

## THE LAUREATE

THE COMPUTERWORLD HONORS PROGRAM | 2012

# SYBASE CONGRATULATES OUR 2012 COMPUTERWORLD HONORS LAUREATES

**Dutch-Bangla Bank Limited** 

**Mekorot Israel National Water Company** 

Morpheon Corporation - ChartBase Medical Systems

**NTT DATA** 

**World Vision Canada** 



# THE JOURNAL OF THE COMPUTERWORLD INFORMATION TECHNOLOGY AWARDS FOUNDATION

THE LAUREATE

Chronicling the 2012 Computerworld Honors Program

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#### INTRODUCTION

**The Computerworld Honors Program**, now in its 24th year, recognizes organizations that use information technology to promote and advance the public welfare, benefit society and change the world for the better. This year's 200 Laureates are a heartening reminder of the great things that can be accomplished when determined people put their minds to a task and harness the full potential of technology.

The proliferation of mobile and wireless technologies has enabled many of these organizations to better track the spread of disease, deliver humanitarian aid, improve healthcare education programs, promote ecological conservation and improve financial services for underserved populations. And by leveraging social media technologies, these organizations have helped better coordinate disaster relief efforts and provided resources to those hardest hit by the global recession. Cloud computing technologies have allowed students and teachers to connect, and they have expanded the reach of children's assistance programs.

All Laureates were selected after a rigorous application and review process. A panel of judges comprising IT executives and *Computerworld* editors chose the five finalists in each category; from those finalists, one 21st Century Achievement Award winner was selected in each group. Each Laureate case study is briefly profiled in this book, and the projects of the 21st Century Achievement Award winners are described in more detail, based on their case studies, starting on page 46. Laureates' case studies become part of the Honors Program's Global Archives, which are available to researchers, students and scholars through <a href="www.cwhonors.org">www.cwhonors.org</a> and through records housed in national archives in more than 350 universities, museums and research institutions throughout the world.

Congratulations to all in the Laureate Class of 2012 for their determination to help those in need and make the world a better place. The Program is honored to shine a well-earned spotlight on the exceptional work of these organizations, and the tireless efforts of the people who have endeavored to put technology to its very best use.







## AWARDS CATEGORIES FOR 2012

The 2012 Computerworld Honors Program recognizes those organizations that create and use information technology to promote and advance the public welfare, benefit society and change the world for the better.

Laureates were identified for the following 10 categories:

## Collaboration

Recognizes organizations for the innovative use of IT to expand beneficial economic, social, environmental, health or research initiatives to a new or previously underserved population, organization, country or continent.

## Digital Access

Recognizes organizations for the implementation of innovative strategies and technologies that result in the availability of Internet access and the distribution of digital information to new and previously underserved populations.

## Economic Development

Recognizes organizations for the innovative use of IT to create, enable, improve or expand business and job opportunities, advance a positive work environment and/or provide support for entrepreneurs.

## **Emerging Technology**

Recognizes organizations for the bold and innovative creation or use of leading-edge and largely unproven technologies to advance programs and services that benefit humanity.

## Environment

Recognizes organizations for the innovative application of IT to reduce waste, conserve energy, or create and implement new products, processes, programs or services to help solve global or regional environmental problems.

## Health

Recognizes organizations for the innovative use of IT to conduct research, develop new diagnostic or treatment methods and services, improve the safety and quality of patient care, or improve access to or the affordability of healthcare.

## **Human Services**

Recognizes organizations for the innovative use of IT to effectively develop or deliver public programs that provide food and nutrition, housing, transportation, mental health or other social services to populations in need.

## Innovation

Recognizes organizations for the design and development of new technologies and/or the application of an existing technology in a new and unique way to advance overall human health, security or well-being.

## Safety & Security

Recognizes organizations for the innovative application of IT to significantly improve the safety and security of the populations they serve.

## Training/Education

Recognizes organizations for the innovative use of IT to create and improve learning programs and/or extend the reach of education and training to new and/or wider audiences, particularly those previously underserved.



