AmerisourceBergen's BIG BANG

6 DC's, 3 years

By Tom Andel, Editor-in-Chief

The desire for double-digit growth motivated the merger of two pharmaceutical wholesalers. All they needed was a new distribution center network — and fast.

In 25 years, pharmaceutical distribution has evolved from an environment of overcapacity to one dominated by three large distributors: Cardinal, McKesson and AmerisourceBergen (ABC). AmerisourceBergen's evolution has been as tumultuous as the industry it serves.

When two of the largest drug wholesalers in the nation (AmeriSource Health and Bergen Brunswig) merged in 2001, the result was a $36 billion giant in pharmaceutical wholesaling. Today, AmerisourceBergen Corp.'s revenues top $64 billion. It is one of the largest purchasers of generic drugs in the United States and supplies nearly 10,000 chain and independent pharmacies as well as thousands of hospitals, nursing homes and mail-order pharmacies.

At the merger, the two companies shared a network of 52 DCs, all run on variations of two different legacy host systems. This clash of communications and cultures wouldn't take AmerisourceBergen where they wanted to be by 2006: processing higher volumes, with improved productivity, order fill and inventory accuracy. That's why a dedicated integration team, led by Terry Haas who is now ABC's executive vice president and chief integration officer, was formed.

After the merger and the carefully planned construction of six greenfield facilities, labor has been reduced 21% while revenues have increased 38% for the wholesaler.

Identifying the goals

The team spent more than six months developing the structure for a new network. They reviewed DC locations, customer and supplier locations, capacity at each division, fixed and variable costs for each division, required customer delivery times, item-level demand and market growth projections. They knew the following things needed to happen during the aftermath of the merger:

1. Customers received consistent service as if things were business-as-usual
2. Bad costs like fixed-cost duplication had to be driven out of the new entity's P&L
3. Best practices had to be implemented across the entire network
4. The company had to migrate from two legacy host systems down to one supply chain management system
5. Enough warehouse capacity had to be left to grow the business significantly

The A-frame dispenses 2,200 SKUs, mostly prescription and over-the-counter products.

These goals would be hard enough to meet while joining two similar organizations, but these two companies were different geographically and culturally. The transaction involved a West Coast company being acquired by an East Coast one. AmeriSource, the smaller organization, was more decentralized and scrappy, while Bergen Brunswig was more mature and centralized, and had more overhead.

Post-merger, ABC's 52 DCs were about double what was needed. Many of these used manual, paper-intensive warehouse processes. To be lean, smart and efficient, ABC would have to trim its 52 legacy facilities down to 30 or fewer, build six high-velocity DCs to support market growth, and connect the entire chain with strong information links.

The network plan

Planning and developing those six high-velocity DCs was the challenge. The first step was to identify their physical locations. The company did a network study, but it also identified a center of excellence among the existing facilities that would provide the model for labor productivity. (The facility, located in Paducah, Ky., was covered in *Modern* in October 1995.)

In addition, ABC leveraged Bergen's experience with A-frames and automation. The facility combined a warehouse management system (WMS) with engineered standards and performance incentives. That combination provided a strong base upon which a logical materials handling strategy could be built.

The capacity designed into each DC was just one component of a holistic network project. In addition to the efficient use of technology inside each DC, the team established a set of “pay for performance” labor optimization standards, by which workers earned additional compensation for exceeding the engineered standards.

In addition to DC optimization, efficient transportation was critical. The team wanted to ensure the DCs were sited to serve their markets most efficiently. The six greenfields would have to serve customers as far as 400 miles away on a next-day basis, without relying on expedited transportation providers.

Targeting technologies

A WMS that validates processes through bar code radio frequency (RF) scanning, eliminated paper-based batch processing. The system time-stamps operator activities and ensures accurate inventory by location through real-time cycle counting. Rules-based and configurable, it accommodated unique information handling requirements at each site as they went online.

