



A Case of Production Whoas

MARLA MISEK

Headquartered in Secaucus, New Jersey, Northstar Travel Media, LLC (formerly Cahners Travel Group) is a business-to-business media company that serves the travel and hospitality industry—specifically, travel agents, corporate travel planners, and meeting planners. The company's portfolio of print and electronic products includes a dozen market news and travel information publications, directories, and destination Web sites. Its largest hotel directory, the *Hotel & Travel Index (HTI)*, is a four-color, 1,500-page compilation of more than 41,000 hotel listings from around the world, published quarterly. www.ntmlc.com

BUSINESS CHALLENGE

On December 31, 2003, the company that owned the code behind the proprietary layout and composition system that Northstar had been using to produce its heavily illustrated *HTI* informed Northstar that it no longer would be supporting the software. Northstar's immediate challenge, according to production director Roberta Bianchi Muller, was to find a vendor that could "produce the index as we knew it." The company also wanted to streamline the production of its other directories, which were operating on various "antiquated" systems. "One system, one efficient process was the goal," she says.

VENDOR OF CHOICE: THOMAS TECHNOLOGY SOLUTIONS

The origins of Thomas Technology Solutions date to the early 1960s, when a company called 707 Yorkway produced the first trade directory that was compiled, composed, and typeset entirely from a database. Four decades (and three name changes) later, Horsham, Pennsylvania-based ThomasTech provides systems integration, enterprise content management, and publishing services to traditional and nontraditional publishers. Customers such as the British Library, Chemical Abstracts Service, and *EContent* publisher Information Today rely on ThomasTech "to acquire and standardize their content, edit and manage it, and then publish it in print or online," says Jeff Catt, ThomasTech's VP of sales and marketing. "We've built our own databases and we've built our own publishing systems," adds business development manager Eileen Colahan, "so we have experienced the pain of content production from both sides." www.thomastechsolutions.com

THE PROBLEM IN DEPTH

Established in 1939, the HTI provides key facts about hotels and motels, organized by destination, to nearly 48,000 travel professional

Company: NORTHSTAR TRAVEL MEDIA, LLC

The screenshot displays the 'HOTEL & TRAVEL INDEX CLASSIFICATION SYSTEM' with various hotel categories and a map of the Orlando area. The classification system includes:

- EXCLUSIVE DELUXE:** An exclusive, expensive luxury hotel offering the highest level of personal service.
- DELUXE:** An outstanding, expensive, luxury property offering many of the same features as a Superior Deluxe and in many instances may be just as satisfactory.
- MODERATE DELUXE:** Basically a Deluxe hotel, but frequently more heavily frequented by business clients or groups.
- SUPERIOR FIRST CLASS:** An above average First Class hotel with some outstanding features and a broad range of services.
- FIRST CLASS:** This is the full service hotel standard.
- LIMITED-SERVICE FIRST CLASS:** A property offering full first class comfortable, quality accommodations, but limited public areas, dining and facilities.
- MODERATE FIRST CLASS:** Essentially a First Class establishment with comfortable but sometimes simple accommodations.
- SUPERIOR TOURIST CLASS:** Primarily a mid-market economy hotel.
- TOURIST CLASS:** A property for the budget traveler providing basic room amenities, but few services.
- MODERATE TOURIST CLASS:** A budget property with a no frills approach, providing basic accommodations for the traveler.
- UNCLASSIFIED HOTELS:** It is the policy of the Hotel & Travel Index Classification System to classify hotels based on a comprehensive body of information encompassing a selection of reliable sources and contacts.

The map shows the Orlando area with various hotel locations marked. A sidebar on the right lists hotel details for Orlando and Kissimmee Springs.

The automated layout and composition process Thomas Technology Solutions developed for Northstar Travel Media's Hotel & Travel Index adheres to a complex set of "business rules" that dictate how and where information (such as area maps and filler ads) should be presented.

subscribers worldwide. Since 1990, Northstar had produced the directory (which includes roughly 2,100 maps and ads) using a custom-built layout and composition system that incorporated dozens of "business rules" dictating "where ads are positioned on the page, where maps are placed, where city heads appear, and so on," Bianchi Muller explains. "The rules were very specific to the layout of the directory," Colahan adds, "so when the vendor stopped supporting the software, Northstar was faced with the challenge of moving into a more open composition environment."

Immediately, Northstar brought all of the COBOL code behind the proprietary system in-house. "We coasted for awhile, hoping we could learn enough of the code to create some workarounds and not change the product," Bianchi Muller says, but production personnel

soon realized they lacked the IT expertise to maintain the large areas of the system that handled the content rules. In addition to considering the advantages and disadvantages of outsourcing its composition process, Northstar began investigating off-the-shelf software packages to see if any of them could retain the look and feel of the product to which users were accustomed. “We knew we either were going to have to spend \$500,000 to \$750,000 to write a new customized system or purchase an existing solution and give a little on some of the business rules we were using,” Bianchi Muller says.