## Collaboration

#### U.S. Army Analytics Group

Fairfield, Calif.

#### Arlington National Cemetery Gravesite Accountability Research Tool

Integration of 1.2 million records and multiple databases into a research tool allows for a full, accurate account of all gravesites and memorials, establishing a system for maintaining accurate records and the foundation for public-facing applications

#### **Atlassian**

Sydney, Australia

#### **Atlassian Foundation**

A focus on giving nonprofits and open-source projects access to the company's collaboration and project management tools, along with a commitment to donating 1% of annual revenue, employee time and company equity, helps organizations address various global issues Nominated by Morgan Stanley

#### City of Bryan, Texas

Bryan, Texas

#### Collaborative Technology Support for the Brazos Valley Child Abduction Response Team

Initiative creates and supports comprehensive computerized system to rapidly collect, track and distribute information throughout the multiple agencies responding to child abduction cases

FINALIST

#### Colorado Governor's Office of Information Technology (OIT)

Denver. Colo.

## Colorado Program Eligibility and Application Kit (PEAK)

A Web-based portal that lets residents apply for public assistance programs and manage existing benefits better enables social service workers to assist clients in receiving the benefits to which they're entitled

Nominated by Deloitte Consulting LLP

#### Continuum Health Partners

New York, N.Y.

## Caregiver Collaboration Using DNA

Desktop Notification Alert (DNA) system informs caregivers about system outages so they can plan accordingly to maintain high levels of patient care; initiatives to use the system to communicate other types of information are under way

#### **CURE International**

Lemoyne, Pa.

#### CUREkids (cure.org/curekids)

Open-source platform integrated with social media services enables people to learn about and donate to individual children's surgeries, creating more awareness of the organization's mission among donors

**FINALIST** 

#### **DataDyne**

Washington, D.C.

#### **EpiSurveyor**

Application of Web and mobile tools makes real-time electronic data collection with smartphones affordable, and often free, to international development sector workers

Nominated by Télécoms Sans Frontières

21st Century Achievement
Award winner

#### HIV Online Provider Education (HOPE) Program, Massachusetts General Hospital

Boston, Mass.

## Harvard University Center for AIDS Research HOPE Program

Web-enabled connections and videoconferencing allow U.S. medical professionals to share latest research on combating HIV/AIDS and discuss related health issues with their counterparts in Africa, Asia and the Caribbean Nominated by Saba Software

#### Indiana University Health

Indianapolis, Ind.

#### The Best Minds in Pediatric Care Know No Bounds

File-sharing and telemedicine initiative enables physicians across the IU Health network to instantly, easily and securely share test results, improving patient care while reducing the time required for accurate diagnosis Nominated by Accellion

## International Justice Mission

Washington, D.C.

#### Casework Tracking and Management System

System pulls together data to provide an end-to-end picture of all cases, enabling workers to better analyze data, aid victims and ultimately help reduce human rights abuses

#### **ITKAN**

Chicago, Ill.

#### ITKAN - Information Technology Knowledge Abilities Network

Organization fulfills its mission by developing disabled professionals' technology skills, engaging with other organizations and employers, and working with a Microsoft Technology Center to explore how developing technologies can improve the lives of disabled users Nominated by SPR Companies

#### JPMorgan Chase & Co.

New York, N.Y.

## The King Center Imaging Project, an Initiative of JPMorgan Chase

Effort by the company's Technology for Social Good group involved digitizing 1 million-plus historical documents related to Dr. Martin Luther King Jr. and making them accessible to the public via the Internet

#### Mekorot Israel National Water Co.

Tel Aviv, Israel

#### Project "Maslul"

Development of a single, strategic platform for all current and future mobile solutions creates a consistent, highly adaptable and secure platform that connects business data to mobile workers on any device, at any time Nominated by Sybase

#### **Microsoft Corp.**

Redmond. Wash.

