# TECHNOLOGY *Touches* LIV

## THE 2004 COMPUTERWORLD HONORS NOMINEES FROM SYBASE HAVE ALL WORKED TO BENEFIT SOCIETY

▷ BY **ANA M. HAYS**

**F**OR 16 YEARS, the Computerworld Honors have recognized IT innovators and pioneers for their outstanding achievements and cataloged stories illustrating how information technology has benefited society. For the 2004 Computerworld Honors, Sybase has nominated 17 laureates whose compelling stories reveal the daily business challenges that create opportunities to identify and solve unique problems. Following are stories and examples of these talented laureate nominees.

Picture yourself as a hungry child with an uncertain future. Imagine living in an environment where you are at risk of abuse or neglect. Organizations such as the United Nations World Food Programme, in conjunction with the Ecuadoran government, and Manitoba's Child and Family Services, recognize these basic needs of children. With the support of Sybase technology, they improve lives by making information more readily available.

In the case of the Ecuadorian School Feeding Program, a Web site built with Sybase PowerDesigner 9.0 Enterprise Version manages and monitors functions that reduce costs and loss of perishable food. Implementing this technology has allowed the government to provide nearly one and a half million children in marginal rural and urban areas with daily nutritional meals at school, enabling them to become more effective learners.

According to James T. Morris, executive director of the World Food Programme, "Food attracts poor children to school, and education helps break the cycle of poverty. There are few things that are so unnecessary as child hunger or so wasteful as unexplored intelligence."

In Ecuador 45 percent of children under the age of 5 suffer from malnutrition. The School Feeding Program acts as an intervention point for children ranging in age from 5 to 14 and encourages them to attend and stay in school, ultimately decreasing dropout rates. Costing an average of $24 per student annually, the program provides children with meals cooked by parents under the supervision of teachers, 160 days a year.

According to Roberto Pazmiño, systems manager for the project, "This project has been very positive. More children now have the food they require to develop, and their levels of study have increased."

Prior to the Web-based system's inauguration, ordering, distribution, and tracking were managed from a central office, which used an unreliable flat-file FoxPro database with a DOS user interface. Province coordinators called the office, and four data-entry personnel, who updated information that often ended in duplicate orders and errors in records, managed the process via telephone.

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The project selected Sybase PowerDesigner to design a meal distribution program that would serve a widely dispersed population. PowerDesigner quickly united dissimilar technologies into a functional application. It was the perfect tool for a tight budget. "The World Food Programme was astounded at how quickly the team implemented a complicated, yet user-friendly system," stated Pazmiño.

This Web-based solution now houses a nationwide central database for 15,000 schools and saves $1 million annually for the government, which supplies $25 million each year for breakfast and school lunches.

### Safeguarding Kids

To ensure the safety of Canadian children at risk of abuse or neglect and to serve their families, the Manitoba Child and Family Services Information System (CFSIS) provides case information that is readily available, via a secure Internet connection, and improves caseworker responsiveness for service recipients in rural and urban areas of the province.

Manitoba, a province of Canada since 1870, covers 250,946 square miles and has a population of 1.2 million, blending diverse and vibrant heritages. Households are spread over a large geographic area.

Originally launched in the early 1990s, the CFSIS was an early-generation, enterprise-scale client/server application written in PowerBuilder, using Sybase Adaptive Server

## WHY READ THIS?

### FIND OUT:

• What organizations Sybase is nominating for this year's Computerworld Honors

• What they have accomplished to gain their nominations

• How their accomplishments are helping change the world

## Technology Touches Lives

Enterprise for its database. With the signing of a multilateral protocol between the Province of Manitoba, The Manitoba Metis Federation, the Assembly of Manitoba Chiefs, and the Manitoba Keewatinowi Okimakanak, the framework was formed for the Aboriginal Justice Inquiry—Child Welfare Initiative.

Without a way of getting the CFSIS running independently of the Province's private desktop computer network and into the hands of the new service delivery workers, it faced obsolescence. The solution was simple: Put the CFSIS onto the Internet.

The CFSIS's new Secure Internet Services (SIS) portal employs an innovative blend of off-the-shelf security and thin-client access technologies to bring the power of the CFSIS onto the Internet. This portal cost 10 percent of what it would have cost to expand the Government of Manitoba's desktop environment. The online system gives the aboriginal child welfare agencies secure, reliable, encrypted access to CFSIS files from within individual desktop and government network environments.

"In total, the CFSIS database contains 350,000 person records, 173,000 cases, and 352,000 caseworker notes. Approximately 15,000 families, provincewide, are receiving services through the Child and Family Services Information System," notes Brian Konopski, director of information technology for the Department of Family Services and Housing, Government of Manitoba.

