

R

S

A

## APPLICATION STUDY

## McGraw-Hill Education writes new chapter for shipping labels

It doesn't look like a traditional business case study. But according to Michael Flowers, computer operations manager for McGraw-Hill Education, producing shipping labels can serve up some valuable lessons about how to run a successful business.

"Our shipping labels can be complex," admits Flowers. "We may print several kinds of bar codes, numerous fonts and variable data all on the same label. It takes several pages of code to create each label page."

And even though they're complicated, these labels have to be generated on schedule, no matter what. "When it gets as busy as we get during our peak seasons, nothing can go wrong," he says. "Nothing."

Founded in 1888, The McGraw-Hill Companies is a global information services provider for financial services, education and business information markets through brands such as Standard & Poor's, Business Week and McGraw-Hill Education. With sales in 2000 of \$4.3 billion, McGraw-Hill has more than 300 offices in 32 countries including almost 1,700 employees in 17 countries throughout Europe and nearly 1,000 in the United Kingdom.

Within the organization, McGraw-Hill Education is the company's fastest growing division. From pre-school to post-graduate courses, McGraw-Hill Education publishes everything from textbooks to CD-ROM to online educational tools.

### Moving Metacode applications to PostScript

When McGraw-Hill acquired Tribune Education last year, Flowers and his colleagues decided that, with the additional new business, it was time to upgrade the division's print systems. The primary target was to upgrade their old channel attached printers located in the McGraw-Hill Education's distribution sites at Desoto, Texas and Dubuque, Iowa, and add printers at the Columbus, Ohio and Grand Rapids, Michigan locations. New printers are also planned for the Ashland, Ohio later this year.

"We were looking for a printer that would get us into a LAN environment where we could use TCP/IP to transmit data," he explains. "So we decided we wanted to upgrade."

Located at the Columbus facility, Flowers is responsible for overseeing production systems and applications running on the division's IBM OS 390 mainframe-including the all-important shipping labels.

The challenge: how to deal with the code for creating McGraw-Hill Education's shipping labels, which had been devised more than a decade ago using native Metacode.

The solution: M.I.S. Print from Rochester Software Associates, a software tool that automatically converts legacy print data streams-including DJDE, XES and Metacode-to PostScript or PDF.

"Even before we got started, I remember talking with an RSA representative at DocuWorld," recalls Flowers. "We discussed how M.I.S.Print handled the conversion process. It sounded interesting. So this year, when we were presented with the opportunity to upgrade our print systems, our printer vendor representative also recommended M.I.S. Print. We did some additional research and decided that this was the best approach to our situation."

Before, operators were forced to manually start every shipping label print job with a unique JDE/JSL. In addition, each print job required the operator to physically ensure the proper paper was loaded in the trays.

Even with the division's qualified operators, the process provided room for error something the distribution centers could not afford, especially during peak seasons.

*"If labels come in and they need the ship forms and yellow separators already loaded in trays one and two, the job will just start printing without operator intervention, the only time our operators get involved is if the tray needs to be refilled."*

Michael Flowers,  
Computer Operations  
Manager

#### Rochester Software Associates, Inc.

69 Cascade Drive  
Rochester, New York  
14614

Main 585.262.2690  
Fax 585.262.4808  
E-mail [RSAinfo@rocsoft.com](mailto:RSAinfo@rocsoft.com)  
Web [www.rocsoft.com](http://www.rocsoft.com)



R

S

A

## APPLICATION STUDY

"Last summer, the warehouse here in Columbus, Ohio, averaged \$9 million per day going out the door," recalls Flowers. "Our college business runs quarterly. But K-12 is different: it runs from April through May for orders, and then June through mid-September for shipping."

Further complicating matters is the fact that school districts may require McGraw-Hill Education to ship textbooks within a narrow timeline. "We get a lot of orders in which the school will say, 'Please don't ship until July 1, but if I can't have it by July 6, don't deliver it,'" says Flowers.

### Making it simple

Fortunately, M.I.S. Print automates the entire print process. As an integrated software solution running on the print controller, M.I.S. Print examines the contents of the job's banner page for a field, which tells M.I.S. Print which start command to use. Based on this start command, proper PostScript requests are inserted into the output file, guaranteeing that the proper stock is used.

"If labels come in and they need the ship forms and yellow separators already loaded in trays one and two, the job will just start printing without operator intervention," says Flowers. "And when it's done, if the next job calls for three-hole paper and we've got that stock in tray six, it'll just take off and print. "The only time our operators get involved is if the tray needs to be refilled," he adds.

Although it's too soon to quantify improvements, Flowers already sees real time savings. "Even if the operator isn't in the room, the job keeps running," he says. "I recently visited our Desoto, Texas center. In the past, first and second shifts would arrive at 5 a.m. and 11 pm respectively, to begin handling shipping label print jobs. With the new system, a lot of what they have to print is already done when they arrive. What used to take up hours of their workday is already sitting in the output trays. That's a real productivity boost for us."

Another advantage is M.I.S. Print's ability to dial up remotely to make modifications and update resources on all of the printers with the "replicate" feature. "That's been a great benefit," says Flowers. "As we installed the new equipment, we were able to work everything out on one machine then download software already converted and tested into the other machines." Once the master printer is updated, M.I.S. Print allows the user to synchronize the other printers with updates—a clear improvement over having to update and maintain resources at each printer.

### Reliable, faster

During the installation process, RSA's customer support proved noteworthy. "I'm impressed by the software," says Flowers. "I'm impressed with the support I got. They were very knowledgeable about what needed to get done. We don't have a lot of applications, but what we do have is very complex. When we brought the first install in-house here in Columbus, we worked closely with RSA to work out all the kinks before proceeding at our other locations. If something needed to be fixed, RSA almost always got back to me within one day."

For Flowers, however, the most significant benefit is getting a state-of-the-art print system for what they were paying for their outdated equipment. "I have brand new equipment within pennies of what I was paying to maintain ancient machines," he notes. "We have new technology without the major cost. It's more reliable. It's faster. And it doesn't cost me any more money."

M.I.S. Print proved a useful part of the new system. "This was our solution to avoid a major programming overhaul," he continues. "M.I.S. Print allowed us to keep doing what we're doing on the mainframe."

As for future plans, "I can see us moving into a more on demand environment for some of our print areas," says Flowers. "And M.I.S. Print will continue to be able to help us there."

#### Rochester Software Associates, Inc.

69 Cascade Drive  
Rochester, New York  
14614

Main 585.262.2690  
Fax 585.262.4808  
E-mail [RSAinfo@rocsoft.com](mailto:RSAinfo@rocsoft.com)  
Web [www.rocsoft.com](http://www.rocsoft.com)

*With the new system, a lot of what they have to print is already done when they arrive. What used to take up hours of their workday is already sitting in the output trays. That's a real productivity boost for us."*

Michael Flowers,  
Computer Operations  
Manager