



# THE LAUREATE

THE COMPUTERWORLD HONORS PROGRAM | **2010**

THE LAUREATE

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# THE LAUREATE

Chronicling the 2010 Computerworld Honors Program



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## INTRODUCTION

**The Computerworld Honors Program**, now in its 22nd year, aims to recognize those who create, use and advance information technology for better good in the world today. This year's 151 Laureates are no exception. Nominated by one of the technology companies on the program's Chairmen's Committee, Laureates must complete a comprehensive case study that details their achievement and its significance. These documents then become part of the Honors archive housed at more than 350 educational and government institutions around the world.

All Laureates then undergo a judging process during which IT executives and Computerworld editors review their case studies and rank them in the 10 industry categories that make up the program. These rankings identify five finalists in each industry category, and ultimately one 21st Century Achievement Award winner in each group.

Each entrant, however, has a great achievement to be proud of. Through Honors recognition, all Laureates join an elite group of organizations in the annals of IT history. Congratulations to all listed herein for using technology to make the world a better place.



# SYBASE CONGRATULATES OUR 2010 COMPUTERWORLD HONORS LAUREATES

ASICS  
Baloise Group  
Celcom  
Geokon  
ICICI Prudential Life Insurance Company  
Indian Railways  
IndianOil  
Kindred Healthcare  
Leeds Teaching Hospitals NHS Trust  
McKesson  
mobilkom austria group  
National Grid  
PlayPhone  
Rave Mobile Safety  
São Paulo State Treasury Department (SEFAZ)  
Summit Entertainment  
The Evangelical Lutheran Good Samaritan Society  
Ticketmaster  
United States Air Force  
United States Army and Stanley Associates  
Visy

# SYBASE®

# THE LAUREATES





# Business & Related Services

## Baker Tilly

Crawley, England

### De-risking the Deployment of Windows 7

Early adoption of Windows 7, which led to simplified IT management, an improved end user experience and enhanced staff productivity, enabling the firm to deliver more cost-effective and higher quality services to clients

## CIO - Analytics Center of Competence

Raleigh, N.C.

### Blue Insight

Utility-like business intelligence service from IBM that aims to make BI ubiquitous throughout an organization

*Nominated by IBM*

**FINALIST**

## Clifford Chance

London, England

### Clifford Chance Centralizes Storage Management

Migration from disparate solutions to a Brocade data center backbone to connect two data centers, enabling centralization and consolidation of storage and backup and improved performance for global law firm

## Datotel

St. Louis, Mo.

### Improving Energy Efficiency in the Data Center

Reduction of carbon emissions, improvement of IT availability and cost control through use of CA ecoMeter

## Deloitte Consulting LLP

Philadelphia, Pa.

### Fusion Delivery - Roadmap to IT Innovation

Development of roadmap and other tools to help clients migrate to Oracle's new ERP system, Fusion Applications

## GroundWork Open Source, Inc.

Andover, Mass.

### Accelerate Time-to-Market and Expand Market Opportunities

Quick development of a virtual appliance for network and system monitoring using GroundWork's open source software, through Novell's SUSE [Linux] Appliance program

## MobilKom Austria

Vienna, Austria

### One Source Mobile Payments

Mobile commerce system that allows customers to purchase products and services, pay bills and the like, using their mobile phone

*Nominated by Sybase*

## Papa Ginos

Dedham, Mass.

### Server Refresh and Virtualization

BI application and server consolidation initiative that led to speedier deliveries and a better customer experience

## Practising Law Institute (PLI)

New York, N.Y.

### PLI XChange

Online learning and collaboration service that brings social networking to legal professionals through IBM Lotus software

## Rave Mobile Safety

New York, N.Y.

### Life-saving SMS Alert System

Mobile text message alert solution that allows university administrators to rapidly and effectively transmit emergency messages across the college campus community

*Nominated by XX*

### 21st Century Achievement Award winner

## REJIS

St. Louis, Mo.

### Web-enabled Grant Management System

Automated grant management solution that helps agencies in the grant application process by providing functions from application creation and review to award distribution and administration

## Savant Protection, Inc.

Hudson, N.H.

### Application Whitelisting

Lincoln County Montana A whitelisting solution that lets small decentralized organization improve security, stop malware and eliminate the need to rebuild compromised computers

## Sendmail, Inc.

Emeryville, Calif.

### Email Backbone Modernization and Smart Appliances

Message security appliance that provides unified solution for policy-based message handling and routing

*Nominated by Morgan Stanley*

**FINALIST**

## Serco

Bournville, England

### End to End Infrastructure Management Services

Implementation of an IT infrastructure services model that enables world class IT operations, process innovation and the ability to achieve higher performance benchmarks, while continuously reducing costs

## Symantec Corp.

Layton, Utah

### Masterdata Transformation

Implementation of Oracle Product Data Hub to enhance SKU functionality and integrate pricing into a separate hub system

## Virtual Agility, Inc.

Winchester, Mass.

### Virtual Agility's Missouri Public Safety Enablement

Browser-based system, Virtual Agility OPS (Operations, Planning, Sharing) Center, that helps emergency response groups coordinate response efforts to disasters

*Nominated by Morgan Stanley*

**FINALIST**

## Zyme Solutions

Redwood Shores, Calif.

### Channel Data Management Initiative

Data analysis software that lets clients assess market dynamics, minimize financial exposure and make data-driven decisions

# Education & Academia

## Beech Grove City Schools

Beech Grove, Ind.

### Cloud Computing and Virtual Clients Increase Graduation Rates at Beech Grove City Schools

A technology infrastructure redesign that slashed maintenance costs, improved teacher access to computers and provided students access to online credit course recovery programs, leading to higher graduation rates

*Nominated by Wyse*

**FINALIST**

## Centre for Quantum Technologies

Singapore

### High Performance Virtualized Storage System

Virtualized, networked storage infrastructure in Singapore's academic community that gives each client their own environment native to his or her research applications, frictionless information access and support for unpredictable, data-intensive usage

## Coppin State University

Baltimore, Md.

### Enhanced 911 for Public Safety Effectiveness and Efficiency

Campus-wide, enhanced 9-1-1 system that delivers precise emergency response locations to 9-1-1 calls plus alarms that enable first responders and select staff to respond quickly

### DEAFinitely Connected: Bridging the Language Divide with Telecommunications

Videoconferencing system that allows access to telecommunications for hearing impaired students, fostering development of communication and social skills

*Nominated by Tandberg*

**FINALIST**

## Herzenberg Laboratory

Stanford, Calif.

### Advancements in FACS System for Clinical Studies

System that enables modern therapeutic practices including HIV monitoring, leukemia diagnosis, bone marrow transplantation and stem cell therapies

## Historic Map Works

Westbrook, Maine

### Historic Map Works

Company that digitally restores, protects and preserves geographical information for generations to come, offering access to the largest online collection of historical resources including antiquarian world maps, atlases and centuries of cartographic information

## Kentucky Community and Technical College System

Versailles, Ky.

### KCTCS Safety Notification Alert Process (SNAP)

Notification system, using Cisco's Notifi-ED unified communications network, that can reach students, faculty and staff, regardless of location, in seconds, resulting in efficiency and safety during an emergency

## Kentucky School for the Deaf (KSD)

Danville, Ky.

### DEAFinitely Connected: Bridging the Language Divide with Telecommunications

Videoconferencing system that allows access to telecommunications for hearing impaired students, fostering development of communication and social skills

*Nominated by Tandberg*

**FINALIST**

**Leeds Teaching Hospitals NHS Trust**

West Yorkshire, England

**The Chapel Allerton RFID Solution**

Addition of radio-frequency identification (RFID) solution to e-procurement system and catalog for hospital equipment, keeping patients, doctors and delicate medical procedures organized

*Nominated by Sybase***FINALIST****Mobile County Public School System**

Mobile, Ala.

**Student Performance Excellence**

A data analysis system that monitors the entire academic lifecycle of each student, identifies students "at risk" and allows educators to adjust academic programs in real-time

*Nominated by IBM* **21st Century Achievement Award winner****Rochester Institute of Technology**

Rochester, N.Y.

**Academic Reporting and Analysis Initiative**

Initiative to quickly create central repositories of information for academic decision makers, enabling access to consistent, reliable and accurate data faster than before

*Nominated by Informatica***FINALIST****Université de Montréal**

Montreal, Canada

**Momentum**

Project to upgrade the university's voice and data network that enables use of more diverse, innovative networks and tailoring of bandwidth to certain groups, providing support for a wide range of academic and research environments

**University of Canberra**

Bruce, Australia

**Experiential Services on an Integrated Platform**

Integration of application, infrastructure and business process outsourcing that has resulted in faster identification and resolution of problems, leading to a better service availability for staff and students

**University of Georgia College of Pharmacy**

Athens, Ga.

**The Right Prescription for Distance Education**

Videoconferencing distribution software that lets students download and stream content to both their computers and mobile devices for a more synchronous educational environment

**University of Pittsburgh**

Pittsburgh, Pa.

**Enterprise Security Controls in the Academic Enterprise: Central Email, Web Services and Network-based Firewalls**

Information security initiative that provides the central management and flexibility needed to support university community, while virtually eliminating compromised email and web servers and significantly reducing the number of compromised computers

**Environment, Energy & Agriculture****Calpine Corp.**

Houston, Texas

**Project Phoenix**

Reorganization of the CFO organization and its business processes to better align and utilize resources and replace old IT systems

**DC Water and Sewer**

Washington, D.C.

**DC WASA Platform for Spatio Temporal Analytics**

Use of predictive and advanced spatial analytics to deliver near real-time information to predict potential problems based on location, time, weather and maintenance and assist in critical infrastructure planning

*Nominated by IBM***FINALIST****Foundation e-laad.nl**

Duiven, Netherlands

**Chargepoint interactive Management System (CiMS)**

Project to create and manage a national grid of charging stations for electric cars plus establish European standards for same

*Nominated by Logica* **21st Century Achievement Award winner****Geokon**

Rodovre, Denmark

**GeoEnviron**

Database that includes an automated system for managing technical environmental data together with administrative data for case handling, work planning and quality assurance

*Nominated by Sybase***FINALIST****IndianOil**

Mumbai, India

**Centralized Data Warehouse**

Project that consolidates and centralizes data from disparate sources across India, efficiently capturing every transaction and allowing for a quick and easy view of customer behavior and other information that can assist in forecasting customer need

**National Grid**

Melville, N.Y.

