Selecting and implementing an appropriate Enterprise Resource Planning (ERP) system for your business can help you chart a course that will profitably drive your business well into the 21st Century. The tools that are available with modern ERP software can provide you with analysis and management capabilities that have never before been available to most companies. Implementing ERP systems can be a daunting task due to their complexity. By planning and adhering to a carefully thought-out process, success can be assured and the true power of ERP can be harnessed.

Because an ERP system touches all aspects of your business, how you implement the system is just as important as which system you purchase. Knowing from the start what the critical success factors are can guide you down the right path. Of course, in practice, implementing software can be quite different from one company to the next. In this article, we discuss six major success factors that can make or break an ERP implementation project. Throughout the article, we offer real-life examples from two mid-sized paint and coatings manufacturers that successfully implemented ERP software and are now reaping the benefits.

ABOUT THE COMPANIES

Finnaren & Haley is a 91-year-old company located in Conshohocken, PA, with 24 retail paint stores around the Greater Delaware Valley region. In addition to architectural paint, F&H produces a broad line of industrial and marine paint. Their high performance coatings are sold throughout the continental U.S. and abroad.

Vista Paint in Fullerton, CA, is a 45-year-old company with 46 retail paint stores in California and Nevada. Vista produces a broad line of architectural coatings sold primarily to retail and commercial accounts. They are one of the largest independently owned paint companies in Southern California.

ABOUT THE PROJECTS

Both companies replaced existing software systems with an integrated ERP software package that handles accounting, lab, production, Point of Sale (POS), order entry, purchasing, inventory, and reporting for paint companies and other manufacturers. Before their implementation projects began, the two companies were using very different
F&H had been using a UNIX-based ERP system for more than 10 years. It provided them with stable data storage and transaction processing, but was extremely limited in allowing users to access data in a meaningful way. Because the old software was inflexible, it was very difficult for users to streamline their daily processes. Many functions were accomplished by printing a greenbar report and then manually keying data into Excel spreadsheets. The UNIX system handled basic requirements of accounts receivable & accounts payable (AR/AP), general ledger, formulating, production, and inventory control, but did not handle environmental reporting, shop floor data collection, and POS. In addition, the old software was somewhat dated and did not interact with email, MS Word, and other modern productivity tools.

Vista’s operations were run using many different software systems, which were integrated with varying degrees of success. Vista had one system for formulation and production control, a second for accounting and general ledger functions, and a third for POS functions, as well as many smaller systems that handled functions such as document management and customer relationship management. Many of these systems worked well by themselves, but they did not provide tight integration. This led to redundant data entry requirements and complicated data access for users. From an Information Technology (IT) perspective, it had become difficult to run all these applications efficiently over a wide-area network.

SUCCESS FACTOR 1: CLEAR GOALS

The starting point for any software implementation is to clearly define what you hope to achieve through the use of ERP software. Done correctly, this not only helps you to select the vendor and software package that will best meet your needs, but will also help guide the implementation process and determine priorities. Clear goals should include checkpoints that help keep everyone on the right path and help measure progress throughout the project.

For their ERP implementation, F&H wanted one unified ERP system that could handle all their functional areas. They wanted to replace their outdated software with a single Windows-based system that would provide ease of use, low maintenance, and significantly enhanced reporting capabilities. They also needed a vendor that they could work closely with through the process—one that brought complementary skills to the F&H implementation team. F&H selected Deacom, Inc., a Wayne, PA-based firm that specializes in accounting and ERP software for manufacturing and distribution companies. Fred Moellers, vice president of marketing for F&H, commented, “We wanted a software system, but we also wanted a partnership that would help us to improve our business over the long term.”

Vista’s goals for their ERP implementation were to replace their different software packages with one integrated system, provide improved performance and data access for users, and simplify their business processes by creating one primary data storage location. Vista also selected DEACOM’s system primarily because it features tight integration of many functional areas into one package.