## Microsoft Disaster Response Portal

Use of cloud service on a global data center infrastructure enables availability, traffic capacity and performance of the portal, which can be deployed in less than an hour to disseminate critical information during a disaster

**FINALIST** 

#### **Sinclair Knight Merz**

New South Wales, Australia

#### Virtual Teaming and Worksharing

Initiative allowing 7,100 workers around the globe to easily connect, communicate and work with one another via videoconferencing increases collaboration, productivity and morale while reducing travel demands and carbon emissions

## The Millennium Project

Washington, D.C.

#### The Millennium Project

Innovative uses of information and communications technology facilitate the exchange of ideas and collection of data from individuals and sources globally, and help create reports and predictions of future trends based on that collaboration

#### Thrupoint Inc.

New York, N.Y.

#### **Enterprise Mobility Suite**

Company's unified communications collaboration suite simplifies and accelerates the deployment of applications supporting telework by providing interoperability among the various vendors and communication modes in many organizations

Nominated by Morgan Stanley

#### Virginia Tech Transportation Institute

Blacksburg, Va.

## Driving Road Safety With HPC Technology

High-performance computing (HPC) technology enables the collection and analysis of data for the Strategic Highway Research Program naturalistic driving study, allowing VTTI to deliver information needed to address critical road infrastructure and safety issues Nominated by Platform Computing, an IBM company

#### **Vodafone Group PLC**

Newbury, England

#### **Vodafone Circle**

Implementation of a corporate social networking tool that includes mobile capabilities connects 90,000 employees across the globe and enables improved communication and collaboration without workers having to travel

#### Welfare Client Data Systems Consortium

Folsom, Calif.

#### CalWIN Strategy to Health Care Reform Coverage Initiative

Deployment of applications allowing healthcare agencies to interface with a state-sanctioned automated welfare eligibility system (CalWIN) to verify patients' identity and citizenship ensures healthcare agencies receive reimbursements for care provided



## Digital Access

## City and County of San Francisco

San Francisco, Calif.

#### **SFGov Mobile Applications**

Mobile applications broaden access to government by giving residents access to all of the city's online resources, including video and audio of government meetings, speeches and information on city government programs

#### City University of Hong Kong

Kowloon Tong, Hong Kong

#### University-Wide Mobile Web Project

Transformation of university's entire public Web presence, which spans 100 websites and half a million pages, into a mobile-friendly format that makes all pages more accessible to users with disabilities

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#### Curriki

Minden. Nev.

#### Curriki

Online community makes open educational resources readily available for free and creates a collaborative social network for educators, an exchange of free learning materials, and a resource for parents and students

21st Century Achievement Award winner

#### **Get Real Consulting**

Rockville. Md.

## eHealth2go, Powered by InstantPHR

Web-based technology encourages disadvantaged patients with diabetes in the Washington, D.C., area to use computerized personal health records to help improve their health and medical care

#### Give Every Child A Chance

Manteca. Calif.

#### **Technology Outreach Program**

A solar-powered computer lab housed in a former school bus offers mobile computer instruction to children who might otherwise not have access to such technology

#### **GoGoNews**

Toronto, Ontario

#### GoGoNews

Application for One Laptop Per Child devices gives children access to news in an age-appropriate format, updating content whenever Internet connectivity is available so it can be read offline

## Indian Farmers Fertiliser Cooperative Ltd.

New Delhi. India

#### Integrated Information Management System

Use of a Web-based content management system to manage and disseminate voice messages and help-line conversations on agriculture, markets and pricing, weather and other useful reference information to rural farmers via mobile phone

**FINALIST** 

## Loveland Public Library

Loveland, Colo.

#### Providing the Unemployed With Access to Technology for Job Searching and Career Development

Replacing traditional PCs with cloud PCs allows library to increase the number of devices available for public use from 37 to 140, giving more people access to computers and enabling the library to add classes without increasing technical support budget

Nominated by Wyse Technology

#### m-Via

Palo Alto, Calif.