**Field Technician Application**

Application that coordinates work of field service crews, maximizing their efficiency and improving emergency response time and customer satisfaction

*Nominated by Sybase***FINALIST****RENCI**

Chapel Hill, Ore.

**Cluster Upgrade**

Implementation of new processors that, together with innovative forecasting techniques, provide faster and more accurate weather predictions, enabling better regional preparation for severe weather

**Swiss Office of Energy/EnDK**

Chicago, Ill.

**Swiss Government Creates Certificate to Rank Energy Efficiency in Buildings**

Energy Certificate that ranks buildings and homes according to energy consumption, to improve Switzerland's carbon footprint and energy efficiency

*Nominated by Keane***FINALIST****TXU Energy**

Dallas, Texas

**ROMP V Retail Operating and Marketing Platform**

SAP-based, integrated solution that manages all customer interactions and transactions, resulting in improved service levels, reduced customer churn, higher customer acquisition and faster time to market for new products

**University of California at Irvine**

Irvine, Ore.

**ATLAS Experiment**

A particle physics experiment that uses CERN's Large Hadron Collider, the world's largest and most powerful particle accelerator, and is expected to lead to new applications in medicine, industry, commerce and other fields

**Vaisala**

Philadelphia, Pa.

**Wave Program (Oracle EBS ERP Implementation)**

ERP implementation that has resulted in visibility across the supply chain, for improved manufacturing processes and greater customer satisfaction

**Finance, Insurance & Real Estate****Addison Avenue Federal Credit Union**

Palo Alto, Calif.

**A Silicon Valley-based Credit Union Maintains its Competitive Advantage with Secure Online Banking**

System that offers layered, risk-based authentication and fraud prevention capabilities, providing a convenient, secure way to do business long-distance

*Nominated by VeriSign***FINALIST****Baloise Group**

Basel, Switzerland

**Strategic Mobility Self Service Portal**

Self-service portal located within the company's intranet that enables employees to synchronize mobile devices with corporate systems and data

*Nominated by Sybase***FINALIST**

**BLADE Network Technologies**

Santa Clara, Calif.

**MS Net 2.0**

Provider of technology, including top of rack switches, to project that provides best-in-class MPLS capabilities to Morgan Stanley for a lower cost of ownership than other offerings

**Celcom**

Kuala Lumpur, Malaysia

**AirCash**

Initiative that enables Celcom subscribers to transfer money, make payments and purchases, and reload their prepaid airtime in real time with their mobile phone

*Nominated by Sybase***FINALIST****Clarity Systems**

Toronto, Canada

**Project Phoenix**

Technology implemented at Morgan Stanley for data capture and reporting across the company's business units

**Corvil**

Dublin, Ireland

**Next Generation Market Data Plan**

Latency management system at Morgan Stanley that monitors, analyzes and optimizes market data plants in New York and London

**Credit Suisse**

New York, N.Y.

**CS Equities REAP (Rapid End-to-End Automation Program)**

Automation and tool development program for quality assurance of software development, leveraging the onsite-offshore model

**CS STARS LLC**

San Francisco, Calif.

**Risk Goggles**

Introduction of map-based visualization features in STARS' risk management information system, which allow users to quickly identify and analyze events that can impact business performance

**Denizbank (Dexia Turkey)**

Istanbul, Turkey

**Core Banking Infrastructure**

Fully web-based, integrated banking platform that links enterprise marketing strategy to core banking processes, allowing banks to align services with customers' needs and expectations

*Nominated by HP* **21st Century Achievement Award winner****Grupo Bancolombia**

Medellín, Colombia

**Innova (Treasury unit)**

Implementation of a front-to-back trading platform to capture, manage and settle positions on financial products, manage portfolios from a market risk perspective and control credit risk and compliance requirements

**ICICI Prudential**

Mumbai, India

**Innovation in Information Systems**

Creation of a data warehouse to ensure a single version of the truth, plus data marts for each business unit so each can generate its own analytical reports

**ING**

West Chester, Pa.

**ING Testing Center of Excellence**

Creation of an independent and centralized quality assurance organization to provide a good and consistent customer experience through reliable IT processes

**Kapow Technologies, Inc.**

San Francisco, Calif.

**Real-time Web Data Services Fuel Evidence-Based Research**

Implementation of Kapow Web Data Server at Morgan Stanley to allow Evidence-Based Research team to access, transform and deliver quality Web data to publish customized information reports for customers

**KX Systems, Inc.**

Palo Alto, Calif.

**kdb+**

Fast, scalable database that supports the trading and analytical requirements of financial services companies

**Lloyds Banking Group**

London, England

**Lloyds TSB SEPA PSD Program**

The Single Euro Payments Area (SEPA) Program includes development of common financial instruments, standards, procedures, infrastructure and technology to enable economies of scale, reducing the cost of moving capital around the region

**Raymond James**

St. Petersburg, Fla.

**Maximizing the Value of IT Investments**

Service request and asset management initiative designed to automate end-to-end processes for IT services

**Rural Servicios Informáticos, SC**

Tres Cantos, Spain

**Evolution and Innovation**

Implementation of BI technology to manage reporting activities within its outsourcing environment to over 70 member banks

**State Street Corporations Global Infrastructure Services**

North Quincy, Mass.

**Innovation Pipeline: An IT Infrastructure Blueprint for 2010 and Beyond**

Methodology that sets expectations for continuing renewal and improvement of the IT infrastructure blueprint and reliably delivers and improves services

*Nominated by IBM***FINALIST****Government****Alameda County Social Services Agency**

Oakland, Calif.

**Social Services Integrated Reporting System**

Information management system that combines entity analytics with business intelligence, allowing agency to understand and optimize the relationships between clients, programs and services

*Nominated by IBM* **21st Century Achievement Award winner****FINALIST****Army Materiel Command, Chief Information Office (CIO)/G6**

Fort Belvoir, Va.

**Materiel Enterprise Portal (MEP)**

Portal that enables process automation, collaboration and information access, facilitating seamless operations despite budget cuts and high turnover preceding an office relocation

**Army Review Boards Agency (ARBA)**

Arlington, Va.

**ARBA Case Tracking System (ACTS)**

Business process system that streamlines manual and paper-intensive processes for improved efficiency, accuracy, and productivity

**ASM Research, Inc.**

Fairfax, Va.

**U.S. Army Training Requirements and Resources System**

Web-based, pervasive BI application that manages all resident training programs and tracks the training activities of 3 million Army and other graduates

**Birmingham City Council (UK)**

Birmingham, England

**Business Transformation and Value Realization**

Implementation of enterprise software to improve city services while reducing costs through streamlining and efficiencies

*Nominated by HCL Axon***FINALIST****City of Coquitlam**

Coquitlam, Canada

**City of Coquitlam Elevates IT Efficiency, Reliability and Service Levels with HDS Storage Virtualization**

Revamping of SAN to include controller-based storage virtualization, so city can consistently provide efficient, highly available online services

**City of New York Department of Information Technology and Telecommunications**

New York, N.Y.

**311 Online**

Searchable Web portal for city services, complementing the city's 311 call center

**City of New York Health & Human Services**

Brooklyn, N.Y.

**HHS Connect**

Initiative to link the city's nine health and human services agencies and allow caseworkers to share client information

*Nominated by Accenture***FINALIST****City of New York Mayor's Office of Operations**

New York, N.Y.

**NYCStat Stimulus Tracker**

Online capability to help the city track federal stimulus funds

**City of San Diego, California**

San Diego, Calif.

**OneSD**

Replacement of the city's financial and managerial systems to enable transparency, efficiency and controls following fiscal crisis

**Defense Information Systems Agency**

Arlington, Va.

**Enterprise Mission Assurance Support Service (eMASS)**

Tool that enforces strict controls for obtaining authority to operate information systems on DoD networks, allowing for faster system rollouts

**Department of Public Welfare (DPW) Commonwealth of Pennsylvania**

Harrisburg, Pa.

**IT Shared Services - Security Vulnerability Testing**

Establishment of a shared services application security program, allowing application security experts to be engaged at the enterprise level and shared across each of the business applications

**Federal Financial Institutions Examination Council**

Washington, D.C.

**FFIEC Central Data Repository (CDR)**

System to collect and manage financial institution data, improving efficiencies and resulting in cost savings throughout the financial regulatory collection process

**Home Guaranty Corp.**

Makati City, Philippines

**HDS Helps Home Guaranty Corp. Support the Philippines' Family Housing Dream**

Deployment of modular storage system for centralization and consolidation of home purchase data

**Leon County Board of County Commissioners**

Tallahassee, Fla.

**North Florida Pawn Network (NFPN)**

System that centralizes pawn shop data by allowing shop owners to send in their daily reports via email, resulting in greater compliance and recovery of 900 stolen items so far

**Michigan Department of Corrections**

Lansing, Mich.

**MDOC Video Conferencing Network**

Deployment of videoconferencing systems for purposes including judicial proceedings, medical diagnostics and inmate programs

**National Institute of Justice (NIJ)**

Washington, D.C.

**National Missing and Unidentified Persons System (NamUs)**

Web-based repository, with interactive components, for information on missing persons and unidentified human remains

**Office of Health and Human Services**

Boston, Mass.

**EHSResults!**

Use of business intelligence technology to help 16 agencies use performance data to make policy, strategy and operational decisions

**Pennsylvania Liquor Control Board**

Harrisburg, Pa.

**Technology Transformation**

Project Spirit—replacement of aging legacy applications with ERP, retail and financial applications to become a "best in class" retailer

**Project Manager Battle Command**

Ft. Monmouth, N.J.