SUCCESS FACTOR 2: SUPPORT FROM SENIOR MANAGEMENT

Implementing ERP software is a major project, which can impact people’s day-to-day activities. It is critical that senior management aggressively supports the project and allocates the resources required to implement the software in order to achieve optimal productivity and process improvement.

To successfully streamline processes and improve business operations through the use of ERP software, your best people must be involved in the implementation—both managers and line workers. Of course, these are the same people who do the daily processing required to run the business. The time demands of ERP projects can get in the way of these people performing their normal day jobs. In order to accommodate this increased workload, senior management must communicate the importance of the project and balance the allocation of tasks so that the ERP project can co-exist with normal daily processes.

Both F&H and Vista launched their projects with direction from the owners that the process was important and should be given high priority. In each case, all affected personnel—including senior management as well as the people that
would use the system on a day-to-day basis—embraced the project and did what was necessary to solve problems as they arose. Fran Connell, CFO of F&H, noted, “Our people spent a lot of time with the implementation team, re-thinking how our business works. Everyone worked some extra hours to get this done and still get the paint out the door every day, because they knew how critical this was to our long-term success.”

SUCCESS FACTOR 3: WORKABLE PLAN

Because ERP implementations can be so large in scope, it is tremendously helpful to break the project down into manageable sections. These sections also serve as natural checkpoints, helping to measure interim progress. How tasks are broken out for a particular project will vary based on current problem areas and where benefits can be most quickly realized.

At F&H, the implementation project was broken down into three primary task groups: process engineering, data conversion, and general training. Because of the extensive process engineering requirements for F&H, implementation was scheduled to take place over eight months, with all functional areas going live on the same date.

At Vista, since their existing systems operated independently, their implementation plan was a little different than normal and was divided into three phases. Priority was given to areas that could realize the biggest gains in productivity and performance from new software. The plan for Vista was to replace the lab, production, and purchasing modules in Phase 1. Phase 2 would implement the financials and distribution center. Phase 3 would implement the POS system. The needs and requirements of each implementation phase were very different.

From a technical standpoint, Phase 1 called for a fairly straightforward data conversion and training process, without much emphasis on process engineering. Certain enhancements to current processes were provided, such as grouped quality control tests and QC tracking. The implementation emphasis was primarily on ease of data entry and system stability and performance. Due to failures in previous systems, users were wary of any new software. It was important to work with all users to make them comfortable that the new software would work consistently and make their day-to-day jobs easier.

Phase 2 of the Vista implementation called for considerable process engineering review, as well as the integration of functional areas that were not integrated in the past. Since approximately 80 users were involved with this phase, extensive use was made of interactive training and process engineering sessions in small groups using web-based meeting tools. This training methodology allowed many users to participate in the process evaluations in a flexible setting so that the process did not interfere too much with their normal daily activities.

Phase 3, which will be implemented in the winter, calls for the new POS system to be rolled out to all 46 retail stores. In order to minimize disruptions, this rollout will take place with groups of three or four stores converting to the new software at the same time.

SUCCESS FACTOR 4: PROCESS ENGINEERING

Process engineering is the cornerstone of the implementation process in most companies. Proper business processes will ensure smooth and efficient workflow. If implemented well, ERP software will mimic how a business actually functions. While there are best practices that should be considered, sometimes the uniqueness of a particular business requires variation from what would often be considered standard operating procedure. It is important to consider the standards but allow for flexibility where required. In some cases, the software will need to be changed, and in some cases the business process should be changed. Properly designed software should allow the system to be configured to specific needs without resorting to customization of the software.

F&H worked with the implementation team to analyze each business function, reviewing why it was done and how it could be improved or combined with other processes. The flexibility of the ERP system was critical to improving workflow, as it enabled F&H to mold the software to their redesigned processes as opposed to having to conform to rigid software constraints. User buy-in was particularly critical during this stage, as process engineering can be threatening to people when their world is rearranged. It was also imperative that senior management fully support this process to ensure open-minded participation from all staff members.

