THE LAUREATE
Chronicling the 2010 Computerworld Honors Program
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
Clifford Chance Centralizes
London, England
Clifford Chance make BI ubiquitous throughout service from IBM that aims to Blue Insight
Raleigh, N.C.
Competence Center of and enhanced staff productivity, an improved end user experience led to simplified IT management, early adoption of Windows 7, which de-risking the deployment of windows 7
Crawley, England
Baker Tilly
Dedham, Mass.
Papa Ginos
Datatol
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
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

21st Century Achievement Award winner

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

Sendmail, Inc.
Emeriville, 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

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

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

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

21st Century Achievement Award winner
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
1st 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 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

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

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 technological environmental data together with administrative data for case handling, work planning and quality assurance
Nominated by Sybase

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

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

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

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 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

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

Vaisala
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

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**THE LAUREATES**

**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 onshore/offshore model

**CS STARS LLC**
San Francisco, Calif.
Risk Goggles
Introduction of map-based visualization features in STARS’ risk management information system, which allows 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**
Medellin, 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

**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

**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 systems 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

Stadsarchief Amsterdam (Stadsarchief Amsterdam)
Amsterdam, The Netherlands
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

The City of Ryde
Ryde, Australia
City of Ryde Enterprise-Wide Information Management Solution
Launch of enterprise database and records management system for transparency and operational efficiencies throughout the local government
Nominated by HP

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, The Netherlands
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

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 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

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 AWRS (U.S. Army War Reserve Stocks)
Automated information system that tracks inventory, maintains inventory 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
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

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
Nominated by Polycom

21st Century Achievement Award winner

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

Medicare

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

Kindred Healthcare
Louisville, Ky.

Point-of-Care Mobile System
Rollout of mobile devices that let therapists record patient information at the point of care

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

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

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%

Welfare Client Data Systems Consortium (WCDS)
Folsom, Calif.

CalWIN
On-line, real-time automated system 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
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 XCL
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

Media, Arts & Entertainment

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

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

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

The 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

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

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

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%
Good Samaritan
Sioux Falls, S.D.
**Hands On**
System that delivers resident care information on nursing staff and management on a more real-time basis, enabling better patient care
Nominated by Sybase

**Finalist**

Lifespan
Providence, R.I.
**RESCO**
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
Nominated by Morgan Stanley

**Finalist**

Transportation

**Dealers 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
Nominated by Sybase

**Finalist**

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**

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**

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
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
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.

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 school 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, 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 admitted 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
“One semester that 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.”

Pradeep Sindhu

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.

By itself 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
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.”

“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 our 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. 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 build 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 interest- ing history. I’m going back now to February of 1996, when the company was about to be formed, and my lawyer 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.”

“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.”

“Guys, all you have to do is just build it. Don’t worry about there not being a market for what you’re trying to build. Just make it happen.’”

Juni...
THE 21ST CENTURY ACHIEVEMENT AWARDS
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 (APIs) 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 Valdés, 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."

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.

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

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

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 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.
Driving Electric Cars

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

Thus this project, achieved through a collaboration of the Dutch electric grid owners called Foundation e-laad.nl, aims to facilitate a network of car charging stations complete with centralized management capabilities.

On average, about 40% of all Dutch energy consumption goes to transport. Electric cars are considerably more economical than petrol-, diesel- or gas-run vehicles and can reduce that 40%. Driving electric cars also causes carbon emissions to fall, especially if green electricity is used.

However, market demand for electric cars will be very limited if there are not enough charging facilities available. A charging station network is therefore needed around the globe to break the status quo.

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 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.

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.

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.

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

Environment, Energy & Agriculture

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Banking Gets Modern

Denizbank

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

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 delivering 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, the 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.
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.

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 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 paperwork 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 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.

**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
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 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 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.

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.
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.

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 compliance.

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.

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

P RO JEC T SI G NF IC ANCE

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.

Starwood Hotels & Resorts & 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
- Costs: $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
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 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 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.
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 identifying 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.

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 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.
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 back 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.
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