Sales/Distribution Team

Several major process changes were also to be implemented for these functions. First, national accounts (which accounted for a large percentage of sales) would have dedicated NIBCO associates. Second, a much more controlled processing environment would be set up for making changes to customer master data. In the past, changes to customer data, including pricing data, could be made by all customer services (CS) personnel. Under SAP, a new, centralized marketing services group would be formed and customer master data changes would be limited to this group. This more centralized, focused approach would yield revenue gains from better response to national accounts. It would also yield dollar savings because fewer price deductions would have to be given to customers due to internal processing errors.

One of the major challenges facing the project team was the structuring of the customer master data. For example, terms of sale at NIBCO had not been defined in terms of the sales channel of the customer in the past, but in R/3, pricing distinctions are made between wholesalers and retailers. This meant that all NIBCO customers had to be classified by their sales channel. Training was also a major hurdle because about half of the CS staff had used green screen terminals in the past and had to be trained in using a PC with a mouse and graphical user interface (Windows). PCs for the CS group were installed about eight months before the Go-Live date, and each member of this group had over 45 hours of mandatory R/3 training.

NIBCO's warehouse operations had not been highly disciplined in the past, so large-scale process changes would also be implemented for the distribution function. The risk of the warehouse management implementation was increased by the distribution center consolidation that was going on during the same time period.

> We used to run distribution centers with notebooks. John, who put stock away, put it over in bin 12 in the corner, and would write it down. He knew where the overstock was and you could get away with that in a 50,000-square-foot facility. But when running 250,000-square-foot facilities, you can't do that; you've got to have a system run your facility for you.
>
> *—Larry Conn, Extended Team Member*

Technical Responsibilities

During the preparation phase, while the business process teams worked on As-Is analysis, about six IS specialists under Wilson developed a 250-page technical document that became the blueprint for building the new technology infrastructure—the PCs, servers, and networks for every NIBCO location. Over the next nine months, the technical team worked through the installations for all the plants and distribution centers, and a trainer would travel right behind the technical team and do PC and Windows training as needed.

The TIGER project and the new client/server architecture also required new work processes for the IS organization. New processes for network management, backup and recovery procedures, system change controls, and business-client relationship management needed to be developed. Many of these changes were made under the TIGER project umbrella, and the IBM consultants helped with the IT process design and IT worker reskilling.

> The project leaders worked very hard to manage our consultants. We expanded when we needed to and we contracted very quickly. When a consultant no longer held value for us, we cut him loose. At one time, we counted 50 consultants here.
>
> *—Rod Masney, Business Systems Analyst*

During the preparation phase, a new director-level position for systems development was filled with an outside hire, Greg Tipton, who began to take over the day-to-day program management responsibilities from Wilson. Tipton became the primary liaison between the TIGER team and the IS development resources during the design phase as ABAP programming needs increased. All maintenance support for legacy systems was essentially shut down by the summer of 1997 as the entire IS group focused on the R/3 implementation.

In the last months of the project, the IS area was running multiple R/3 environments: the development system, a production system, two training systems, and a test system. IS specialists were also dedicated to cleaning up and converting master data, loading master data, and stress testing the system with real data. Data from 85 different legacy system files and lots of Access databases had to be converted. Although discussions on how to accomplish these critical activities began as early as March 1997, the master data loading processes proved to be more complex than expected, and four complete heavy-duty-testing trials were run.

Change Management Responsibilities

> We were convinced we could configure a system. We were convinced we could build a technical infrastructure that would support it. We were NOT convinced that we could change people's attitudes and behaviors in a way that we could successfully use what we came up with.
>
> *—Jim Davis, Project Co-Lead, Change Management*

Because IBM's change management approach was not ERP-specific, the NIBCO team had to learn how to apply it to an R/3 big bang implementation. Some of the IBM change management people had been trained in methods developed by Daryl Conner, CEO of Organizational Development

New work (New) The purpose of this category is to highlight where a new job is required. Please reference which role (responsible, accountable, consulted, or informed) you are referring to and any details about the job you think would be useful in defining or designing the new job. (Example: Master data is going to be managed and controlled in a centralized location. This would require the creation of a new job which is focused solely on this set of activities.)

Automation of old work (Automate) This should be used when an activity which was previously performed manually will now be automated either in whole or in part. Please note whether this activity should still remain in the same functional area or whether the automation would support its movement to another functional area. (Example: The system will automatically perform the threeway match of a PO, receiver, and invoice which we currently reconcile manually.)

Elimination of related activities (Eliminate) This should be used when activities previously performed associated with this activity are no longer required because of a changed process. Please note which function previously performed this eliminated work. (Example: People spend significant time creating special reporting to summarize data in a meaningful way for analysis. The system will provide that data online in a way which allows the analysis to occur without the off-line work.)

