Advanticom Case Study
Data Center and Office Move

A 1500 employee medical management firm decided to move to a new corporate office. The project included the design of the data center, cabling infrastructure, a new phone system, and complete project management. The project resulted in a seamless move of the organization and significant new capabilities.

Project Overview

A 1500 employee medical management provider headquartered in Pittsburgh, Pennsylvania acquired a new facility to house their corporate office.

The facility required all new cabling, a new phone system, and data center preparation. The project was complicated by the following considerations; the server farm, switching /routing infrastructure, and security appliances would not be replaced, the transition would take place over a 3 day holiday weekend, and management would only accept two hours of total business hour downtime (3pm to 5pm the Friday of the move). Therefore we would have to fully implement the phone system and train users in the week preceding the move, fully test all circuits with loaner equipment, finally have the engineering

During the assessment phase of the engagement, Advanticom process engineers and operational analysts analyzed the client's inbound call flow in general and Claims Department in particular, the order and fulfillment process, their dispatch system, and their network security posture.

The project proceeded along separate vectors through two engineering groups. The first group was tasked with engineering the new office environment (infrastructure, systems, and project management). The second group focused on profitability improvement and competitive advantage development.

Task Group One

This group developed a project team with the construction firm, architect, building management and the client. They began by designing a cabling infrastructure that would accommodate approximately 130 employees and 14 common areas per floor (26,000 sq ft/ floor) and tie the three floors of the building together. A decision was made to develop a network core with separate access areas per floor. The switching infrastructure (wired and wireless) and VLAN segmentations were then designed.

The current data center was analyzed and based on the existing equipment and the needs of the new space an engineering subplan was developed for the core (data center) and the IDF's (access areas). The plans included space, layout, HVAC, wiring, power, grounding and access control for each area. Recommendations were also prepared for a future server consolidation.

Task Group Two

This group began by analyzing the organizational chart, defining departmental responsibilities, and meeting with each department manager. They defined key performance metrics in the context of the corporate goals, then identified several target areas which they believed would deliver the greatest benefit in terms of reduced cost, operational efficiency improvement, and improved customer and employee satisfaction.

Through the combination of process refinement, new technology and training, they achieved significant results. The organization was comprised of 6 business units (BU). Each BU had its own inbound call flow, but because of limitations in the current equipment, callers had to sort their own way through a series of auto attendants. Through a combination of direct dial (DID), PRI circuits, and intelligent call routing; callers were able to limit the number of auto attendants they navigated on every call from 3 to 6 down to 1 or 2. Both outsided employees and clients were pleased.

The Claims department had responsibility for supporting 4 of the six BU's. Staff were assigned to specific tasks, however, the legacy system could not intelligently route calls to the appropriate party without lengthy question/answer in auto attendant. As a result, agents transferred nearly 70% of calls to the appropriate party because most callers selected a zero option. Through intelligent call routing that could analyze both the number outside parties dialed, and the originating number of the caller, a logic tree was created that routed calls after just one auto attendant to the appropriate party 74% of the time. This reduced the labor demand of the call center freeing up one full time equivalent (FTE), and significantly improved employee and caller satisfaction.

The fulfillment department received all orders via fax. Every order was reviewed, a PO assigned and orders placed via phone/fax/internet. Confirmations came back via fax or internet. They then scanned the original order and

the vendor receipt into Dynamics for storage and assignment. Through a combination of unified messaging and DID, the fulfillment department was able to directly email 100% of their orders instead of faxing and then export both the order and the vendor receipt directly out of their inbox and into Dynamics. The time to process a PO from receipt to delivery fell by 1.25 minutes per transaction and 1.5 FTE's were reduced because the need for scanning was eliminated. Nearly $800 per month in faxing bills, and $210 per month in equipment and paper were saved.

Department managers had little visibility into analyzing the individual performance of staff and found it difficult to make staffing decisions. Staffing decisions were based upon "gut instinct". Through a combination of real time visibility of the status of each individual and the group, call center historical reporting, and erlang analysis of the call volume, it was determined that several FTE's could be eliminated in two separate departments. While the client decided not to reduce their staff, both the managers and the executive staff reported an increase in their feeling of visibility and control of their business and better able to make staffing decisions and provide more tangilble employee reviews.

Finally, the phone bills were reviewed. The review found 27 lines that were minimally used to support dedicated analog devices (modem/fax). Each BU had a separate hunt group. Some hunt groups had too many lines, (never operated over 67% utilization) while others had substantial busy signals (12%). Through replacement of the analog circuits with PRI circuits with Call by Call and incorporation of analog ports and DNIS in the telephone system, the firm was able to recognize a savings of $2400 per month and elimination of the busy signal issue.

Additionally, through the provision of management software and training, the company saved over $1,800 per annum in move, add, change work from an outside vendor who was and the rarely available in a timely manner.

Results

- The move was seamlessly project managed.
- All systems were functional 24 hours ahead of schedule.
- The total week one punch list was one page long.
- The project cost came in 27% under budget for the technology components.
- The firm saved $2,400 per month on their phone bills, $1,010 per month through unified messaging, $1,800 per year in service fees, and 2.5 FTE's at an estimated $48,000 per fully loaded for a total annual savings of $162,720.
- Customer and employee satisfaction were improved.
- Management had greater confidence in their decision making through better reporting.