



### Case Study – Business Forms Printer

This organization prints a wide variety of business forms on demand in multiple–geographically distributed plants. They typically turn around orders in under 48 hours and process several thousand orders a day in each plant. This organization makes extensive use of IT services to track and process their orders.



The initial requirement from this client was to implement a barcode tracking system to track the labor hours on each job step, so they could determine actual versus estimated cost. The typical time per order for each job step was about 8 minutes so the data collection had to be very efficient. As they already had a PC by each press, it was decided to add a barcode scanner to these PCs and to add barcodes to their job sheets to track the labor. Operators now scan in and scan out for each job step, thereby giving an accurate record of labor expended on each job.

This system was eventually extended to replace their time clocks by having workers clock–in and clock–out at their machines. We also added the capability to export the labor hours captured to this client’s payroll processing system. This required the addition of electronic time cards for managers and supervisors as well as screens to allow entry of holidays, vacations, jury duty and other non–productive time. These extensions resulting in substantial savings by eliminating the time employees spent waiting to clock–in and clock–out at conventional time clocks. These extensions also simplified the preparation of payroll payment data and eliminated many sources of potential mistakes.

The resultant system was deployed at a number of plants using a Citrix terminal server technology. This enabled the PCs in the printing plants to work efficiently over relatively low–bandwidth links between the plants. It also simplified maintenance for the IT department by eliminating the need to install the tracking software on a large number of PCs.

Subsequently BellHawk Systems assisted this client to implement a planning and scheduling system for custom jobs. This system took the orders and then assigned them to presses in various plants depending on the attributes of the orders and the capabilities of the presses and binding equipment in the plants. The system then automated much of the pre–press preparatory work based on each individual order and the capabilities of the press. This included making multi–up decisions and assignment decisions to 1 or 2 color versus 4 color presses.

This planning and scheduling software enabled this client to transition from running custom work on three presses in a single plant to transitioning to running over 50% of their jobs as custom orders in all of their plants. The ability to handle highly customized orders on a rapid turnaround basis gave the client a great competitive advantage and let to rapid growth in, what would otherwise be, a slow growth industry.

For more information about BellHawk, please see our website at [www.BellHawk.com](http://www.BellHawk.com). For a free consultation on how to solve your barcode tracking problems, please call 508–865–8070 x302.