

Scan Orders, Save Money



By integrating mail extraction and document imaging technologies, this catalog company accelerated order entry 80% and cut costs \$500,000 a year.

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By Ken Congdon

Many argue that the rise of e-commerce will soon make the mail order catalog a thing of the past. Try telling that to Gary Porto, VP of operations for Dr. Leonard's Healthcare Corp. Dr. Leonard's produces two mail order and online catalogs, the Dr. Leonard's healthcare catalog and Carol Wright Gifts. These catalogs specialize in health and home comfort products such as air purifiers, blood pressure monitors, and nose hair trimmers. While Porto agrees that Web orders are the most efficient — allowing a customer order to be automatically downloaded to a company's mainframe — he feels the day when the Internet completely replaces the mail order is still a long way off.

"We only get about 10% of our orders through the Web," says Porto. "We take nearly 40% over the phone, but the majority of our orders are still received in the mail. Most of our clients are senior citizens, and the majority of this demographic has not kept pace with the technology curve. Many don't own a computer and have never even been online. This group is most comfortable placing orders by mail." According to Porto, senior citizens are also fond of prepaying their orders with a check, rather than using a credit or debit card. Dr. Leonard's receives thousands of mail order forms and checks each day at its Edison, NJ mailing facility.

From the company's inception in 1975 until June 2004, all mail orders were processed manually. Each envelope was opened by hand in the mailroom and batched in groups of 50. These batches were assigned a number in the company's mainframe system and then

distributed among more than 30 customer service agents. These agents would manually key the information contained on each of the order forms within an assigned batch into the mainframe database. Dr. Leonard's introduced Model 51 Rapid Extraction Desks from OPEX Corp. into the process in 1993. This reduced some of the manual labor involved by automatically opening envelopes and extracting the documents. However, it wasn't until 2003 that the company seriously started to investigate the benefits that document imaging and automated forms processing could provide.

IDENTIFY MAIL-FRIENDLY SCANNING HARDWARE

"On more than one occasion, we considered scanning technologies as a way to boost our efficiency and productivity," says Porto. "However, we weren't confident that the scanning equipment on the market at the time would effectively transition from 8 1/2 x 11-inch order forms to 3 x 6-inch checks in a single pass. When OPEX unveiled its scanning device, we decided to revisit the technology."

Dr. Leonard's already owned OPEX mail opening equipment, and the vendor's AS3600i scanning module was designed to be built into the Model 51 Rapid Extraction Desk. This configuration allowed mail to be scanned in-line as it was opened (see sidebar below), reducing the labor and errors often encountered when scanning multiple document types. Porto and members of his team visited OPEX's Moorestown, NJ headquarters to participate in a hands-on demonstration of the system. "Following the product demo, we felt that we could use the system to accelerate our order entry process from 60 to 90 orders an hour per agent, but first we had to revamp our order form." At the time, Dr. Leonard's used a free-field format for its order form. This form simply provided lines for each field or category such as name, item number, quantity, and price. Dr. Leonard's needed to redesign its order form so that it was structured for information to be easily captured from the scanned image. This entailed creating boxes for each letter or numeral in a given field to be entered. This format helps the scanner identify the designated areas of the form where important information is located.

USE A PILOT SYSTEM TO JUSTIFY A SCANNING INVESTMENT

A mere product demo wasn't enough for Dr. Leonard's to make a full-fledged investment in scanning technology. The company would require six complete OPEX systems to process the influx of order forms it received every day. Porto wanted to make sure the benefits Dr. Leonard's gained would be well worth this significant investment.

Once the order forms were redesigned, the company hired systems integrator CPT to install one system to prove the concept, while limiting Dr. Leonard's exposure in terms of expense. This system consisted of an OPEX Model 51 Rapid Extraction Desk, an OPEX AS3600i scanner, OCR for AnyDoc software, and integration with the company mainframe. "We processed about 3,000 orders each day on this pilot system and ran it in parallel with our existing manual processes," says Porto. "Running the system in our own environment, using our actual orders, allowed us to gain a better perspective of how the system would perform. Through this process, we realized that our initial labor savings estimates were conservative at best."

ONE-TOUCH ORDER ENTRY WITH FORMS PROCESSING

Using the new OPEX systems, mail orders are automatically opened and fed through the scanning device where data fields (i.e. order numbers, item numbers, dollar amounts) are extracted by the OCR software. As the machine scans each document (order forms and checks), it automatically counts out groups of 50 and assigns a batch number to each group. Once a batch contains 50 orders, it is automatically closed, and all document images and extracted data fields are placed on a server and presented to a Dr. Leonard's agent so the transaction can be completed.