**Pocket-sized Forward Entry Device (PFED)**

Small, rugged computer that supports digital messaging, the Military Global Positioning System (GPS) for self location and various features for precisely targeting munitions

**Project Manager Warfighter Information Network-Tactical (WIN-T) Increment 2 (PM WIN-T Inc 2)**

Monmouth, N.J.

**PM WIN-T Increment 2**

Network that integrates communications for offensive and joint operations over extended distances from fixed and mobile platforms

**Project Manager, Night Vision/ Reconnaissance, Surveillance, and Target Acquisition (PM-NV/RSTA)**

Fort Belvoir, Va.

**Development, Integration, and Deployment of Tactical Sensor Systems**

Sensors, networks and information technologies that gather video, radar, GPS and other data to provide warfighters a common operating picture

**The City of Ryde**

Ryde, Australia

**City of Ryde Enterprise-Wide Information Management Solution**

Launch of enterprise document and records management system for transparency and operational efficiencies throughout the local government

*Nominated by IBM***FINALIST****SEFAZ-SP (São Paulo State Treasury Department)**

São Paulo, Brazil

**Preventing Tax Evasion**

Incentive program for consumers to request tax documents when making a purchase that qualifies for tax credits

**Stadsarchief Amsterdam (Amsterdam City Archives)**

Amsterdam, The Netherlands

**Stadsarchief Amsterdam Secures Historic Inheritance of Amsterdam with the HDS Content Archive Platform**

Digital archiving system that preserves 22 miles of historic documents

**State of Mississippi, Department of Human Services**

Jackson, Miss.

**Optimizing for Disaster Recovery for the State of Mississippi**

Expansion of thin client architecture to new divisions after it salvaged operations of some programs in wake of Hurricane Katrina

**Suffolk County Clerk**

Riverhead, N.Y.

**Public Records Retrieval Gateway**

Kiosk-based system for retrieval, printing, faxing or emailing of mortgages, deeds and other documents

*Nominated by IBM***FINALIST****U.S. Army Forces Command (FORSCOM), G-6, Network Support Division**

Fort McPherson, Ga.

**FORSCOM Command and Control System (FCCS) Support Services**

Enablement of continuous, reliable and secure access to networks and critical applications through network monitoring, tracking and scheduling applications

**U.S. Army Recruiting Command (USAREC)**

Fort Knox, Ky.

**The Army Compensation Advantage (ARCA) Program**

Recruiting and retention system that centralizes data on education, compensation, incentives and bonuses to aid career planning efforts

**United States Air Force**

WPAFB, Ohio

**Air Force Enterprise Data Collection Layer (EDCL)**

Infrastructure for the standard delivery of applications and content to the end-user via a mobile computing device

**United States Army**

Alexandria, Va.

**Stanley AWRDS (U.S. Army War Reserve Stocks)**

Automated information system that tracks inventory, manages maintenance and facilitates the transfer of prepositioned equipment, spare parts, etc., from logistics unit to the warfighter

**United States Department of Veterans Affairs**

Vancouver, Wash.

**VA Wireless Fidelity Program**

Deployment of Wi-Fi technology for clinical, maintenance, and asset management benefits at 288 locations

**United States Postal Service**

Washington, D.C.

**Full Service program**

Program that uses "intelligent" barcodes, electronic mailing data, postal operations information and other feedback to enhance mail services and develop products to revolutionize mail delivery



## Welfare Client Data Systems Consortium (WCDS)

Folsom, Calif.

**CalWIN**

On-line, real-time automated system with 26 subsystems that supports 14 federal, state and local public assistance programs

## Wiltshire Council

Trowbridge, England

**Wiltshire Council Business Management Innovation Programme**  
Business transformation program to create a shared service center and implement technology for managing financial controls, accounting, payroll, human resources and procurement

# Health Care

## Caisse nationale de l'assurance maladie des travailleurs salariés (CNMATS)

Paris, France

**H1N1 Vaccination System**

Tracking system that enabled fast-track vaccinations against H1N1 to all French citizens

*Nominated by EMC*

**FINALIST**

## Catholic Health Initiatives

Denver, Colo.

**Patient Care is the Winner with Efficient Operating Model**

Creation of a common information and technology infrastructure to integrate data and services, improving the quality and accuracy of data across the organization

## Center for Connected Medicine

Pittsburgh, Pa.

**Center for Connected Medicine**

Creation of center at the University of Pittsburgh Medical Center to provide "connected medicine" – electronic health records delivered over a virtualized infrastructure giving caregivers seamless access to consolidated patient information

*Nominated by Polycom*

**FINALIST**

## Clinical Bioinformatics, Rizzoli Orthopaedic Institute

Bologna, Italy

**BioMIMS**

Development of system to collect, classify and analyze family histories for the purpose of diagnosing and treating hereditary skeletal diseases

## Denver Health and Hospital Authority

Denver, Colo.

**Denver Health Transforms Health Care Delivery and Improves Financial Health**

Development of a robust technology infrastructure that enables advanced clinical data mining and electronic health records for better management of applications for Medicaid and other indigent care programs

*Nominated by EMC*

**FINALIST**

## Express Scripts

St. Louis, Mo

**Beacon**

Business intelligence and analytics system that helps clients make better health care and prescription medicine decisions

## Humana

Louisville, Ky.

**Humana Games for Health**

Use of a video game channel to disseminate health information and healthier lifestyle programs aimed at helping a variety of audiences from middle-school students to active seniors

## Institute of Physiology and Pathology of Hearing

Warsaw, Poland

**Cochlear Implant Innovation Project**

Implementation of a network of clinical sites with videoconferencing capabilities to diagnose, fit and treat hearing-impaired patients with cochlear implants

 **21st Century Achievement Award winner**

## Kimberly-Clark Corp.

Neenah, Wisc.

**Better Business Through Better IT Management**

IT initiatives funded through cost savings such as a Virtual Reality Center that helps visualize how germs are transferred in medical procedures, resulting in safer products, and BI-driven acquisitions such as that of a pain management business

## Kindred Healthcare

Louisville, Ky.

**Point-of-Care Mobile System**

Rollout of mobile devices that let therapists record patient information at the point of care

## Kool Smiles

Atlanta, Ga.

**Virtual Clients to Improve Patient Care and Security of EHRs**

Implementation of a standardized data collection and centralized record system that enables fast expansion of dental care to underserved communities

## Medical Sciences School of the University of the State of Rio de Janeiro, Brazil

Rio de Janeiro, Brazil

**Children and Adolescent Health & Medicine Special Interest Group**

Videoconferencing system to exchange relevant medical and scientific information across a network of health-related professionals dealing with the care of children and adolescents

## Mount Sinai Medical Center

New York, N.Y.

**Faculty Practice Associates Dashboard**

Dashboard application with analytic tools and metrics that enable physicians and administrators to run their practices more effectively and improve the quality of patient care

## North Shore-Long Island Jewish Health System

Lake Success, N.Y.

**Strategy for Widespread Use of Interconnected EHRs**

Electronic health records strategy that emphasizes integration between emergency departments, inpatient areas and outpatient practices for data sharing, coordination of care and decision support

## Perkin Elmer

Waltham, Mass.

**Specimen Gate**

Upgrading the Illinois Department of Health newborn screening program for the detection of congenital newborn birth defects

## Sanofi Pasteur

Lyon, France

**Speeding H1N1 Vaccines to Market**

Use of a Web 2.0-based knowledge-sharing and collaboration platform to share best practices and deliver H1N1 vaccines to those most at risk

## Singapore General Hospital

Singapore

**Creating Optimized Patient Throughput During a Pandemic Outbreak**

Creation of an optimized, integrated system to handle patient throughput during a pandemic outbreak

## Smith & Nephew

Andover, Md.

**Enterprise Data Governance Initiative**

Creation of a data quality and governance model to help each of its business units measure, monitor and improve the quality of its master data

## Summa Health System

Akron, Ohio

**Stroke Outcomes Study**

Deployment of a computerized physician order entry system that includes specialized tools and decision support features to promote higher quality care

## University of Arkansas for Medical Sciences

Little Rock, Ark.

**UAMS Angels**

Use of state-of-the-art telecommunications equipment to increase access to specialty care for high-risk patients and continuing education for healthcare providers across the state in a cost-effective, simple, and rapid way

*Nominated by Tandberg*

**FINALIST**

## Wisconsin Physicians Service

Madison, Wisc.

**Member Correspondence**

Implementation of a software system that produces documents in real time

# Manufacturing

## Asics

Kobe, Japan

**Sales Analysis System**

Rebuilt BI infrastructure with increased functionality and faster reporting

*Nominated by Sybase*

**FINALIST**

## Avago

San Jose, Calif.

**Multi-Vendor Governance Framework**

Collaborative sourcing model that resulted in outsourcing non-core business activities, allowing the organization to refocus its efforts on key business objectives and reduce operational costs by 30%

**Cummins Inc.**

Columbus, Ind.

**Cummins Connected Community Partnership**

Partnership designed to enhance economic development and improve the quality of life for county residents, small businesses and nonprofits by increasing their access to technology

*Nominated by HCL***FINALIST****McKesson Patient Relationship Solutions**

Scottsdale, Ariz.

**Web Reporting Portal and Business Intelligence Solution**

Secure Web-based report portal with dynamic dashboards that display patient volume, prescriber activity and drug regimen compliance, allowing pharmaceutical manufacturers to design and adjust patient adherence programs to support patient health

*Nominated by Sybase***21st Century Achievement Award winner****Visy**

Coburg, Victoria, Australia

**Platform for Production Control Systems**

Manufacturing system that provides views into production processes at packaging and recycling company, allowing for efficient use of resources and productivity increase of 10% to 15% in six months

*Nominated by Sybase***FINALIST****Western Forest Products**

Duncan, British Columbia, Canada

**Accounts Payable Overhaul Yields Big Results**

Implementation of enterprise content and accounts payable solutions to automate paper-based processes at main and remote offices, resulting in streamlined processes, improved accuracy and the need for fewer staff

*Nominated by Xerox***FINALIST****Media, Arts & Entertainment****Bank of Oklahoma Center**

Tulsa, Okla.