Work moved from one group to another (Transfer) This should be used when work moves from one function/department to another or when work is moved up or down from one level of management to another. The goal for this element is to track how you expect work to shift as a result of the new activity or process. (Example: Accounts receivable activities occur as a part of the customer service function because of the need for communication with CSRs. The system will now provide information in a way that allows the A/R activities to be performed in the treasury area.)

Risk of process not being done well (Risk) It is important that all new processes be performed efficiently and effectively. This change element should be used when the activity is particularly critical to activities performed downstream and you want to highlight that to the organization. (Example: The new demand pull methodology has a particular "triggering event" which drives all of the downstream events. It is imperative that this activity is performed effectively, or in a particular time frame, or with a particular frequency.)

Increased level of difficulty (Difficulty) This should be used when a new activity or process is substantially more complex or involved than previously. This will give us a heads-up for training and organizational readiness to prepare for a more difficult application. (Example: The current process calls for data to be input without any quality review or analysis. The new process requires a specific analysis to be performed or data to be reviewed and approved prior to entry into the system.)

New business partnerships (Relationships) This should be used to identify where the new activity or process requires people to work together or collaborate in new ways. This could include where information must be shared between groups that don't ordinarily work together. (Example: I currently work with the logistics function to get input for an activity I perform. In the new process, that information will come from manufacturing.)

Miscellaneous (Other) This should be used when you want to highlight an issue or concern that is not covered by one of the other change categories.

EXHIBIT 7 Change Management Categories

Resources, Inc. Conner's book[2] heightened the leadership team's understanding of the importance of dealing with change management issues at the level of the individual. The overall change management thrust became how to ensure that the R/3 implementation would not drive NIBCO users beyond their abilities to adapt to change.

Although only Davis and two other team members were working full-time on change management issues, all team members were expected to be change leaders. During the selection process they were told that the rest of the organization would be looking to them to understand where the TIGER project was heading and why it made sense to be going in that direction. The team members also had to understand the change implications of their decisions: They were asked to identify what the major impacts would be for people performing a particular function—how they would work together differently, or need different information. The change management team used this knowledge to develop communication and training plans that would help NIBCO associates make those changes.

Identifying the Key Changes

Information to help the change management team was captured as part of the business process documentation. For example, as a business process team was preparing To-Be business process documentation, the team members were asked to identify the changes a given process introduced and to categorize them (see Exhibit 7).

[2]Daryl R. Conner. *Managing at the Speed of Change*. New York: Villard Books, 1992.

No process documentation (and later no training script) would be approved until the change management elements were complete.

For example, an associate in accounts payable who worked with NIBCO's legacy systems in the past really had no need to talk to the procurement department. In R/3, however, the procurement process has a significant bearing on the transaction documentation that finds its way to accounts payable. So the communication and information sharing between those two groups becomes very important. The change category here would be *relationships*.

Team members were also asked to help determine the training needs for these specific change examples. In all, 450 different business activities in 15 locations had to be addressed.

Internal Communication Plan

A critical part of the change management efforts was to provide information and to keep open the communication lines between the project team and the other NIBCO associates. This involved several types of activities—some at headquarters and some onsite at the plants and distribution centers across North America.

> We basically followed the rule . . . somebody has to hear something five different times from three different sources for it to hold. So we looked for every different way that we could get ahold of somebody to get their input and to share information with them, too.
>
> —*Jim Davis, Project Co-Lead, Change Management*

A communication analysis of three or four hundred people at NIBCO yielded a type of "spider web" map of internal communication linkages from which the "best connected" associates could be determined. The supervisors of associates with a score above a certain level were then asked for their permission to have these associates invited to participate in a TIGER focus group. About fifteen people at corporate, and three to six people at each plant and distribution center, were then personally invited to join the focus group. Their job was to be a "hub" within the business, to provide bidirectional feedback to the team and to those with whom they were connected in the workplace.

> We didn't say: "You have to be a cheerleader for the project." As a matter of fact we said: "We prefer that you fight back because it is only at the point of resistance that we can identify how to react". . . . Their job was to get in our face and say: "You know what? You've got a deep problem—people are just not buying into this." Or: "Here's where you're gonna fall off the edge."
>
> —*Jim Davis, Project Co-Lead, Change Management*

Another key communications activity was holding monthly "TIGER talks" in the auditorium at corporate headquarters. Jim Davis and selected TIGER team members made presentations and answered questions, and Don Hoffman facilitated the meetings. Each TIGER talk had a different main message, such as project phases, process-focused organizations, training and education plans, technology infrastructure, plans for prototype sessions, organization/role/job design, implementation phase issues, "homestretch" issues, SAP start-up plans, and post-live status.