THE SOLUTION

It was at this point that Northstar turned to ThomasTech for guidance. “Years ago, ThomasTech designed and maintained an order-entry application for us that housed all of our HTI database content on a mainframe,” Bianchi Muller says. “Eventually, we wrote a SQL-based Web browser application that enabled us to manage the content ourselves, so we stopped working with ThomasTech. When we found out our system was no longer supported, we sought their input because we had that history with them and we knew they were well respected in the publishing industry.”

Together, the companies brainstormed options and quickly agreed that writing a new layout and composition program wasn’t viable. They opted instead to evaluate off-the-shelf solutions to see, as Bianchi Muller describes it, “how close the products could come to satisfying our requirements, how much they would cost to implement, and what business rules we would have to give up.” As part of this effort, Northstar sent to several vendors a “Statement of Work” document detailing 89 requirements the ideal solution should meet. Over a three-month period, Bianchi Muller says the company considered proof-of-concept proposals submitted by CRW Graphics, Kytex, Miles 33, RR Systems, and XyVision Enterprise Solutions. ThomasTech also submitted a proposal recommending XyEnterprise’s XML content management and enterprise publishing tools and offering its own support services.

Bianchi Muller says XyEnterprise was “the only solution that came close” to satisfying Northstar’s needs. “We initially were going to try to implement the product on our own,” she says of the solution that Reed Elsevier, Northstar’s former parent company, also uses, “but you need a dedicated programmer to maintain it, and we didn’t have that resource in-house.” So instead, Northstar hired ThomasTech in April 2004 to handle the setup and ongoing maintenance of XyEnterprise. “We chose ThomasTech because the application it recommended had a proven track record, its proof-of-concept met our needs, and its pricing was phenomenal.” (Both sides declined to disclose the figure.) “We also believed ThomasTech could help us speed up the time it took to produce the directory”—a key consideration, she says, given the volume of products Northstar generates each year.

Over the next 11 months, the companies incorporated HTI business rules into a fully automated and accelerated electronic composition process; created new data preparation and approval processes; wrote new layout and extract rules; communicated to sales staff the product features the new system couldn’t accommodate; and conducted extensive testing. “We had to give up a few custom layout rules, and the

look and feel of the directory is a little bit different,” Bianchi Muller says of the compromises the new workflow demanded. Ultimately, the company found this to be a relatively small inconvenience when balanced against time and cost savings: A layout process that once took eight days to complete now takes less than two hours.

Live since March 2005, the new system allows Northstar to manage directory content in an on-site SQL Server database. When it’s time to produce the next issue, Northstar extracts all ads, maps, and legends from the database for placement in an FTP directory, which is then pulsed every 15 minutes by ThomasTech software to download new files. (The process runs from 8:00 p.m. to 6:00 a.m. so the Northstar Web site isn’t impacted during peak business hours.) Various programs developed by ThomasTech validate image sizes and file names, conduct preflight checks, and convert images from PDF to EPS format. The system rejects files containing errors and automatically notifies Northstar via email of problems requiring resolution.

Once this is done, Northstar again extracts the data listings for placement in the FTP directory, which is pulsed, downloaded, and processed using ThomasTech programs for data validation and manipulation, image validation, copyfitting, business rule processing, and mapping to composition styles. These programs then pass the final data to XyEnterprise for automated page layout, map and legend placement, ad placement, cross-reference processing, and index generation. Scripts grab the completed PostScript file, convert it to PDF files, and post the print-ready PDFs in the FTP directory, which Northstar editorial personnel then review. If changes are necessary, Northstar again updates the database and posts new extracts to the FTP directory for automated production processing. Scripts once again grab the PostScript files and create single-page, high-resolution PDF files for the printer, which Northstar editorial personnel and advertisers review and approve before the directory goes to press.

THE OUTCOME

According to Bianchi Muller, the production team met in early May to discuss what parts of the new process went well and to identify system modifications and scheduling adjustments that need to be made for future issues. “For the first issue, we kept the same 24-day schedule—from start of extracts through layout and composition of pages to page review and final PDFs—because we were using a new workflow and we wanted to do a full review of all pages,” she explains. Although she says it’s “too soon to judge” the new system’s long-term impact, the majority of her objectives are already being met. “Of the 89 requirements we had, 79% were met completely and 11% were met at 80 to 90%,” she says. “Three percent were met at 50% and required some additional programming by us, and the remaining 7% were not met and required manual intervention after the layout was complete.” Like all technology implementations, there’s room for improvement, but thus far, Bianchi Muller is pleased and optimistic about how this solution will continue to positively impact the company’s processes in the future. ■

MARLA MISEK (MJMNO1@AOL.COM) IS AN EDITOR AND FREELANCE WRITER BASED IN ALEXANDRIA, VIRGINIA.
COMMENTS? EMAIL LETTERS TO THE EDITOR TO ECLETTERS@INFOTODAY.COM.