#### m-Via Improves the Lives of Immigrant Families with Boom Service

The United States' first mobile payments solution for cross-border transactions allows individuals with mobile phones to send money via text message without having a bank account or credit card

#### Microsoft Corp.

Redmond, Wash.

#### **Students to Business**

Program connects students to internships and jobs at companies using Microsoft technologies, giving young people valuable work experience and employers access to new talent

#### **Modo Labs**

Cambridge, Mass.

#### **Harvard Mobile**

Use of Kurogo, an opensource middleware, empowers development of a mobile application that ties content from disparate sources into a cohesive experience on any mobile device, making campus life easier and more productive for students and faculty

#### NSW Curriculum and Learning Innovation Centre

Strathfield, Australia

## Outreach Learning for the 21st Century

Technology-enabled initiative brings distance learning to remote and rural areas of Australia, helping to improve student performance and giving teachers access to best-practice models

#### **OneCommunity**

Cleveland, Ohio

#### Connect Your Community (CYC)

Project helps narrow digital divide in eight economically challenged communities by providing free digital literacy training, equipping participants with computers and creating broadband access plans; also hires instructors from each community

#### Skype

Luxembourg City, Luxembourg

#### Skype in the Classroom

Free online community enables teachers anywhere in the world to connect with one another and with subject matter experts and other resources to facilitate collaboration and shared learning in their classrooms

#### **SmartRiverside**

Riverside. Calif.

#### SmartRiverside Digital Inclusion Program

Program provides free PC training, refurbished PCs and access to city's Wi-Fi network to low-income families, with 84% of participants saying the program had a positive impact on their income, job status or grades

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#### Stanford University Education Program for Gifted Youth

Stanford, Calif.

#### Stanford University Education Program for Gifted Youth (EPGY)

Use of cloud-based collaboration tool allows Stanford EPGY to expand its experimental online school from grades 10 to 12 to a fully accredited, six-year independent school delivering a rich curriculum to more students

Nominated by Saba Software

**FINALIST** 

#### **Temple University**

Philadelphia, Pa.

## Green Methods of Closing the Digital Divide

Program refurbishes donated computers, giving IT students valuable experience as they turn e-waste into computers for sale to Temple students at nominal cost and for donation to community members

#### Tidewater Community College Computer Club

Virginia Beach, Va.

#### **Computers for Student Success**

Club refurbishes donated computers, provides hands-on training to IT and computer science students and gets computers into the hands of deserving students who otherwise couldn't afford them

#### **University of Houston**

Houston, Texas

#### University of Houston Digital History

Dynamic, database-driven website drawing on robust technologies to maintain its availability, performance and personal engagement provides teachers and students with a wealth of learning resources

Nominated by AppAssure Software

#### **Warrior Gateway**

Arlington, Va.

#### Warrior Gateway's G.I. Network

Portal connects veterans and families to thousands of services and programs, with its newest project, the G.I. Network, allowing government and nonprofit organizations to share resources in one location

Nominated by MarkLogic Corp.



## Economic Development

#### **BANSEFI**

Mexico City, Mexico

#### BANSEFI's Correspondent Program

Project utilizing fingerprint recognition for customers and operators creates a correspondent bank network to provide financial services to and encourage saving among Mexico's poor

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## Boston Technologies Inc.

Boston, Mass.

#### Boston Technologies' Start Your Own Brokerage Offering and Liquidity Bridge Technology

Completely customizable solution includes everything an entrepreneur needs to start a foreign exchange brokerage, opening up the market to those in emerging economies and minimizing manual trading operations and associated errors Nominated by Morgan Stanley

## City of Riverside, Calif.

Riverside, Calif.

#### **Innovation Economy Initiative**

A high-tech road map created by government, education and business leaders sets goals for attracting new high-tech businesses, incubating start-up technology companies and creating high-paying jobs in the region

#### **Dextro LLC**

Lansdowne. Va.