These face-to-face sessions were open to all NIBCO associates; each session was run four times, so that people could pick a time slot to fit their schedules. Attendance was voluntary, but there was an expectation that members of the focus group would be among the attendees. A summary and internal news release highlighting the main message were published to the entire organization within 48 hours. On a monthly basis, information would be sent out to focus group members and other key players who were not at the meeting, and videotapes of the sessions were also made available.

Team members also conducted two or three rounds of onsite visits to each NIBCO plant and distribution center. That meant that all associates had an opportunity for a physical face-to-face meeting with team members once every three to four months. Again, questions and answers from these meetings were summarized and distributed within 48 hours to the entire organization.

At each meeting, the team attempted to measure the level of individual commitment to change. A change adoption curve was posted on a flip chart and the meeting leaders pointed out that their goal was to get every NIBCO associate to the buy-in point on the curve. Each participant was given a red sticker and asked to place the sticker on the curve to record "where they were" at the end of each meeting, out of sight of the TIGER team members. Over the course of the project, these scattergrams became a way to measure progress toward an effective implementation. The team could also identify which plants or distribution centers were lagging behind, and then focus on the ability of those associates to assimilate the anticipated changes.

About halfway through the project, a weekly newsletter for those associates who would be using R/3 began to be distributed via e-mail. After training had begun, the newsletter included questions asked in the training classes and the answers provided by the classroom trainers.

User Training

Over 1,200 hours of training were delivered at three NIBCO training sites over the four month period before Go Live. Depending on their job, users received between 8

and 68 hours of training that focused on the new processes, not just individual tasks. In addition, a user ID was issued during the training classes that entitled associates to access a training "sandbox" where they could try things out and practice transactions or scenarios. User attendance at the training sessions was tracked as part of the organizational incentive scheme, but sandbox practice was not.

Delaying the "Go Live"

The original plan was to go live the Monday after Thanksgiving. This date proved not to be feasible for two primary reasons.

First, the distribution center consolidation was significantly delayed. This resulted in a somewhat chaotic state, as most of the DC managers were still focused on the consolidation, rather than on preparations for the R/3 system. The new staff hardly had a chance to get to know NIBCO's business partners, let alone be prepared for a new system by the Go-Live date.

> These new people who were in all the new facilities never had time to get involved in the SAP project. They never went through appropriate training because they were focused on the consolidation. You cannot do two astronomical projects at the same time. Distribution was not prepared for the SAP start-up and we paid for it.
>
> *—Larry Conn, Extended Team Member*

Second, a complete master data load was taking about 17 to 18 days round the clock. The first loading of the master data for manufacturing was sufficiently bad that the consultants had warned them that they were in trouble. The manufacturing data alone was loaded six times. A "stress test" at the beginning of November also reinforced the need for another "full load" test, and time was running out.

> We were probably right out there at the maximum extreme as far as time to get something like this done. There were other small companies out there that had done it in like six or seven months where they just slammed it in. We didn't buy into that. We had a ton of master data to move around, which was a big deal for us. It was a major, major effort that slowed us down
>
> *—Scott Beutler, Project Co-Lead, Business Process*

The Go-Live date was moved back to the latest possible date—the end of the 30-day grace period. The change management team used the project delay to emphasize scenario training that focused more on business process changes. Although the attendance at training had been very high, there was no formal user-certification process and user readiness continued to be a concern.

The Big Bang: December 30, 1997

On the Go-Live date, there were no consultants on site. Instead of paying the consultants to come in for two days in the middle of a holiday week, they were cut loose for the last week in December. Management knew that even if they struggled for those two days, they would be bringing the system back down and would have time to work on it over the New Year's holiday weekend to make any fixes. Core team members were on site at plants out in the field, and a help desk was manned by project team members. Besides saving some consultant costs, it was a symbolic move: The company was ready to operate R/3 on its own.

The co-leads had warned the business that "it was going to be ugly" in the beginning. Everything they had read and heard suggested that there would be an initial drop in productivity. The key was not to deny it, but to plan for it and manage through it. On Day 1 they were prepared to be able to operate at only the 50 percent level.

The project team members were kept on the team for only two months after the Go-Live date, rather than four months. The business units were clamoring for people to come back, and just did not want to wait any longer.

> Ideally, we should have had them for another 60 days because we went through a lot of growing pains, and we could have done much better if we had the team together longer. But...it was unraveling on us and we just had to let people go.
>
> *—Jim Davis, Project Co-Lead, Change Management*

By the time they went live, most team members knew where they would be redeployed. Some went back to their old jobs, but several received promotions or new opportunities and many went into newly created jobs. Some of the extended team members found that their business groups continued to rely on them for their in-depth R/3 knowledge. A few of the power users went into SAP support positions within the IS organization.