**Fifth-Best-Selling Arena in U.S. Builds Its Networking Foundation to Consolidate Voice, Data, and Video IP**

Converged network and flexible IT infrastructure for wireless access, point of sales, audio, video and data communications

**GSD&M Idea City**

Austin, Texas

**Digital Management Asset Initiative**

Centralized digital content repository that allows quicker time to market with ads and better client service

**M Resort (The)**

Henderson, Nev.

**The M Resort as the Most Converged Network in Vegas**

Consolidation of data, voice and video on an all-IP network

**Pixorial**

Englewood, Colo.

**Pixorial and HDS Collaborate on High Density Storage Performance for Versatile, Cost Efficient Growth**

Collaborative video service whose storage infrastructure allows it to offer customers a social video experience without length or resolution limits

*Nominated by Hitachi***FINALIST****PlayPhone EMEA**

London, England

**Business Analysis System**

Customer analysis engine that tracks and predicts behavior of those who purchase the company's ringtones, games, video and more for their smartphones

**Starwood Hotels and Resorts**

White Plains, N.Y.

**Safeguarding Online Services**

Development of SOA-based central reservation system for luxury hotel chain, with help from application performance monitoring software

*Nominated by CA***21st Century Achievement Award winner****Station Casinos**

Las Vegas, Nev.

**Realtime CRM Campaign Management**

Real-time data integration and customer intelligence environment to deliver real-time personalized offerings and services using various points-of-contact

*Nominated by Informatica***FINALIST****Summit Entertainment**

Santa Monica, Calif.

**iRights Implementation**

Expansion of iRights features for international financial transactions, allowing film studio to scale business operations

*Nominated by Sybase***FINALIST****Ticketmaster**

Chantilly, Va.

**ARCHTICS**

Ticketing system that enables clients (such as teams) to customize ticket packages and sell them to their fans

*Nominated by Sybase***FINALIST****Boston Debate League**

Boston, Mass.

**Bostondebate.org**

Website to drive awareness, support and funding for the Boston Debate League, a non-profit organization dedicated to transforming public school culture through competitive debate

*Nominated by Sapient***FINALIST****Walt Disney Parks and Resorts**

Celebration, Fla.

**GDM Database Replacement POC**

Proof of concept for combined IT and marketing project to enhance the Customer Managed Relationships (CMR) platform

*Nominated by Sapient***FINALIST****Non-Profit Organizations****2-1-1 San Diego**

San Diego, Calif.

**IT-CO**

Upgrade of technology infrastructure to provide community, health and disaster information services plus a deeper level of support to a broader audience

**Arkansas School for Mathematics, Science and the Arts**

Hot Springs, Ark.

**Distance Learning Outreach Project**

Upgrade of technology infrastructure to provide more real-time, compressed, interactive video courses in virtually all disciplines to public, charter and private schools nationwide

**Boston Debate League**

Boston, Mass.

**Bostondebate.org**

Website to drive awareness, support and funding for the Boston Debate League, a non-profit organization dedicated to transforming public school culture through competitive debate

*Nominated by Sapient***FINALIST****Compassion International**

Colorado Springs, Colo.

**Ministry Information Library**

New information architecture capable of growing the number of children sponsored by Compassion International from 1 million to more than 4 million

**Correctional Health Services Corp.**

Guaynabo, Puerto Rico

**Digital Pharmacy Services**

System to fully automate the documentation process for distributing medications to all inmates plus give medical and legal staff real-time access to patient data related to medication deliveries

*Nominated by Intel***FINALIST****Dialysis Clinics, Inc.**

Nashville, Tenn.

**Financial Reporting Environment**

Business intelligence dashboards that give managers access to information that makes the organization more cost-efficient and thus able to spend more on kidney disease research, education and services for renal disease patients

**Food for the Poor**

Coconut Creek, Fla.

**Enterprise BI Environment**

Use of business intelligence dashboards and reports to reduce operating expenses and thereby raise the percentage of donations going directly to programs from 96% to 98%



THE LAUREATES

## Good Samaritan

Sioux Falls, S.D.

### Hands On

System that delivers resident care information to nursing staff and management on a more real-time basis, enabling better patient care

*Nominated by Sybase*

FINALIST

## Lifespan

Providence, R.I.

### RESCQ

Development of mobile emergency communications system to support collaboration among health care providers and emergency management agencies in emergency situations

*Nominated by Cisco*

 **21st Century Achievement Award winner**

## South Carolina Department of Mental Health

Columbia, S.C.

### D MH Telepsychiatry

Use of videoconferencing and telemedicine technology to offer all state hospital emergency departments timely access to a DMH consulting psychiatrist

*Nominated by Polycom*

FINALIST

## White Memorial Medical Center

Los Angeles, Calif.

### Hospital Integrates Paper Records into EHR System, Critically Improving Patient Care

Expansion of electronic health record system to the extent that retention of paper copies of scanned documents is no longer necessary

## Transportation

### Dealer Services Corp.

Carmel, Ind.

#### BI and Predictive Analytics Environment

Predictive business intelligence project to give users better insight into the company's position with each dealer and portfolio, to identify factors that may cause trouble so they can proactively take action

### Indian Railways

Delhi, India

#### National Train Enquiry System

Infrastructure upgrade to system that reports on train status in real time across 9,000 stations

*Nominated by Sybase*

FINALIST

### Kelley Blue Book

Irvine, Calif.

#### Infrastructure Refresh

Scaling of IT capacity to support increased demand and new services while containing cost

### MicroStrain, Inc.

Williston, Vt.

#### Microstrain Energy Harvesting Wireless Sensors for Smart Machines & Structures

Sensing systems that harvest energy from vibration, strain, heat, radio frequency fields and light to power wireless sensors on aircraft that then report on the aircraft's structural health

*Nominated by Morgan Stanley*

FINALIST

## Missouri State Highway Patrol

Jefferson, Mo.

#### Interoperable Public Safety Communications Platform

Creation of Network Emergency Response Vehicles (NERVs), which act as command centers for disaster management and feature TelePresence, video surveillance, Wi-Fi, and other communication technology on-board

*Nominated by Cisco*

FINALIST

### NASA Ames Research Center CIO

Silicon Valley, CA

#### Service Integration Management

Re-organization of IT service delivery for customers within and outside of NASA Ames Research Center, standardizing service definitions, incorporating a project management framework using ITIL, ultimately deploying best practices aligning Ames IT with NASA's requirements and strategic initiatives.

*Nominated by Booz Allen Hamilton and Dell Perot Services*

FINALIST

### United States Department of Homeland Security

Arlington, Va.

#### US-VISIT

Development of the United States Visitor and Immigrant Status Indicator Technology (VISIT) system, which gives government agencies access to biometric identification services and has resulted in the identification of over 67,000 wanted criminals

*Nominated by Accenture*

 **21st Century Achievement Award winner**

In the  
reset  
economy,  
there is no  
'business  
as usual'

Be Cognizant



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As an Information Technology leader, Morgan Stanley recognizes the importance of innovation and excellence and is proud to sponsor the

## Information Technology Leadership Award for Global Commerce

and the

## Computerworld Honors Laureate Medal Recipients for Technology Innovation

Morgan Stanley congratulates the winners of this year's Information Technology Leadership Award for Global Commerce

### Pradeep Sindhu

Chief Technology Officer and Founder, Juniper Networks, Inc.

Morgan Stanley congratulates our Computerworld Innovation Award Nominees for the acceptance of their works into the Worldwide Archives of the Computerworld Honors Foundation

BLADE Network Technologies, Inc.

MicroStrain, Inc.

Clarity Systems

Savant Protection

Corvil

Sendmail

Kapow Technologies

VirtualAgility

Kx Systems

Morgan Stanley



## 2010 Morgan Stanley Leadership Award for Global Commerce

Recognizing those unique and amazing individuals who have, through their leadership and vision, made critical contributions to the effective use of information technology around the world.

### Pradeep Sindhu

Juniper's Chief Technology Officer and Founder:

**Motivated by possibilities**

# Unlocking Human Potential

Through his work in IP networking, Juniper Networks founder **Pradeep Sindhu** seeks to advance human achievement—something he has done a lot of himself

*Computerworld senior editor Patrick Thibodeau recently interviewed this year's recipient of the Morgan Stanley Leadership Award for Global Commerce, Pradeep Sindhu, for a videotaped oral history. Excerpts of the interview follow.*

The story of Pradeep Sindhu, the CTO and founder of Juniper Networks, can begin in multiple places: In his birthplace in India, his experience with networking and computers at the University of Hawaii, Xerox PARC (Palo Alto Research Center), or in Silicon Valley. It was a series of steps and experiences that led to the creation of Juniper in 1996, which today is a multibillion-dollar company with about 7,000 employees. But the story really begins with his vision.

#### Global networks can unlock human potential

"I think that the role information technology

has to play is essentially to make human beings much more capable in achieving the things that they want to achieve. Think about the network, and information technology infrastructure, that we are building as being the cerebral cortex of the planet earth.

"And the power of what society can achieve when connected in this powerful way, is absolutely incredible. I don't know what the bounds are. I just know that it can be very, very powerful.

"I feel very strongly that when you have people around the world richly connected to each other, and to information resources, the collective power of what can be done, what

can be accomplished, goes up by some immeasurable amount. And this phenomenon I've seen at almost every level of scale imaginable.

"The vision that I've always had for Juniper is that I want my company to build the infrastructure that connects the world together. Any information processing system on the planet, whether it be a human being, whether it be a device, needs to be connected into a global network. Basically because such connection actually enriches the people, and it also enriches the network in turn."

### **In India, an inquisitive child, a builder**

"I was born in Bombay, which is a very big city, and my schooling was done in relatively small schools, which were the only schools available in the cities where I was. My high schooling was done in Delhi. It was a pretty good high school.

"When I was little, I remember actually building things with my hands all the time. I was always building things, trying to understand things. So it was kind of natural for me when I graduated from high school to apply to engineering schools.