#### Dextro's Online Education Learning Platform (DELP)

Platform aims to help small and midsize business owners and employees in Mexico by providing access to training and content that teaches business and entrepreneurial skills and best practices at minimal cost

#### **Donlen Corp.**

Northbrook, III.

#### **Fleets for Change**

Web-based program provides commercial fleet companies with a way to calculate a carbon baseline from which to improve the efficiency of existing vehicles though driver behavior training, route efficiency and other best practices

#### Dutch-Bangla Bank Ltd. (DBBL)

Dhaka, Bangladesh

#### **Mobile Wallet**

Development of a mobile banking program makes banking services accessible and convenient to Bangladeshis who otherwise have limited or no access to them, while creating a low-cost transaction methodology for the bank Nominated by Sybase, an SAP company

#### Entrepreneur Support Center

Houghton, Mich.

#### **Entrepreneur Support Center**

High-tech facility featuring business-grade computer and telecommunications equipment along with professional business consultants from the region helps entrepreneurs launch successful companies in an area of high unemployment Nominated by MTEC SmartZone

## **Ethiopia Commodity Exchange**

Addis Ababa, Ethiopia

#### **Ethiopia Commodity Exchange**

End-to-end platform provides realtime market data and a commodity grading system for farmers that guarantees commodity quantity and quality and establishes a system for the daily clearance and settlement of contracts

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#### **G20**

Toronto, Ontario

#### G20

OpenText Social Workplace provides a secure, cloud-based mobile collaboration platform that allowed representatives of different countries attending the G2O Summit in Toronto to work together and collaborate on world financial issues Nominated by McKenzie Worldwide

#### Government of the District of Columbia, Office of the Chief Technology Officer, Program Management Office -Enterprise Contracts Management Services

Washington, D.C.

#### Citywide Information Technology Staff Augmentation (ITSA)

Initiative improves contract processes, resulting in reduction of average time-to-hire for IT contract staff while also expanding the number of Washington-based Certified Business Enterprises participating in the work

#### Gulf JP Co.

Bangkok, Thailand

#### Gulf JP Co. Supports Imperative Business Continuity

Company's 2011 update of IT infrastructure ensures business continuity in the main industrial zones of Thailand, the areas most important to the country's economic development

Nominated by Hitachi Data Systems

#### **Hewlett-Packard Co.**

Palo Alto, Calif.

## HP Learning Initiative for Entrepreneurs (HP LIFE)

Through equipment donations, training and online resources, this program enables access to the business and IT skills that aspiring entrepreneurs need to turn their ideas into thriving companies

#### Kellogg Co.

Oak Brook, Ill.

#### **Project Boot Camp**

Web-based information portal provides social workers helping veterans with a centralized link to information, resources and benefits, allowing for more effective, timely and targeted assistance for veterans

#### Michigan Department of Technology, Management and Budget

Lansing, Mich.

#### USAHerds Cattle Tracking: Protecting Michigan's Food Supply

Tracking technology and processes provide a sustainable mobile system that ensures a high degree of animal and disease traceability for Michigan livestock and livestock imported into the state

**FINALIST** 

#### MicroGraam Marketplace Pvt.

Bangalore, India

#### MicroGraam

Platform allows urban professionals to provide microcredit to underprivileged borrowers in rural India and to set terms that reflect the loan's purpose, while also minimizing transaction costs

#### National Telecommunications & Information Administration, U.S. Department of Commerce

Washington, D.C.

#### Broadband Technology Opportunities Program (BTOP) -U.S. Dept. of Commerce

A \$4 billion investment of grant money is helping close the digital divide by providing and improving high-speed Internet access for underserved populations Nominated by Booz Allen Hamilton

#### One IT World Corp.

New York, N.Y.

## Government Central Payment Service for Online Taxes

A service-oriented integration architecture between El Salvador's Ministry of Finance and 10 major banks creates a more efficient and reliable framework for taxpayers to make payments at banks that the government receives online

#### SunGard Financial Systems

Wayne, Pa.

