



Challenge:

A custom leather furniture manufacturing company approached us to develop a system for their business that would handle it from start to finish and replace their existing MS-DOS DBase system. The existing system only allowed for one user to be in an area of the application at any one time and could not be made available over the corporate VPN to the showrooms so they could perform live order entry.

Solution:

Apex was brought in to design and develop a custom software system that would meet the challenges. To outline the capabilities of the system we will start at the beginning of the manufacturing – the sale. A sales representative would enter a customer's information and pieces they purchased. Once swatch samples for the leather were approved and a payment was made the system would schedule the order for manufacturing. When an order is scheduled the system automatically generates purchase orders for leathers and accessories not in stock that are required, and deducted the existing stock if a PO was not generated. When the materials required for production were on hand the system would schedule the order for production and generate [custom barcode](#) labels representing each phase of the manufacturing process performed by incentive based workers. As each phase was completed the tickets were turned in and scanned in to the system which credited their commission for the value of task completed and updated the production status of the piece so showrooms could see what stages had been finished in the manufacturing process. After the piece is completed the system generated shipping manifests with routes and stop numbers to get the furniture distributed to either the customer's home or the local showroom for pick up.

Impact:

The business was able to reduce overhead by moving previous human labor tasks to software. Previously the purchasing had been keyed so the automated purchase order system also reduced the number of keying errors and expedited the processes of determining what materials were needed as orders became scheduled. Two facets of the business which were previously autonomous are now related: payroll and manufacturing. The barcode scanner for manufacturing steps updated the payroll system and provided a manufacturing status on the piece at the same time with no extra effort.

Showrooms were also able to access the system and get real-time status updates to provide for customers when they called in to inquire on the status of the furniture they had ordered. Previously orders were hand-written on paper and sent as overnight packages at the end of the business day. This tremendously reduced postage expenses, handwriting legibility problems, and fast tracked manufacturing.