"One of the things that my parents did was, they gave me a lot of freedom to decide what I wanted to do. My dad had a preference that I would go into the Indian Administrative Services because that was a very prestigious post. And the discussion we had was that it didn't interest me. The sciences, engineering interested me a lot, and even back then I can remember that I was interested in electrical engineering, because it seemed to have a lot of possibility in the future.

"I applied to the top engineering schools in the country, which are called the Indian Institutes of Technology. There were, at that time,



**Pradeep Sindhu** was selected by Morgan Stanley for the award because he "is a leader and technical visionary in the field of high performance networking. His contributions have guided Juniper Networks from a start-up into a global powerhouse, one that will continue to shape the way business is done for generations to come."

### **Pradeep Sindhu**

Chief Technology Officer & Founder

**Dr. Sindhu founded Juniper Networks in February 1996 and served as Chief Executive Officer and Chairman of the Board until September 1996. Since then, Dr. Sindhu has served as Vice Chairman of the Board and Chief Technical Officer of Juniper Networks. At the Computer Science Lab at Xerox's Palo Alto Research Center (PARC), Dr. Sindhu was a Member of the Research Staff from September 1984 to February 1991, the Principal Scientist from March 1987 to February 1996, and Distinguished Engineer from February 1994 to February 1996.**

four of them. And the process of getting into those schools is actually pretty difficult. There is a national exam and typically 250-300,000 people take it. From that they select 1,200 to 1,800 students, and it's strictly ranked number one through number 1,200 or so based on how you do on a set of examinations. I was fortunate enough to be admit-

ted first, and get my first choice, which was electrical engineering at IIT Kanpur, which was, I think, the top school out of the four.

#### **University of Hawaii offers a scholarship and a network**

"Once I graduated from the Indian Institute of Technology, I applied to schools in the U.S. The other

compounding problem was that I was not able to afford to come to the U.S. without a scholarship. The only school where I actually got admitted and also got a scholarship was the University of Hawaii.

"It turns out the University of Hawaii had two projects that were phenomenally interesting in terms of my development. One was the Aloha Network, which was the precursor to Ethernet, which is a very widely known network in technology today. The second project was the project very few people have heard of—a computer called BCC-500 [Berkeley Computer Corp].

"I was there only for a year and a half, but all the things I learned there actually have been applied later."

#### **PARC, Sun Microsystems and the path to venture capital**

[After receiving a PhD in computer science at Carnegie Mellon Univer-

sity in 1982, Sindhu then became a research scientist at Xerox's Palo Alto Research Center (PARC).]

"What started me down this path was the frustration...[of] having had a lot of ideas, but not having had those ideas go out as products that would actually affect people directly. I think that frustration is what led me to think that, hey, I need to actually go and do a startup by myself.

"It was a time [the mid-1990s] full of possibilities. There were only three of us. Me and two co-founders, the guys that I had hired. We had just gotten an agreement from Kleiner Perkins that they were going to fund the company for the first three months. And as you well know, when creating a startup, the biggest challenge is actually a chicken and egg problem: Before you have the money, you have no credibility, and if you have no credibility, you have no money. And if you don't have the money you can't hire the people. So it's a really very circular problem. And the first venture capital company that actually acknowledged that the idea behind Juniper might be something worth funding was Kleiner Perkins, specifically Vinod Khosla, and Will Hearst.

"Vinod was one of the founders of Sun Microsystems. Just prior to Juniper, I worked at Xerox PARC for 11 years. Three of those years I spent on loan to Sun Microsystems, developing their high-end, high-performance multi-processor servers. During that time I established a reputation at Sun Microsystems for getting Sun into the server market.

Vinod knew about that. Sun's other founder, Andy Bechtolsheim, knew about that as well.

"Knowing Vinod now for a good 14 years, I think he was looking for a big idea that was underserved. That's the first thing, because those

### **2010 Computerworld Morgan Stanley Leadership Award Nominating Committee**

**Marv Adams**  
Executive Vice President  
Technology and Operations  
TIAA-Cref

**Cristobal I. Conde**  
President and CEO  
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**Fred Matteson**  
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QBE Reinsurance Corporation

**Jon Shirley**  
Retired President and Board Director  
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**Matthew J. Szulik**  
Chairman, Board of Directors  
RedHat

**John W. Thompson**  
Chairman of the Board  
Symantec Corporation

themselves are very rare. The second thing he was looking for was whether this person who was coming with the idea could actually do something about it. Those were the top two things."

### The idea behind Juniper

"The central technological thesis was quite simple. It was the fact that the Internet Protocol was going to be the center of the universe. It was clear to me at the time. It was not widely recognized, though. That was one piece.

"The second piece was that the devices (called routers) using the Internet Protocol, were all built using

general-purpose microprocessors. So essentially what you did was you took a general-purpose computer, you programmed it and wrote some software for it to behave like a router.

"However, the speed of these devices needed to increase at an exponential rate, roughly a doubling of performance or more every year. Now, the fundamental technology behind general-purpose computing was doubling in performance only every 18 months. Well that's a difference in the exponential. What that meant was routers (as they were designed and built) were completely falling behind the curve in terms of the required performance. Not only

were they falling behind in terms of required performance, they were also falling behind in terms of reliability of the network.

"So the innovation that Juniper did primarily was to recognize that, in order for the network to grow exponentially and because of the increasing use of the network, we had to actually change—not the functionality of the routers, but the way they were implemented. So being in the network, and carrying network traffic, has to be done in an open standards-based way. In other words, it has to be done in a way where different devices made by different manufacturers can in-



teroperate with each other to make a network."

### Juniper aimed at the problem where it was most acute

"After the VC funding, it took about two years and three months to actually get the product to market. And along the way, of course, we had to work to convince some of the first customers. The first two customers were Cable & Wireless and UUNet, which were the largest ISPs in the world at the time.

"Mike O'Dell was the chief technology officer of UUNet, and I remember the discussion with him quite clearly because he looked at the design of what we were trying to build, which was 8 by 2 and a half gigabit per second router at line rate. That was revolutionary back then, because it was 25 times faster than the fastest existing machine. What Mike said to Dennis [Dennis Ferguson, Juniper co-founder] and I was, 'Guys, all you have to do is just built it. Don't worry about there not being a market for what you're trying to build. Just make it happen.'"

### The history of Juniper's name

"The name Juniper has an interesting history. I'm going back now to February of 1996, when the company was about to be formed, and my lawyers asked me, on the day before the

incorporation, 'Do you have a name picked out?', and I said, 'Well, I don't have one name. I have three or four names.' And Judy, who was our legal counsel, said, 'Well three or four names won't do. I need one name.' All of the names I had selected had something to do with IP, which stands for the Internet Protocol, which was the technology Juniper was going to do. Juniper clearly has the letters 'IP' right in the middle. They're well hidden.

"What I did was take the list home to my kids. The only recognizable name in there was Juniper. So both of them voted very, very strongly for Juniper. It's a name that's natural and has stood the test of time."

[Juniper went public on June 24, 1999.] "And the reason I remember the date is it also happens to be my wife's birthday, just by pure coincidence. I was actually in New York. It was a pretty special day."

### An unending search for new possibilities

"What motivates me is the set of possibilities I see for what my company can do. I think that Juniper has achieved some things in the form of the effect that it's had on the world. But the effect we can have from here on out is much, much bigger than the effect we've had in the past. And that possibility is what drives me." ■

**"The effect we can have from here on out is much, much bigger than the effect we've had in the past. And that possibility is what drives me."**

## The Need to Stay Competitive

Pradeep Sindhu, the CTO and founder of Juniper Networks, continues to see great strength in Silicon Valley's ability to create new companies and America's promise for innovation. But there are challenges as well.

**"I am hugely optimistic** about the U.S. I think that we have to focus on education. We have to make sure the economic system we have allows innovation to reign free. The more laws and the more hamstrings we place on that, that's surely a way to set us back.

"We want to make sure that the infrastructure we have for information technology is the best in the world. Because most of that infrastructure is actually invented here, and it's sometimes hard for me to see that there are other countries where the information infrastructure is much more advanced, and you can do things a lot faster, a lot more efficiently.

"Rather than focusing on the issue of training people to set up farms of solar panels—which is a fine thing to do—we need to get people trained in information technology, in biotechnology—in the fields that hold the biggest promise for the future. And to have an infrastructure in the country second to none. I think we are in danger of losing the edge in that. It's the infrastructure that is going to govern the rate at which we can do innovation. So I am talking about the computing infrastructure, the storage infrastructure. I'm talking about the networking infrastructure.

"You have lots and lots of talent, and you have people who are entrepreneurs who want to do interesting things. That mix exists in Silicon Valley to an extent that it does not exist anywhere on the planet. And even in the U.S., this is the one place where it exists in its extreme form, and its most refined form.

"So I would think that the eco system that connects entrepreneurs, venture capitalists and other people with skills is probably way stronger today than it was back then [when Juniper was formed in 1996]. And the reason is that the technology available for connecting people together is actually a lot, lot better than it was back then.

"The role Juniper plays in this, in evolving the social networks, is that we build the infrastructure that underlies all of the surface things that individuals see and do and use. So a Google would not exist without a networking infrastructure which is worldwide. A Facebook would not exist. A Twitter would not exist. None of these network companies would exist without the deep infrastructure that we're talking about.

"So...the goal is to connect everything together, and through that connection—to empower people."

# THE 21ST CENTURY ACHIEVEMENT AWARDS

## Business & Related Services

# Campus Safety via Texting

**Rave Mobile Safety** Uses Students' Preferred Medium—Among Others—to Deliver Alerts and Emergency Messages To All



RECENT CAMPUS TRAGEDIES such as the shootings at Virginia Tech have made clear colleges' need for an emergency system that enables them to communicate immediately with students, faculty and administrators on campus, as well as with parents off campus.

