers. Buying group hospitals still fill their orders through distributors — but at prices that are often less than wholesalers' cost. Manufacturer reimbursement comes only after the distributor sends "charge-backs" with transaction documentation. "Manufacturers are attracted to us — and recommend us to buying group customers," says Bottlinger, "because we have the business systems to meet their needs."

With its proven ability to manage acquisitions and develop value-added services for customers, Cardinal Distribution has positioned itself for further growth in the tough pharmaceutical supply market.

— Susan C. Linden, CDP

Standard *Continued from previous page*

polling software. During the day, each sales office independently processes orders and releases warehouse inventory, and then during fixed nightly polling sessions the PS/2s exchange transaction data with the host AS/400.

That Something Extra Keeps Standard in Top Form

In addition to basic distribution systems, SMC has developed systems for Standard Forms that provide special services to customers in the form of reports, forms management, and direct computer access. Such services are especially valuable to Standard Forms' primary target market — medium-sized companies with 2 to 800 employees.

According to D'Agostino, helping customers with recordkeeping is an increasingly important aspect of distribution. For example, Standard Forms provides some customers with detailed reports of product shipments and dollar totals broken down by delivery location.

Standard Forms also offers a

forms-management service to handle all forms-related activities for participating customers. The vendor maintains and warehouses the customers' forms inventory. A computer system alerts Standard Forms' trained forms consultants when an item needs to be reordered and groups orders that use the same size form so Standard Forms can take advantage of volume discounts.

Right now, Standard Forms has about 50 forms-management customers. Twenty have chosen to go one step further to direct computer access. Standard Forms supplies these customers with a PC, printer, and 5250 remote emulation, and trains staff members. Customers can dial into the host computer and track their orders — whether they are in manufacturing, in a warehouse, or in shipment — and they can release product for shipment or see any releases that are made.

MIS Moves In-House

After several years with SMC as the de facto MIS department, Standard Forms is now in the process of establishing MIS in-house. SMC is finishing program development and is

hiring and training MIS staff so Standard Forms will be able to maintain the existing systems. This transition matches SMC's stated company goal of letting "each client become self-sufficient in the operation of its computer system." SMC will still help with new system development as needed.

D'Agostino foresees "a bigger and bigger role" for information systems at Standard Forms. The company management is committed to maintaining a leadership role in its industry in spite of the tough business environment for printed forms. Government statistics predict that the forms industry will drop from a 5 percent growth rate to about half that by the end of the year, but Standard Forms expects to continue growing at a rate higher than the industry average. "Customers want to deal with a company they can communicate with, a company that can access data and get it to them rapidly," says D'Agostino. With ever-improving MIS systems, Standard Forms will be that company.

— scl