Training was a by-product of the process engineering sessions. Implementation specialists worked with F&H users to review how their tasks would be done in the new system; this methodology allowed the system to be configured to match the specific needs of F&H and helped identify where existing processes needed to be streamlined. As each process deficiency was identified, solutions were developed either through software configurations or by re-engineering the process. During the implementation sessions, optimal business processes were developed and users became comfortable and proficient with the new system without requiring traditional training classes.

Data conversion took place during and after process engineering.
As processes were redesigned, data structures for customers, vendors, formulations, pricing, chart of accounts, item master files, and transactional history files were converted and restructured accordingly. Data was converted during the implementation process for training purposes, and then wiped out and completely re-imported in the days before the go-live date. Because of this re-importing of data at the transition date, there was no need to run parallel systems after the cut-over.

SUCCESS FACTOR 5: CONFIGURATION OVER CUSTOMIZATION

Many ERP projects fail due to cost and time overruns associated with the need to customize software for a particular company’s needs. Once custom software is created, it is very difficult to update the software as operating systems and new requirements evolve. Testing of customization is a time-consuming and expensive proposition, as customized software needs to be tested and potentially reprogrammed each time a new version is installed. The long-term maintenance costs of custom software often far exceed the short-term development costs. Custom software should be avoided wherever possible.

F&H and Vista had very different business process requirements, but both were able to use the ERP system without customization. Because extensive configuration options are built into the base system, F&H and Vista run the same base program to handle their unique requirements. For example, functional areas such as product formulation, production, regulatory reporting, and sales processing are common areas that have been customized by many companies in the past. The system instead uses configurable and infinite units of measure, data-driven regulatory forms with independently main-tained sections and flexible sales processing.

SUCCESS FACTOR 6: INVOLVEMENT OF ALL USERS

Proper engineering of any product requires specifications and requirements that are based on the realities of the actual users’ day-to-day needs. ERP implementations require close interaction of the software vendor and the workers in the trenches that are processing the daily transactions of the company. Many projects fail because they focus on solutions that do not address the core problems faced by the end users. The implementation team should focus on simplifying and streamlining business processes wherever possible with input directly from the users on the current bottlenecks and how they do their daily tasks.

Maryann Burke, from the accounts receivable department of F&H, commented, “I was pleased that I was able to influence how the system would be set up. The way we did things, the software really matches how I actually do my job.”

It is imperative that all users embrace and participate in the implementation of ERP software. As they say in sailing, if you fall out of the boat, you must assist in your own rescue. Likewise, when you implement a large-scale software system, you must assist in your own implementation.

RESULTS

Although F&H and Vista faced different challenges and followed different paths as they implemented their new ERP systems, both achieved their desired goals. Key factors in their success included starting with an open-minded approach to process change, support from senior management, continual work to get buy-in and ideas from users at all levels, developing a clear idea of what they needed to achieve, and creating a workable plan to realize success.

At F&H, because the new system is simpler and more accessible, individuals throughout the company are better able to manage their workloads and track their performance. According to John Mangano, technical director of F&H, “The new system has allowed all of our chemists to access data significantly faster and more easily. Formulation histories and batch histories are kept forever in an easy-to-view way. The fact that we can configure MSDS reports and batch tickets ourselves makes us much more responsive to the company’s requirements.”

Reporting that mostly consisted of the monthly generation of giant greenbar reports has given way to immediate access to live data, providing much more rapid analysis and identification of problems and opportunities. F&H’s president, Bob Haley, remarked, “From my perspective, I am much less dependent on other people for accessing information. I can get information myself the way I want it, when I want it, without having to burden our staff with too many reporting requests.”

F&H’s implementation of the ERP system and re-engineering of their business processes has greatly streamlined their operations. By continuing to analyze and reconfigure processes where necessary, F&H expects to continue to grow upon their 91-year history in the paint and coatings industry.

Vista’s technical director, Hamid Pourshirazi, said, “Our new system has provided us with the stability and integration we needed to keep up with our formulating requirements, allowing us to work more efficiently.” Eddie Fischer, the owner of Vista, has expressed great satisfaction with the whole process. “I think when we’re all done, Vista will have the most advanced software system in the paint business.”