### Rave Mobile Safety

New York, NY

- **Challenge:** Create an emergency campus communication system that can quickly alert students and others via email, text messaging and voicemail, depending on their preference
- **Approach:** Develop a series of APIs, known as Rave Alert, to integrate with college databases plus an Internet portal that gives message originators and recipients the ability to customize how they send and receive alerts
- **Outcome:** A multi-mode communications system that is able to distribute as many as 50,000 text messages within minutes as well as notify other individuals via land lines and email
- **Nominated by:** Sybase

To integrate with the Rave Alert system, colleges need to grant access to databases, which can sometimes cause problems with the college IT department. However, once a college president or dean of students endorses the project, integration typically proceeds smoothly.

To meet this need, Rave Mobile Safety developed a set of applications that enables colleges to quickly reach all parties via a variety of methods, including voicemail, email and text messaging. Other communication methods include Twitter posts, RSS feeds and digital signage on campus.

The Rave Alert system relies on (application programming interfaces) that are linked to college databases, such as directories of student and faculty contact information, learning management systems used by professors, and student registration systems used by bursars and other college administrators. The Rave Alert system automatically receives continuous updates from all of these systems so that information remains current.

This is especially critical in an emergency, such as the bomb scare that occurred at University of South Florida. The administration was able to instantaneously send messages to 50,000 college students and staff. It was also able to provide four follow-up messages to keep the campus community informed of the status of the incident. The Rave Alert system ultimately distributed 350,000 text messages during the day of

the bomb scare.

"When we had that incident on campus, I sent out an alert to our 50,000 registered users, and all were reached in just over 50 seconds," said Christopher Akin, the university's director of IT. "The message arrived to my phone before I had taken my hand off the mouse."

Rave Alert can also be used to communicate in non-emergency situations, such as when classes are cancelled. A professor can submit an entry to a Web-based Learning Management System and the Rave Alert system automatically converts the information into a text message or email that can be sent to students. In these cases, the Rave Alert system's text messaging feature is especially valuable since college students generally don't read email consistently and often fail to check voicemail. The only way to consistently communicate quickly with students is through cell phone text messaging.

Jose Valdes, director for telecommunications at Colorado State University, put it this way: "There are myriad ways to communicate with people. One way won't reach everyone. But we do think that text messaging is one of the best ways to reach students." ■

## Education & Academia

# Addressing Failure Head On

**Mobile County Public Schools** Use Economic Stimulus Funds for a Data Project That Identifies Students at Risk so Educators Can Take Action



WITH MORE THAN 63,000 STUDENTS in 95 schools, the Mobile County Public School System needed a way to effectively measure student performance plus identify students at risk of failing. With a drop-out rate of 48%, MCPSS specifically wanted to better identify which students were at risk for dropping out and which intervention

### Mobile County Public School System

Mobile, Ala.

- **Challenge:** Effectively measuring student performance and identifying "at risk students" with an overall goal of delivering smarter education services that prepare students with 21st century skills
- **Approach:** Blend together real-time analytics software traditionally used by businesses with educational services to help at-risk students
- **Outcome:** A new system incorporating business intelligence and analytics technology that has transformed day-to-day operations at the largest school district in Alabama
- **Nominated by:** IBM

programs worked. But the information they needed was scattered. Attendance, test and student data were disconnected, and quarterly reports were often delivered late, making it difficult to flag students at risk of failing.

With the aid of federal funds secured under the American Recovery and Reinvestment Act (ARRA) of 2009, school officials worked with IBM to develop a system that pulls together all relevant information into a single system. This system is now at the heart of the school system's day-to-day operations.

School officials including principals, guidance counselors, teachers, administrators and others can access customizable dashboards to track the entire academic lifecycle of each student, including data on class attendance, grades and any special education requirements.

MCPSS' Student Performance Excellence Project blends together real-time analytics software tradition-

ally used by businesses with educational services. The new system focuses on at-risk students by proactively alerting school personnel once a student has crossed a pre-set at-risk threshold, such as a high rate of absenteeism or declining grade levels. This enables school officials to develop an individualized response to each student's problems, then to monitor their progress.

The new data warehouse has also helped teachers during parent conferences.

"Parents are accustomed to saying, 'This is my child's first time having problems with attendance,'" one school principal noted. "However, after you show the parent the snapshot from the past two to three years, the meeting quickly becomes one of a proactive nature."

What's more, the principal said that being able to see trend data on at-risk students from the past few years has allowed her to show parents patterns that are hindering a student and putting him or her at risk. Principals have never been able to quickly spot these trends in the past.

Additionally, the analytics system is reaching beyond the educational system. For example, MCPSS

### PROJECT SIGNIFICANCE

**MCPSS' Student Performance Excellence Project** blends together real-time analytics software traditionally used by businesses with educational services. The new system focuses on at-risk students by proactively alerting school personnel once a student has crossed a pre-set at-risk threshold, such as a high rate of absenteeism or declining grade levels. This enables school officials to develop an individualized response to each student's problems, then to monitor their progress.

has partnered with Mobile County's District Attorney's Office on a variety of special joint education initiatives, including an early warning truancy program and the Multiple Education Pathways Blueprint Initiative, which is designed to help connect high school dropouts with alternative learning opportunities. ■

# Environment, Energy & Agriculture

# Driving Electric Cars

**Foundation e-laad.nl** Builds a Network of Charging Stations Across Europe for Electric Cars



THANKS TO THE SOPHISTICATED POWER NETWORK across The Netherlands and many other countries, electricity is available at the click of a switch to meet demand as and when required. It is the task of grid management to prepare the grid for the future: the future of charging electric cars.

## Foundation e-laad.nl

Duiven, The Netherlands

- **Challenge:** Create a national grid of charging stations for electric cars to support widespread adoption of vehicles in the Netherlands and beyond
- **Approach:** Collaborative effort of electrical grid owners with vendor support to create stations and back-end management system
- **Project duration:** Three years (2009-2012)
- **Initial investment:** \$15 million
- **Nominated by:** Logica

a uniform, generally accessible infrastructure of 10,000 charging stations. E-laad.nl plans to install these charging stations between 2009 and 2012. By doing so, it will bundle research and development and practical knowledge to create uniformity in technology, communication and design. International standards will be used where possible, and when there is no standard available, new de-facto standards will be developed.

Building this network of charging stations involves not just dispersal of the power to users, but also building an infrastructure and transaction management system behind it. Critical success factors for this part of the project include standardization, ease of use, international usability and privacy protection to prevent the tracking and tracing of users. Furthermore, the systems should be capable of connecting to one another but must also work when no data connection is available. You can't have a situation where a user can't drive because they couldn't charge their car.

## PROJECT SIGNIFICANCE

The system built for the charge points and management of this infrastructure for electric cars will change the landscape and the way people think about transport. There are already requests to connect the system to other brands of charge points and to intelligent transport systems. Negotiations are under way to connect other countries to this system, including Portugal, Sweden and the Czech Republic.

This project provides a solution to that status quo by establishing a national grid of charging stations and by promoting and supporting European standards for using this grid. In this way, drivers will be able to charge their car not only in their own city or country but also during travel abroad. This will stimulate the use of electric cars and will change drivers' lives.

The goal of Foundation e-laad.nl is to create and test

It is difficult to predict what the final uptake of electric driving will be, as much depends on the availability of electric cars. However, early adopters are already using the infrastructure, and by 2012 there should be at least 10,000 charge points available. Within five years, the use of electric cars and the charging infrastructure is anticipated to be as common as current traditional fuel systems. ■

Finance, Insurance & Real Estate

# Banking Gets Modern

**Denizbank** Turns to SOA for an Infrastructure that Supports Modern Business Applications With the Mobile Access That Customers Crave



IN 2005, DENIZBANK WAS FINDING that its legacy banking system was limiting its aggressive strategies and goals. It was difficult to maintain the old system and to build new applications synchronized with it. Thus, the Turkish bank embarked on building a flexible platform that would support multiple banking channels for customers while deliv-

## Denizbank (Dexia Turkey)

Istanbul, Turkey

- **Challenge:** A lack of integration, inadequate performance and other issues with legacy banking applications meant high costs and slow rollout of new banking products
- **Approach:** Development of a SOA-based platform with four pillars: Customer relationship management (CRM); business process management (BPM), agile core banking, and interactive business Intelligence (BI)
- **Project duration:** Two years
- **Outcome:** Web-based, fully integrated banking platform serving internal users and customers who want diverse forms of access
- **Nominated by:** HP

**One new feature:**  
Customers can apply for a credit card by text message from their mobile phone.

In addition, the Web and mobile technologies have provided a springboard for DenizBank to develop new offerings and services for a whole range of clients. For instance, customers can apply for a credit card by text message using their mobile phones. The message triggers an automated process that includes security and credit approval checks and, within five minutes, the bank discovers whether the customers have a payment card for buying supplies.

"They no longer have to carry so much cash and they can manage cash flow better," says Hakan Ates, president of DenizBank Financial Services Group.

"Providing our customers, who have different needs and expectations, with the best service at the right time brings loyalty as well as satisfaction," he says. "We feel more confident when planning for the future."

Other results from different parts of the application include six times greater sales rates resulting from predictive analytics; the saving of 600 full-time equivalents from automated processing; and greater business agility from BPM.

## PROJECT SIGNIFICANCE

The Web-based, fully integrated banking platform, built with Microsoft technologies, "highlights how technology can support people day-to-day, helping them achieve work goals more easily while driving business growth," says Hakan Ates, president.

ering a range of services for internal users, including CRM, BPM, agile core banking and business intelligence.

It chose Microsoft's .NET framework to establish a three-layer SOA infrastructure, called inter-Next, to achieve these goals. It used a development framework specially designed for multi-tier, large scale web applications (inter-Frame) that had special features for financial application development.

The new system integrates core banking services, distribution channel management, CRM, BPM and BI under a single, customizable dashboard. By creating such a simple, intuitive system, which features a secure single sign-on procedure, DenizBank established a solution that employees adopted quickly with minimal training.

This customer process management infrastructure has brought massive efficiency gains. The system can process a year's worth of accounting from the hundreds of DenizBank branches in just eight hours. Because of this, DenizBank employees gain faster access to banking data, enabling them to make smarter business decisions.