"Before the CFSIS information system was available, caseworkers could not always access files or call someone for information," explains Debbie Besant, project manager at Manitoba Family Services and Housing. "With 24x7 access," she continues, "child and family historical information is available before caseworkers go on a call. They now know if a child has been abused or is living with a potential abuser. The key benefit of the CFSIS is that it assists in the safety and protection of children." ■

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## › SYNOPSES of the 15

### BUSINESS AND RELATED SERVICES

**Mobilized Software Initiative.** Spearheaded by Intel, the Mobilized Software Initiative serves as an industry catalyst to take the vision of mobilized software and further stimulate development for innovative mobile-device software. The initiative is setting the stage for a creative transformation in the way global business is conducted.

**Real-Time Enterprise Initiative.** Featuring an Internet architecture by PeopleSoft, the initiative enables organizations to create a business environment in which all participants—including customers, employees, suppliers, and investors—can access and track relevant and current data throughout the entire organization, eliminating intermediaries.

**Wireless Mobile Point-of-Sale Application.** With this application from Hyundai System Integration Co., Ltd., personnel at Hyundai Department Store who are deployed throughout the store with handheld Wi-Fi PDAs embedded with SQL Anywhere can offer customers a high-end shopping experience. Point-of-sale transactions are completed on the floor.

### EDUCATION AND ACADEMIA

**MyCourses Mobile Platform.** Harvard Medical School uses standards-based Web technologies from iAnywhere/Sybase. HMS deployed the MyCourses Mobile platform to enable students to access lecture notes, hospital case logs, animated anatomy illustrations, class and exam schedules, and administrative announcements. Existing handheld devices are transformed into powerful personal learning tools.

**SuccessMaker Enterprise.** Elementary education software developed by NCS Pearson, Inc., allows students to access more than 6,000 hours of language arts, mathematics, and bilingual courses. Proven to raise student achievement scores, SuccessMaker Enterprise employs "intelligent tutor" strategies such as Initial Placement Motion (IPM), which automatically locates each student's starting level and presents appropriate instructional materials.

# other laureates, by category:

## ENVIRONMENT, ENERGY, AND AGRICULTURE

**IntelaTrac Mobile Workflow Management.** SAT/Lyondell-CITGO's refinement of IntelaTrac process-improvement software targets key performance indicators, which lowers overall operations costs. Mobile workflow management technology catalyzes a new focus on proactive and preventive maintenance of oil refinery assets, and field operators can detect most secondary failures entirely. (See page 16 for details.)

## GOVERNMENT AND NONPROFIT ORGANIZATIONS

**Business Intelligence for Tax Collection.** The state of São Paulo Revenue Office implemented a business intelligence solution to fight tax fraud, with the positive effect of improving revenue by increasing tax collection. The data warehouse, based on the Sybase Adaptive Server IQ database management system, supports governmental decision making, the integration of data from several government departments, and the monitoring and selection of taxpayers suspected of fraud.

**Passport Validation.** Pentelar, Inc., developed a highly secure, XML-based validation system that allows multiple government agencies to enhance national security by working together to assure that fraudulent birth certificates used in the passport applications process are recognized. (See page 32 for details.)

**GSA Advantage!** *Forbes* magazine called GSA Advantage!, used by the General Services Administration, the "mother of all digital marketplaces." Government purchasers use this Internet tool to access and schedule more than 6.1 million electronic products, goods, and services through online transactions. All products are bought at "best price" while a diverse playing field for small, disadvantaged, and minority suppliers is enforced.

**For more information about the Computerworld Honors and to view individual company case studies, visit www.cwheroes.org.**

## MEDIA ARTS AND ENTERTAINMENT

**Decision Support System.** Nielsen Media Research employed Sybase IQ to develop a single-source data warehouse solution that analyzes and provides information about viewing trends. The television industry can access data weekly rather than monthly and use it in myriad ways.

## MEDICINE

**Medical Charting Plus.** Medinotes Corporation created an innovative, easy, affordable electronic medical record system for physicians practicing in small specialty settings. Charting Plus is geared to practices having minimal computer expertise and budgets, allowing users to enter and access patient records at the point of care.

**Moment of Care Information Systems (MCIS).** Created by Cogon Systems and powered by iAnywhere Solutions' SQL Anywhere Studio, MCIS puts complete information into healthcare providers' hands in "moment of care" time. The system significantly reduces staff tracking time, and a decrease in adverse patient events potentially saves institutions tens of thousands of dollars per month.

## TRANSPORTATION

**TranStats.** A one-stop-shopping portal system utilizing Sybase IQ, this e-Government initiative from the U.S. Bureau of Transportation Statistics enables its users to save time searching, downloading, and analyzing reliable data in reduced time.

**Wi-Fi Employee Information System.** Handheld PDAs developed by Britannia Airways Limited allow cabin crew members to handle in-flight purchase transactions while simultaneously receiving detailed flight instructions, giving crews more time to focus on enhancing passenger service.

**Unreserved Ticketing System (UTS).** The world's second largest railway system, in India, has 11 million passengers. It enables same-day ticket purchase, eliminating long lines at ticket counters in. The Center for Railways Information System in New Delhi employs a Sybase Adaptive Server Enterprise database and a Sybase Replication Server.