

## Customer Case Study

**Customer: Superior Mailing Services**

**Customer Type: Mailing Services Provider**

**Project: United States Census 2010**

**Products: *iDataScan*<sup>™</sup>, *iDataRepair*<sup>™</sup>, *iDataTask*<sup>™</sup>, Customization, *Service in Seconds*<sup>™</sup>**

What would you do if someone asked you to take on a little mailing project of, oh say 180 million pieces or so? If you're Robert Doyle, CEO of Superior Mailing Services in Bedford Park, Illinois, you'd say, "Bring it on!"

Landing a huge job like that may sound like winning the lottery, but it comes with some big risks, too. Particularly when the end customer is the United States Government and the project is probably the highest profile mailing job of the decade. We're talking about the US Census here.

The census is a critical government activity. The effects of this effort can have an impact on large numbers of Americans. For up to ten years following the census, the political direction of individual regions and the entire nation is affected by the population numbers that are compiled as a result of this huge project. The data collected by the census is used to determine congressional representation and redistricting. And it's not just politics that are affected. Federal funds used to build hospitals, schools, roads, emergency services, and more are distributed based upon the census numbers.

Private business is affected as well. Companies often make decisions about where to build or move their corporate facilities or manufacturing plants based on the demographic profiles of various communities that will supply skilled workers. Information about who those potential workers are and where they live is derived from the census.

"We'd do it again," says Doyle, "It was a great experience and we learned a lot. Plus, we knew we were a critical part of a project of importance to our country. We felt good about being able to contribute."



**Robert Doyle**

## A Team Effort

A project of this magnitude requires the coordinated efforts of multiple entities. Superior Mailing worked with the US Government, RR Donnelley, Pitney Bowes, the United States Postal Service, and Document Data Solutions to name just a few of the parties involved. RR Donnelley owned the contract. They could handle the printing and postal processing, but they knew they would need help to fulfill the mailing requirements. Bringing in Superior Mailing Services to fill that role turned out to be a good move. The massive eight-month mailing effort resulted in the most successful census in history.

Mr. Doyle gives a lot of credit to his partners. But in truth, it took some innovative thinking on the part of Superior Mailing to bring the project together in the first place. Superior noticed that the way the workflow was originally specified in the government RFP was going to make it nearly impossible for any mail services provider to meet the turnaround



requirements. They worked with government officials and RR Donnelley to change some of the folding specifications, allowing the material to be processed much faster and with less spoilage. The solution proposed by Bob's crew at Superior Mailing strengthened RR Donnelley's proposal and they won the bid. During production the folded documents slid smoothly into the 6" x 9" envelopes, just as Superior Mailing predicted.

### **Top Notch Security and Integrity a Must**

As one might imagine, a mailing job that produces documents to be mailed to nearly every household in the country comes with some tight restrictions when it comes to privacy, security, and accuracy. It was clear that an automated control and verification system was going to be a necessary part of the solution. Since the work was going to run on Pitney Bowes Flowmaster inserting platforms, Superior asked for the equipment manufacturer's opinion about integrity solutions that would meet the stringent government requirements. Pitney recommended DDS because they knew the company could provide the type of customized system that would be necessary to process this demanding work efficiently and still meet the government's expectations for security and quality.

Officials from the US Government Printing Office and the US Census were going to be on site every day during the mailing process to ensure that security procedures were followed and citizen privacy was protected. Whatever solution was implemented had to work flawlessly, without raising concerns on the part of the government observers.

*iDataScan*<sup>™</sup> and *iDataRepair*<sup>™</sup> from Document Data Solutions provided the framework for the integrity and tracking engine that was installed on twelve Pitney Bowes inserters. DDS President Robert Ellis worked closely with Superior Mailing and the government to develop special modifications necessary to do the census job.



**Robert Ellis**

The functionality that comes standard in the DDS products handled many of the requisite demands one would expect in any mailing project, such as preventing duplicate pieces from being mailed or automatic reprint processes for damaged documents. But supporting those functions while mail was processing simultaneously on twelve different inserters and referencing a mailing database of nearly 200 million records in real time necessitates some creative computing solutions. Robert Ellis and his technical staff were able to make the necessary modifications to the standard DDS software, allowing production to flow smoothly and accurately.

### **Not Your Average Mailing Job**

There were also some requirements that were unique to the census job; functionality that wouldn't be necessary in typical mailing projects. For instance, the government specifications required that quality control pieces be produced inline during the print process and then recognized and pulled from the mail stream during inserting. To accomplish this feat, the DDS system had to acquire data from a camera mounted on the inserter, compare to the database, record the action of pulling the piece, and open the diverter gate on the inserting machine. The Pitney Bowes Flowmaster inserters were moving mail along the track at a rate of about 4 pieces per second. That doesn't leave a lot of time to decide which pieces go into the regular stacker and which ones are diverted! But the DDS software did the job without fail.

The printed and addressed survey forms arrived in the inserting production area on pallets. Therefore a pallet became a natural unit of work that was processed, tracked, balanced, and reported individually. Unfortunately, the documents on a pallet were not necessarily stacked in sequential order. Instead of doing a simple sequence check, the DDS system had to



compare every piece identification number that was encoded in printed barcodes to the mailing database. This obviously takes more time than simply verifying an unbroken list of sequence numbers. The data capture and lookup process had to be extremely efficient to maintain integrity at the required speeds. Barcode reading by *iDataScan*<sup>™</sup> was extremely reliable. 99.9% of all the barcodes were read on the first pass.