#### SunGard Mifos 2

As part of its community service initiatives, SunGard develops cost-effective Web-based open-source technology and efficient processes to help microfinance institutions better manage their loan and repayment programs

Nominated by Morgan Stanley

#### UNED, Universidad Nacional de Educación a Distancia

Madrid, Spain

#### Distance Education Improvements in Customized Classrooms by Means of Virtual Desktops

Deployment of a virtual desktop infrastructure provides a work environment for students and staff that's efficient, cost-effective and consistent across more than 60 learning centers

#### U.S. Department of Agriculture, National Resources Conservation Service

Fort Collins, Colo.

## Cloud Services Innovation Platform

Platform facilitates the migration of existing scientific modeling applications to a cost-effective commercial infrastructure-as-a-service cloud environment to increase availability of environmental models used to help farmers and ranchers in their conservation efforts

21st Century AchievementAward winner



## Emerging Technology

#### **Bloom Energy**

Sunnyvale, Calif.

#### **Bloom Energy**

Using technology that converts oxygen from ambient air and any hydrocarbon fuel into clean electricity, the Energy Server efficiently produces energy at the location where it's needed Nominated by Morgan Stanley

**FINALIST** 

# Commonwealth of Pennsylvania Department of Public Welfare - Bureau of Child Support Enforcement

Harrisburg, Pa.

#### Pennsylvania Child Support Enforcement System (PACSES) Payment Score Calculator

Program uses a predictive algorithm to calculate the likelihood of parents making child support payments, allowing caseworkers to take recommended steps to help prevent delinquent payments

**FINALIST** 

#### Dell

Round Rock, Texas

#### **Dell Health Giving Program**

Initiative donates Dell equipment to help accelerate pediatric cancer treatment, with a particular focus on neuroblastoma; Dell's cloud provides needed computing power to help increase analysis, collaboration and research on this disease

Nominated by AxiCom

## edRover Inc., a project of DDx Media Inc.

Stevenson Ranch, Calif.

#### edRover

Location-aware fundraising applications enable participating businesses to make donations to local educational organizations when nearby consumers "check in" after receiving smartphone alerts

#### Lehigh Valley Health Network

Allentown. Pa.

## Digital Pens for Emergency Care at Pocono Raceway

Digital pens with templated paper documents allow the healthcare organization to capture critical patient data at public events and enable clinicians to provide medical personnel where and when needed and better plan for future events

#### **MedRespond LLC**

Pittsburgh, Pa.

## Effective Brief Intervention (EBI) Project

Project uses artificial intelligence, streaming video and machine learning to simulate conversations between a virtual patient and reallife caregiver to teach healthcare providers effective approaches to substance abuse interventions Nominated by SCS Ventures

#### National Center for Telehealth and Technology

Joint Base Lewis-McChord, Wash.

#### T2 Virtual PTSD Experience

An immersive, interactive learning experience based in Second Life educates service members and other visitors about combat-related post-traumatic stress disorder through simulated scenarios and provides resources for care Nominated by 2b3d

#### **NPower**

New York, N.Y.

#### The Community Corps of NPower

Fully automated online program that matches and connects skilled IT professionals to nonprofits in need of specific IT support helps organizations increase efficiencies through technology

**FINALIST** 

## Ohio Department of Developmental Disabilities

Columbus, Ohio

#### Virtual Desktops at Ohio Department of Developmental Disabilities

Switch to a virtual desktop environment gives users a more stable, mobile and secure version of their PC work experience while reducing desktop management costs by 30%

#### **OhioHealth**

Columbus, Ohio

#### OhioHealth Mobile App

New smartphone applications deliver customized healthcare information in audio, video and text formats to patients, providing education on health conditions as well as ways to manage and improve their well-being

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21st Century Achievement Award winner

#### **Que Innovations Lab**

Sherbrooke, Quebec

#### KOULE

Device combines electronics and mechanics to engage cognitively or physically disabled children, particularly those with autism and those with obesity, in a physically active and fun play environment Nominated by Morgan Stanley

## Seattle Children's Hospital

Seattle. Wash.