As for materials handling, the team evaluated more than 100 potential technologies based on cost, accuracy, productivity, throughput capacity, and flexibility to determine the combination of solutions. A simulation of the initial concept identified bottlenecks and whether there was too much or not enough accumulation buffer in certain areas, for example.

“We wanted to confirm whether we could satisfy our targeted throughput by having all the manual pick systems on one loop, and the simulation proved that was not possible,” says Wayne Kiser, ABC's director of distribution engineering. “The simulation confirmed we needed to break the manual pick system in half and integrate the two parts as sub systems.”

Perfecting the concept

With the input of the system suppliers, the flow and layout were improved and the cost was whittled down. This cooperative effort was driven by the scope and significance of this project—as well as the wholesaler's buying leverage.

“The budget for each greenfield was north of $40 million, half for the building and half for the equipment and systems in them,” says Kiser. “When you take six greenfields plus our renovation sites, for a couple years we had more buying power than most other companies in the U.S.”

With the greenfield design perfected, the team was ready to develop the six build-to-suit sites in:

More than four miles of conveyor and sortation route product through the DC.

- Sacramento
- Columbus, Ohio
- Dallas
- Chicago
- Kansas City, Mo., and
- Bethlehem, Pa.

Although all six have the same flow and general layout, nuances accommodate respective market needs.

Coming to life

AmerisourceBergen delivers to more than 25,000 addresses every morning, with orders placed as late as 9:00 p.m. the night before. The new DCs would have the capacity to process 100,000 lines a night. However, the completion of the six sites had to be prioritized according to those market needs. Each of the six greenfield sites was selected for proximity to ABC's customers, availability of labor and local incentives.

Each building is about 300,000 square feet (expandable to 600,000 square feet) with about 20-40,000 square feet dedicated for offices.

“Only after you've proven all your systems to be perfect do you even place purchase orders to stock the facility with pharmaceuticals,” says Kiser. “Each site has between 30-40,000 unique SKUs. Imagine the planning involved when you're going to stock a new building then migrate thousands of customers to it. Those customer moves were all done in phases.”

Some of the greenfields went live with outbound shipping across four phases, some across three. It takes seven levels of information systems to make these greenfields work correctly; that and well-trained people.

“When each greenfield went live for the first time the people were using all new systems to them,” Kiser says. “That's why training is one of the most important keys to success. We're in the latest round of our never-ending continuous improvement process. We're never done and never satisfied.”

Heading toward ERP

The last piece of the information system is the capper: an enterprise resource planning (ERP) system. That would be challenge enough for one greenfield site, but putting all six under that umbrella will be ABC's next step in their distribution evolution.

“We've addressed logistics and operational issues, and we're managing capacity, labor and transportation,” says Terry Haas. “Now the question is, what is it that our internal and external customers need to take their business to the next level? We need to improve their access to the information that will help them make good business decisions.”

That means creating connectivity and transparency in the channel to meet the needs of manufacturer, provider and internal customers. Haas says his company's long business transformation will be complete with a new ERP.

“It will give us retrievable real-time information to help in decision-making processes,” he adds. “We're completing the scope of the initiative and will be selecting integrators to detail the requirements and harden the business case. Only at that point will we select software to fulfill those requirements. It will be a 36 to 60 month process.”

Results

So far this six-DC adventure has agreed with the company's business. Its divisional expenses as a percent of revenues have gone down 28% since it started this transformation, and they expect that figure to improve. Labor has been reduced 21% while revenues have increased 38%.

There will be further improvement as its smaller legacy DCs adopt the WMS and labor across the network gets onto the incentive program. At the end of this year 95% of the company's distribution center activities will be processed under this WMS.

System Suppliers

WMS: **Manhattan Associates**

Consultants: **Sedlak Management**

System Integrator: **Morrison Company**

Conveyors and Sortation Systems: **Dematic**

A-Frame Picking System: **Knapp**

Racking: **Interlake**

Lift Trucks: **Crown**

General Contractor: **Kajima Construction Services**