Instead of having to type out all the information contained in every field of an order form, the agent now only needs to verify that the information collected by the OPEX system is correct. For example, the system identifies the item number on an order form as 12345 and introduces that number to the mainframe system. If the order number actually is 12345, then all the agent has to do is hit enter to verify that number. If the system is wrong (which is less than 10% of the time), then the agent must make the appropriate corrections to the number. This process holds true for all fields on the order form.

A customer account number is also preprinted on every catalog order form. When the system identifies this number, it automatically pulls the customer account record from the mainframe database and presents it to the agent at the time of order verification. Prior to the OPEX implementation, the Dr. Leonard's agent would have to manually enter the number and search the database to pull the record.

FORMS PROCESSING EXCEEDS PRODUCTIVITY EXPECTATIONS

Installing the six OPEX forms processing systems wasn't cheap. The total investment was just under \$500,000. But Dr. Leonard's did its homework. The savings demonstrated by its pilot system suggested that the project would pay for itself in less than 18 months. These figures weren't entirely accurate.

Initial expectations were that Dr. Leonard's would accelerate the order entry process from 60 to 90 orders an hour per agent. The company actually bettered that estimate by 20. Agents are now processing 110 orders an hour on average, a productivity boost of more than 80%. "We estimate we are saving \$2,000 a day in labor costs as a result of the forms processing system," says Porto. "This translates to annual savings of more than \$500,000, so the system will actually pay for itself in less than 12 months."

The OPEX system also resulted in some unexpected customer service benefits. "We have increased the availability of the customer's order to our agents through use of the forms processing system," says Porto. "When a customer called with a question about an order, our agents used to have to hang up, go to a file room and locate the paper order form, and call the customer back to resolve the issue. Now the agent can access the order form from their computer terminal while they are on the phone and resolve the issue during the initial call." While success of the forms processing systems has been undeniable, some challenges still remain. For all the automation benefits gained, Dr. Leonard's continues to manually encode the checks included with each order. Each check is still run through an NCR encoding machine, and the check and account numbers are still keyed into the

system. Dr. Leonard's is currently investigating ways to include check encoding in the verification process it runs for each order form.

SIDEBAR



In-Line Scanning Addresses Labor, Error Concerns

Dr. Leonard's Healthcare Corp. considered, but decided against, introducing scanning technologies into its order entry process on more than one occasion because the company didn't feel the technology was efficient enough for mail order processing. "Most of the scanning hardware on the market operated independently of mail extraction equipment," says Gary Porto, VP of operations for Dr. Leonard's. "Forms had to be taken from the mail extraction equipment and fed by hand into a secondary scanning device. Our orders consist of a check and order form that must be kept together in order to complete the transaction. Moving these documents from device to device introduced a degree of human error to the process that we weren't comfortable with."

Furthermore, during the mid-'90s, when Dr. Leonard's initially considered scanning as an option, much of the hardware on the market didn't scan different document types or sizes effectively in one pass. For example, a batch of mixed documents would have to be sorted and bar-coded separator pages would have to be placed between each different document type so the scanner could calibrate itself to distinguish an order form from a check. This sorting process was labor intensive and negated the productivity benefits gained from order entry automation.

Dr. Leonard's found the product it had been waiting for in the OPEX AS3600i. This scanner is designed to be used in conjunction with OPEX's Model 51 mail extraction equipment. The Model 51 Rapid Extraction Desk opens all of the mail and automatically feeds the contents through the scanning device. The system scans all transaction types (i.e. order forms, checks, lists) in-line, without the need for presorting or separator sheets, reducing the risk for error and the amount of labor involved in the scanning process.

Forms Processing Streamlines Storage

Before Dr. Leonard's Healthcare Corp. began using its forms processing systems, it kept hard copies of all the paper order forms it keyed into the mainframe database in a file room for three months. Since the company has implemented the forms processing solutions from OPEX Corp. and systems integrator CPT, the retention period for these paper documents has been reduced to three weeks. All order form images are now saved as TIFFs and kept online on a Dell PowerVault NAS (network attached storage) device. These images are always available and can be accessed by any customer service agent with access to the network. The company's plan is to keep a year's worth of images online and back up the rest to tape for off-site storage at Iron Mountain, a records management storage organization. Dr. Leonard's performs system backups at the close of each business day. Daily backup tapes are rotated every three weeks, while monthly backup tapes are stored at Iron Mountain forever for disaster recovery purposes.