#### Seattle Children's Hospital (SCH) Private Cloud

Private cloud built on a virtual desktop infrastructure gives caregivers quicker, more mobile technology, saving them a daily average of 45 minutes that was once spent navigating technology and is now spent treating patients Nominated by Citrix

**FINALIST** 

#### **Socialware**

Austin, Texas

#### Morgan Stanley Smith Barney Social Media With Socialware

New software platform allows employees from financial services companies to connect with new and existing clients' social networks in a secure and regulatory-compliant manner

Nominated by Morgan Stanley

#### Splunk Inc.

San Francisco, Calif.

#### Data Empowerment and IT Infrastructure/Supply Chain Management for Crossroads HK

Splunk software gives a Hong Kongbased nonprofit visibility across its IT infrastructure, allowing the organization to ensure consistency, security, efficiency and reliability of systems and its supply chain operations

Nominated by Morgan Stanley

#### Terremark, a Verizon Company

Miami. Fla.

#### **Enterprise Cloud Federal Edition**

Infrastructure-as-a-service solutions give U.S. government a dedicated pool of compute resources, where customers create and manage their own virtual servers, giving federal agencies flexibility, reliability and security while saving money

#### The Management Innovation eXchange - Hackathon

Boston, Mass.

## The Management Innovation eXchange - Hackathon

Initiative uses collaborative, enterprise social networking environment to bring together more than 500 thought leaders and businesspeople from diverse fields around the world to identify ideas for reinventing management Nominated by Saba Software

#### U.S. Army Materiel Command (AMC) Chief Information Officer

Aberdeen. Md.

#### Defense Common Ground System-Army (DCGS-A) Standard Cloud (DSC)

DSC uses cloud computing and a specialized data ingestion system to make reliable intelligence available in a timely manner to U.S. and coalition forces in Afghanistan Nominated by Booz Allen Hamilton

#### U.S. Army PM Acquisition Business

Alexandria. Va.

#### PM Acquisition Business Next Generation Business Environment (NGBE) Consolidation

Project streamlines the Army's hardware and software portfolio and delivers enterprise service-oriented solutions to the Army acquisition community, resulting in increased capability and significantly lower costs

Nominated by Booz Allen Hamilton

## U.S. Department of State Office of eDiplomacy

Washington, D.C.

#### eDiplomacy

New suite of tools creates a strategic framework for a unified, versatile global collaboration environment, allowing information sharing across U.S. organizations and outreach to U.S. and global stakeholders

#### **U.S. Postal Service**

Washington, D.C.

#### Delivery Confirmation Problem-Resolving Application (DECOPRA)

Program increases efficiency at postal service's Network Distribution Centers by identifying and isolating parcels with problematic addresses and notifying personnel about the problems, ensuring more timely delivery



## Environment

#### **Broadcom Corp.**

Irvine, Calif.

#### Broadcom Energy Efficient Ethernet

Company's extensive Energy Efficient Ethernet (EEE) portfolio goes beyond industry standards to significantly reduce energy costs and CO<sub>2</sub> emissions, delivering 70% power savings when the network is active and up to 95% during down/idle time

## Chicago Department of Transportation

Chicago, Ill.

#### Chicago Traffic Tracker

Application built on open-source software and GPS feeds from transit buses, municipal vehicles and taxi cabs details traffic conditions on Chicago streets in real time, allowing drivers to plan the best travel routes and helping to reduce congestion

**FINALIST** 

#### **Delphix**

Menlo Park, Calif.

#### Delphix Data Virtualization Platform

Several novel technologies form the basis of a platform allowing organizations to virtualize the information in their databases and archives, thereby reducing energy and hardware costs in large-scale data centers

Nominated by Morgan Stanley

#### Fujitsu Ltd.

Tokyo, Japan

#### Great East Japan Earthquake Response Program

Company supplied various resources, including free cloud services, communication applications, PCs and volunteers, to help workers, customers and residents affected by the massive March 2011 earthquake in Japan

21st Century Achievement Award winner

#### **JouleX**

Atlanta. Ga.