Midway through the project, Denizbank was acquired by Dexia, a leading financial group in Europe. In addition to DenizBank, DenizBank Financial Services Group consists of eight domestic and three international financial subsidiaries, four non-financial subsidiaries and a branch in Bahrain. Thus DenizBank and inter-Next enable both individual and corporate customers all over the world to carry out financial transactions over the Internet. ■

Government

# Coordinated Care

## Alameda County Social Services Agency

Unites Client Data via Dashboard to Efficiently Deliver the Right Services



FACING A MOUNTING DEFICIT, budget cuts, an increase in requests for assistance, and new regulations required for better welfare case outcomes, Alameda County Social Services Agency (SSA) has been continually challenged to do more with less. With more than 250,000 clients and over a dozen disparate IT systems spanning 12 government departments, the agency was data rich yet information poor.

### Alameda County Social Services Agency

Oakland, Calif.

- **Challenge:** Disparate data sources give no single client view, leading to uncoordinated care and a lot of paperwork
- **Approach:** Deploy an information management system that combines entity analytics with business intelligence
- **Duration:** Less than six months
- **Outcome:** Agency is able to work much more efficiently to deliver services and save \$11 million
- **Nominated by:** IBM

dashboard alerts them to the fact that some of their clients have not completed their paperwork that is due in a few days. Because the analytics system links into the agency's automated phone system, it will automatically send those clients a reminder voice message and notify the worker of the action. Previously, the caseworker would not have known the paper work was missing until the client showed up at the office asking why their benefits had been canceled.

The analytics system thus improves efficiencies at every program level, and will forever change how the agency delivers assistance to those in need. The single mother of three who previously had to take two buses to visit her caseworker when her welfare benefits suddenly stop will get an automated voice message reminding her to complete her renewal form, eliminating the frustrating trip to the caseworker. The caseworker who

But it took a giant step toward efficiency with the deployment of an analytics system that gives caseworkers and managers a consolidated view of all benefits and activities related to a client.

The Social Services Integrated Reporting System (SSIRS) combines a number of IBM technologies to give employees an agency-wide, comprehensive view of individual clients via an easy to use dashboard on their desktop. It also lets the agency recognize and understand the complex relationships between clients, programs and services. This lets the agency ensure that clients are not being over or under served, and/or identify programs that might work better for the recipient. Both of these capabilities are key requirements for government funding.

The analytics system has also had a positive effect on staff. While it is unlikely that the typical 500-600 client case load will ever be reduced, the analytics system dramatically reduces employees' workload. For example, when a caseworker logs in, their analytics

### PROJECT SIGNIFICANCE

**"This is one of those rare situations where you can see the direct impact technology can have on the quality of human life. Because of what this technology is helping us do, there will be one less child who is going to bed hungry and fewer families not being able to make ends meet."**

*-Don Edwards, Assistant Agency Director,  
Alameda County Social Services*

manages more than 500 clients is now alerted in near real time of the cases that are in immediate need of attention, before benefits lapse.

The taxpayers of Alameda County also benefit. In addition to getting clients back on their feet faster, the system will help Alameda County SSA save an expected \$11 million. ■

Health Care

# Remote Surgical Follow-up

**Institute of Physiology and Pathology of Hearing** Reaches Remote Patients via Videoconferencing



POLAND'S INSTITUTE OF PHYSIOLOGY AND PATHOLOGY OF HEARING performs more than 15,000 surgical procedures annually, including more than 2,500 cochlear implant operations. In the first year following their surgery, patients require between three and 12 rehabilitation and

## Institute of Physiology and Pathology of Hearing

Warsaw, Poland

● **Challenge:** Providing a cost-efficient and effective way for cochlear implant patients from around the country to receive rehabilitation and fitting services in the first three to 12 months following surgery

● **Project Duration:** Four years

● **Outcome:** 94% of patients surveyed after cochlear implant surgery rated follow-up visits via videoconference as a very good alternative to standard fitting sessions. Moreover, remote fitting results showed no significant differences compared to results from standard fittings.

● **Nominated by:** Polycom

Today,  
there are

# 12

policlinics equipped with Polycom, Inc. HDX 8000 technology. The National Program of Hearing Tele-rehabilitation will ultimately include

# 20

centers across the country.

fitting sessions. To make these consultations easier for the patient and more cost-effective overall, the Institute purchased and deployed Polycom videoconferencing technology. This makes it possible for patients to visit virtually with the Institute's experienced specialists, who are now able to perform necessary measurement and cochlear implant fittings via Internet-based audio-video connections.

In one case, a kindergarten teacher notified the student's mother that her daughter was not responding as well as she had been earlier. The girl did not have an appointment with the Institute, located about 200 kilometers away, for another four weeks. "When I called the Institute, they told me about remote fitting and scheduled the visit in the nearby polyclinic in Olsztyn 12 kilometers from our home," the mother said. The next day, she took her daughter to the polyclinic. "The clinical audiologist adjusted the implant

and everything worked fine. It saved us a lot of time and gave us peace of mind."

The videoconferencing technology has also been used for emergency and critical response situations. For example, when implant processors are damaged or the parameters change, an immediate intervention by

## PROJECT SIGNIFICANCE

Experienced specialists from the Warsaw-based Institute are now able to remotely perform necessary measurement and testing of cochlear implant systems via voice and video technology for patients across the country.

a clinical engineer is required. Now, this intervention takes no more than minutes and no longer requires the patient to travel to the Institute.

The video system is also used for teaching, recording lectures and surgeries, which can be broadcast to students unable to attend sessions in person. ■

# Manufacturing **The Patient Payoff**

**McKesson** Portal Lets Drug Manufacturers Track Patient Regimens for Better Outcomes



AS ONE OF THE WORLD'S LARGEST PHARMACEUTICAL distribution companies, McKesson Corp. works with 15 of the top 20 pharmaceutical manufacturers. To best serve patients, these manufacturers need current and comprehensive data about how patients adhere to prescribed drug regimens. Previously, such data was available on a very limited basis, primarily via email distribution once a month.

## McKesson Patient Relationship Solutions

Scottsdale, Ariz.

Challenge: To improve health outcomes by providing pharmaceutical manufacturers with access to data about patients' adherence to prescribed drug regimens

Outcome: A secure Web-based report portal that provides near real-time data via customizable, dynamic dashboards that display patient volume, a geographical view of patient distribution and prescriber activity and compliance

Nominated by: Sybase

Although patients aren't directly accessing the portal, they are ultimately the beneficiary, since pharmaceutical manufacturers design and adjust patients' adherence programs to support overall patient health and well-being.

Now, McKesson's Web Reporting Portal and Business Solution supplies this information to manufacturers on a 24 by 7 basis. Built using technology from Sybase, the online reporting portal enables manufacturers to view a wide array of reports, including near real-time data on how patients are responding to different brands and coupon redemption programs. Other information the portal provides includes the number of patients enrolled in a particular program, the number of patients benefiting from manufacturer discounts on medications plus a geographical view of both patient and prescriber activity and the compliance and persistence of patients on the program.

Based on this easily accessible information, manufacturers can quickly respond to current trends, adjusting patient adherence programs to generate better health outcomes. Brand managers can quickly identify necessary program modifications and ultimately, adjust programs to reach and positively impact more patients. The ultimate goal of each program is to ensure that patients are healthy, to enable them to afford their medications, and in the end, improve the health of the

health care system.

Brand managers report that data from the portal has been invaluable in designing new patient adherence strategies and developing improved programs.

Especially noteworthy aspects of this project are the portal's ease of use, the accessibility of data and the overall visual appeal of the portal. For example, pharmaceutical program managers now have the ability to modify data parameters, select aggregation levels within reports and export data to an Excel spreadsheet for additional manipulation. Reports from the portal can also be exported to a PDF format for use in presentations.

Today, every single one of McKesson's pharmaceutical manufacturing companies is using the new reporting portal for their daily business. Additionally, some of those companies have asked McKesson to provide access to their business partners at advertising agencies, which further expands the visibility of the portal. All told, there are 1,400 individuals who now access the portal on a regular basis. Additionally, there were over 6 million patients benefiting from programs reported on through the portal in 2009. ■

## Media, Arts & Entertainment

# Enabling Agility, Growth

**Starwood Hotels & Resorts** Modernizes IT from Scratch, with the Industry's First SOA-based Reservation System



ABOUT FIVE YEARS AGO, Starwood Hotels & Resorts Worldwide, Inc., operator of luxury and upscale hotels and other properties, faced myriad business challenges. Guest demand was increasing. Business requirements and strategies were evolving. The company's rapidly growing footprint was ever more global. Starwood also needed better

### Starwood Hotels & Resorts Worldwide, Inc.

White Plains, N.Y.

- ◎ **Business Challenges:** Support business growth in emerging economies; remain competitive; deliver innovation and higher quality of service to the marketplace
- ◎ **Approach:** Replace 20-year-old mainframe-based central reservation system (CRS) with a custom Java application built largely in-house, based on a service oriented architecture (SOA)
- ◎ **Project duration:** Five years
- ◎ **Cost:** \$140 million
- ◎ **Outcome:** New SOA-based CRS receives up to 8 million room availability requests daily and represents the foundation for ensuring high levels of satisfaction amongst guests, partners and staff.
- ◎ **Nominated by:** CA

visibility of the service provided to guests and partners.

To meet all of these needs, Starwood—owner of brands such as Westin, Sheraton, W Hotels and The Luxury Collection—undertook a major software development project to replace its central reservation system. It decided on a service oriented architecture, or SOA, approach. And it had to basically start from scratch, as other companies in the leisure industry still relied on legacy systems, so there were no templates or best-practice developments with which to work.

Executing the project largely in-house, Starwood created a highly distributed system. It incorporated a processing grid with a complex matrix of dependencies, so a single request to one engine often involved the interaction of

many. Thus, the project carried significant technology risks. But it also carried risk on the business side, where stakeholders had to be convinced that the new system would deliver better service, better performance and an improved guest experience.

In addition, due to the critical nature of the system, the implementation and rollout could not interrupt the business.