### **Intelligent Mail Barcodes**

The intelligent mail barcode played a big part in the success of the census. In fact, the census project was the largest IMB job in history! Destination CONFIRM, invoked through the barcode, monitored the delivery of the outbound census forms. This let the Census Bureau understand which documents had been delivered and which had not. Since the return envelope included a barcode with the Origin CONFIRM service requested, the government was also able to create re-mail lists for non-responders. The CONFIRM service provided data on which citizens had returned the original survey and which had not. This allowed Superior Mailing to reduce waste and improve responsiveness by re-mailing only those surveys that were necessary and no more.

Superior Mailing Services used the re-mail lists to print names and addresses through open windows onto pre-inserted census forms. The re-mail process was very straightforward and trouble-free. But it didn't start out that way. During testing, Superior Mailing discovered that there was a risk of printing the same re-mail file more than once. There were ten inkjet printers handling the re-mail effort, but these devices lacked the intelligence and controls necessary to deliver adequate quality assurance.

Once again, DDS had the answer. They developed a control system that enabled the fleet of inkjet printers to prevent duplicates. The custom DDS control system captured the log file generated by the printers and directed the data to the *iDataRepair*<sup>™</sup> database. The *iDataRepair*<sup>™</sup> reports told Superior Mailing which pieces were reprinted, along with a date and time stamp and machine identification. Every re-mailed piece was accounted for in the *iDataRepair*<sup>™</sup> database.

### **Productivity or Bust**

Naturally, productivity is a huge success factor in a job like the census. Any operation that impedes the speed at which documents are inserted can translate into extra hours of work and significant increases in cost. One factor that can be especially devastating is down time. When machines aren't running at all, productivity numbers plummet. If the outage affects the whole shop at once, every minute of down time can mean thousands of pieces don't get processed on time. With a workload of 180 million, catching up after extended outages can be extremely difficult.

"Remote real-time diagnostics and support is one of the features our competitors have been slow to offer. Most of them still don't have this capability. *Service in Seconds*<sup>™</sup> has proven to be a valuable tool in our Integrity Solutions."

Steve Ellis  
Sales Manager  
Document Data Solutions.

Superior Mailing understood the risks associated with unanticipated down time and took steps to minimize the impact. They scheduled their equipment for periodic maintenance,



stockpiled spare parts, and had technicians on site to respond immediately when machines malfunctioned. The DDS systems proved to be extremely reliable. Robert Doyle reported that very few issues came up over the life of the project. And when they did happen, the DDS *Service in Seconds*<sup>™</sup> feature kicked in. Technicians at DDS were able to quickly diagnose problems, fix them remotely, and get the system back up and running. This type of servicing functionality had a positive effect on the up-time statistics and kept servicing costs to a minimum.

All those productivity measures really paid off. Superior Mailing Services even finished the work early; quite an accomplishment for a job of this size.

### **A Satisfied Customer**

By all accounts, the 2010 census was an outstanding success. The Census Bureau considers it to be the most efficient census efforts in history. More households than ever returned the initial survey, thanks to some pre-census mailings and a public awareness campaign. But just as with any mailing job, the material has to be accurately processed and delivered to the right recipients at the right times to be effective. Superior Mailing, DDS, and the other entities involved all played a part in making that happen.

In 2010 there were fewer re-mails than anticipated, excellent citizen response, and fewer in-person visits by census workers than in other census years. By completing the census efficiently and early, the Census Bureau finished the project under budget. They returned \$1.6 billion of their budgeted allocation to the treasury.

### **What Comes Next?**

Superior Mailing made a big investment in hardware, software, and facilities to enable them to meet the rigorous requirements of the 2010 census mailing. The project consumed most of the company's resources and attention for a considerable amount of time. So what does an organization do after it's all over?

"The US Census project is a part of every sales presentation now," says CEO Doyle, "It's a great story to tell, an effort familiar to everyone, and demonstrates our ability to tackle even the most demanding jobs. Demonstrating the trust of the Federal Government is a pretty strong sales tool!"

At Superior Mailing Services, all that technology they acquired for the census job is being put to good use. Document Data Services converted the census-specific software into versions more applicable to normal mailing jobs, enabling Superior to add support for more complex applications to their list of services. The addition of extra cameras allows the company to pursue jobs that require matching. The hardware and software investments have opened up more markets and helped Superior mailing land some new accounts.

### **ABOUT DOCUMENT DATA SOLUTIONS**

The census project wouldn't have been such a huge success without the innovative and efficient products and services provided to Superior Mailing Services by their partner, DDS. Other organizations can also benefit from implementing products such as *iDataScan*<sup>™</sup>, *iDataRepair*<sup>™</sup>, and *iDataTask*<sup>™</sup>. As mailing jobs become more complex, and the requirements for privacy, security, and accuracy more demanding, mailers are looking for automated solutions to help them prepare for the future. For more information about DDS products, *Service in Seconds*<sup>™</sup>, and custom solutions, visit [www.dds-usa.com](http://www.dds-usa.com).