To ensure the success of the project, Starwood implemented an application performance management (APM) solution, CA Wily Introscope, at the outset. It used this solution to pre-define and configure quality and performance targets and thresholds, and then to measure the system and all its back-end systems and components throughout development, testing and pre-production.

In so doing, Starwood's IT team was able to ensure that all potential application and performance issues were addressed prior to go-live and demonstrate that the system would be able to meet performance targets and handle peaks in user volumes. The solution would also be used after deployment to ensure and improve the ongoing performance and service of the system.

As a result, Starwood smoothly and successfully deployed a major, bespoke Java application in a new SOA environment without any disruption whatsoever to the business and its customers.

Today, Starwood has improved service to its staff, partners and delivered a higher level of guest satisfaction through its innovative central reservation system. Sophisticated monitoring and proactive management of the application's performance mean that any system issues are resolved before guests are affected. Starwood

### PROJECT SIGNIFICANCE

**Starwood is the first in its industry in recent years to deploy an entirely new central reservation system, and achieve this without any disruption to the business and its customers. In addition, as a Java application based on an environment that is SOA in its entirety, the CRS is unique not only in the leisure industry, but also across many sectors where most companies have only partially adopted SOA. This meant that Starwood scoped and developed a completely new, bespoke, business-critical system with no templates, benchmarks or best practices to work with.**

believes that it is well positioned to improve guest service, grow revenues and deliver substantial cost-savings. ■

## Non-Profit Organizations

# Emergency Connection

**Lifespan** Provides Emergency Phone, Internet and Radio Hookups in a Box



EVERY MINUTE COUNTS IN A HURRICANE, earthquake or other emergency, which is exactly when traditional communications systems are at their most vulnerable. First responders, emergency personnel and hospitals all require a reliable, robust and utility-independent means to communicate.

The RESCQ Emergency Satellite Communications System is an innovative, out-of-the-box system that solves this problem.

Conceived by Lifespan Corp.'s Chief Technology Officer David Hemendinger, the RESCQ system benefits the entire population of Rhode Island by uniting all of the state's

The Rapid Emergency Satellite Communications (RESCQ) system can be set up in about 20 minutes and provides instant phone, Internet and radio connection, from anywhere in the world.

### Lifespan

Providence, RI

- ◎ **Challenge:** Provide emergency and medical personnel with phone, data and radio service anytime, anywhere in the event of a disaster
- ◎ **Outcome:** The first statewide deployment of a simple-to-use, fully interoperable, utility-independent, standardized mobile emergency communications system in the nation.
- ◎ **Nominated by:** Cisco

hospitals and emergency management agencies. The design team was comprised of IT and emergency preparedness employees of Lifespan, a five-hospital network in Rhode Island. To date, 22 individual RESCQ kits have been distributed throughout the state to form a redundant communications grid.

Each kit consists of palletized, highly mobile and self-contained assemblies of customized communications equipment that does not require traditional infrastructure. Core technology from Cisco is used to provide voice, IP and two-way radio communications and interoperability. The kit also includes access points for wireless laptops and two routers with computer ports for connecting desktops, printers and routing to the Internet. Several more laptops, IP phones, wireless phones and two-way radios are also provided as a core of quickly usable devices that can be distributed to first responders. All equipment is powered by gas-fed generators, with accessories such as a gas can, duct tape and extension cables included in each kit.

All technology in the kit is immediately usable,

providing voice, data and radio capability within any field of operations as well as global access via satellite to any offsite resources, such as federal response agencies, hospital information systems, Internet medical reference sites and police and fire personnel.

Acquiring IT resources to work on the project was a barrier because the list of IT priorities was already great. Based on the innovative characteristics of the project, IT team members volunteered to work the extra time necessary to complete their day-to-day duties as well as successfully see the RESCQ Project to completion.

Demand for the system occurred almost immediately after its completion. In the summer of 2009, the hospitals in the Lifespan health care system began their H1N1 pandemic readiness testing with RESCQ providing remote communications between the alternative care sites, such as school gyms and convention centers. Four hospitals used RESCQ at these sites to reach their patient tracking, supply management and registration systems.

Additionally, RESCQ has proven its capabilities in other, non-disaster situations. For example, RESCQ has been used in crowd management situations and

### PROJECT SIGNIFICANCE

The RESCQ project has united Rhode Island's health care and public safety organizations to provide a single emergency communications platform that first responders, emergency personnel and hospitals can use out-of-the-box in the event of emergencies that in the past have often disrupted or disabled traditional communications architectures.

for medical triage communications for events such as the Rhode Island National Guard Air Show.

An ancillary goal of the RESCQ Project was the creation of a statewide collaborative model for emergency response communications that can be replicated in other states. To this end, the entire RESCQ Project, including design, development and training materials, was painstakingly documented for easy replication and deployment. ■

Transportation

# Biometrics at the Border

**The U.S. Department of Homeland Security**  
Continues to Build Out Its Biometric Database and  
Catch Criminals in the Process



US-VISIT has transformed border security and immigrant management by building the world's largest and fastest biometrics system. Since its introduction in 2004, the system has been continually improved, not only in speed and capacity but also in the quality of data—which is critical to iden-

## United States Department of Homeland Security

Arlington, Va.

- **Challenge:** Accurately identify people they encounter and determine whether those people pose a risk to the U.S.
- **Approach:** Build and continue to improve a biometric system
- **Outcome:** Development of the United States Visitor and Immigrant Status Indicator Technology (VISIT) system, which gives government agencies access to biometric identification services
- **Nominated by:** Accenture

VISIT is the world's fastest biometric processing system, capable of handling 300,000 transactions a day.

The new system benefits stakeholders involved in the process of identifying and apprehending dangerous individuals. Within about 10 seconds of capturing even partial fingerprints of a person seeking entry to the U.S., the system has matched those prints to the 4.7 million people on the watch list. Within two minutes, information about positive matches is in the hands of law enforcement authorities.

The rollout last year of advanced fingerprint technology required a completely redesigned system, including scanners capable of capturing and matchers capable of processing information from even partial fingerprints

**PROJECT SIGNIFICANCE**  
Through the US-VISIT program, Homeland Security has built, maintains and is continually improving the world's largest biometric system. The cross-agency, cross-platform program has set a global standard for border management and intercepting suspected terrorists, wanted persons, illegal registrants, felons and smugglers. The world's fastest biometric processing system, it is capable of conducting more than 500 million matches per second.

tifying potential threats. New technologies allow US-VISIT to monitor the quality of fingerprint capture by device, type of capture and location. And, identity verification and biometric quality improvements, such as new algorithms, increase accuracy for searches and transactions and reduce the number of false hits due to poor image quality.

With new cross-agency interoperability through service oriented architecture and support for 10-digit fingerprinting (vs. the previous standard of two), the system allows agencies to use biometrics far more effectively than in the past. The system helps identify criminals and visa violators as well as others that should be prohibited from traveling to the U.S. So far, the system has resulted in the positive identification of more than 67,000 criminals, including such major wanted figures as the DC snipers who terrorized the nation's capitol during a three-week shooting spree that left 10 people dead. In an average week, the system identifies hundreds of subjects wanted for homicide, kidnapping, sexual offenses and drug trafficking, as well as suspected terrorists.

from all 10 fingers, replacing a system that worked with prints from just two fingers. The new system is more accurate and able to quickly process more prints, partial prints or prints that are considered "latent"—hidden, invisible or containing accidental smudges. It also is more cost effective, saving the Department of Homeland Security \$1.3 million annually in operating costs.

Since 2004, US-VISIT has collected fingerprints of more than 108 million individuals and made them available to federal, state and local law enforcement. US-VISIT is also synchronized with the FBI's fingerprint identification system of 102 million fingerprints worldwide. With its technology, speed and cross-agency access, the US-VISIT project has set a global standard for border management. ■

# PROGRAM ARCHIVES

**The Computerworld Honors Program** maintains three archives that ensure the preservation of, and continued access to, the achievements of Laureate and Leadership Award recipients.

The Program's Online Archives provide continual, global access to primary source materials and interviews provided by the Program's Laureates and international leaders of the information technology revolution. Accessible at <http://www.cwhonors.org/archives>, the online archives contain all of the Laureate case studies accepted since 1989—literally thousands of outstanding applications of information technology.

The Program's Global Archives are housed in a select group of the world's leading academic and research institutions. These archives date to 2000, when the program began to disseminate its annual collection of primary source materials to national archives, state and university libraries, research institutions and similar repositories around the world. To date, more than 350 institutions are engaged in the preservation and dissemination of these materials. Members of this Global Archives and Academic Council can be viewed on the Honors Program web site at <http://www.cwhonors.org/archives>.

Finally, we call your attention to the Oral History Archive. Though included in the program's online and global archives, these interviews deserve special mention for their deep and personal insights by many of the inventors of the transformative technologies and IT companies of our time. With text transcripts and/or video files of interviews with industry luminaries from Microsoft's Bill Gates to Digital Equipment's Ken Olsen, Sun's Bill Joy and more (see partial list at right), these sessions capture the goals, ideals, mentors and sources of inspiration of more than a generation. Find them at <http://www.cwhonors.org/archives/histories.htm>.

## The Oral History Archive includes interviews with:

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**Gordon Moore**  
Chairman emeritus of Intel  
and inventor of "Moore's law"

**Dave Packard**  
Co-founder  
HP

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**The Chairmen's Committee** is an invitation-only coalition of Chairmen and Chief Executive Officers of leading information technology companies around the world. Members are selected on the basis of their personal and professional achievements in the IT realm, and are particularly well qualified to track the rapid changes that their technology is fostering in society today.

Each year the Chairmen's Committee identifies a new slate of organizations whose use of IT merits recognition and documentation. Nominees are then invited to submit a written and digital record of their innovations. Once reviewed and accepted, these Laureate Case Studies are inducted into the Computerworld Honors Program's online and global archives, which are housed in over 350 institutions around the world.

The Computerworld Honors Program is indebted to the hard work and commitment of the 2010 Chairmen's Committee:

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