## AMEC Enterprise IT Energy Reduction

AMEC's use of JouleX Energy Manager automates control of energy consumption across the IT enterprise so unused or idle devices attached to the network can be powered down to save energy Nominated by Morgan Stanley

#### Knowledge Profits Inc.

Atlanta, Ga.

## Greater Vine City Opportunities Program Inc.

Technology helps to capture \$1.1 million in federal grants to establish the Global Green Technology Center, a green building aimed at providing technology resources and green job training in an economically and socially disadvantaged community in Atlanta, Ga.

#### Mojave Desert Ecosystem Program

Barstow, Calif.

#### Mojave Desert Ecosystem Program

Initiative uses hosted cloud servers, mobile applications and the Internet to collect and share GIS data and electronic reports from federal, state and local agencies working in the Mojave Desert region

## OG&E, a unit of OGE Energy Corp.

Oklahoma City, Okla.

#### **Positive Energy Smart Grid**

A combination of technologies help customers automatically reduce their energy demand or shift demand to off-peak hours while also enabling the company to manage its energy system more holistically Nominated by ProSearch

**Qingyan Fu and Qian** Wang, Shanghai Environmental **Monitoring Center: David Wong, Atmospheric Modeling and Analysis Division. U.S. EPA:** and Prof. Joshua Fu, **Department of Civil** and Environmental Engineering, **University of** Tennessee at Knoxville

Shanghai, China

#### Shanghai Air Quality Forecasting System

System uses air-quality data from around China to predict the concentration of pollutants expected in Shanghai within a 48-hour range, allowing sensitive groups, particularly the elderly and children, to act to protect themselves

#### **Reaction Design**

San Diego, Calif.

#### **Model Fuels Consortium**

Initiative that brought together automotive manufacturers and energy producers creates and validates the accurate fuel emission models needed to more rapidly develop environmentally responsible engines

**FINALIST** 

## Sabre Airline Solutions

Southlake, Texas

## Sabre Advanced Flight Planning Solution

Flight planning application enables airlines to operate more efficiently and to reduce both fuel consumption and CO<sub>2</sub> emissions by optimizing flight paths

# San Bernardino County Information Services Department - Application Development Division

San Bernardino, Calif.

#### **Document Storage Goes Green**

System that allows county workers to create documents as searchable PDF files and then electronically store them allows county to reduce the use of paper and printer toner, save on personnel time and costs, and create a greener work environment

#### Schneider Electric

Rueil Malmaison, France

#### Schneider Electric Bip-Bop Program

Energy program aims to bring clean, affordable electricity to marginalized people and communities worldwide by providing cost-effective equipment, funding for innovative entrepreneurs, and technical and business training to sustain energy investments

**FINALIST** 

#### **Tetra Tech**

Pasadena. Calif.

#### Water Management Webcast Series for EPA

Use of cloud-based webcasting software enables company to educate thousands on water management topics, remotely train individuals and archive broadcasts for future use

Nominated by Media Platform

#### The California Independent System Operator (ISO) Corp.

Folsom, Calif.

#### Managing Renewable Energy Sources With Situational Intelligence

Analytics tool enables California ISO to analyze data from multiple sources to optimize the use of renewable energy while also ensuring the stability and reliability of the electric grid Nominated by Kickstart Consulting

## The Procter & Gamble Co.

Cincinnati. Ohio

#### P&G's Global Asset Recovery Purchases (GARP)

Company uses a desktop application to extract and visualize data to help it reach its waste-reduction goals by recycling manufacturing waste and turning excess inventory into useful products

**FINALIST** 



#### U.S. General Services Administration

Washington, D.C.

## The A3 (Any Device, Anywhere, Anytime) Strategy

Fiberlink's MaaS360 cloud-based device management service enables the GSA to cut energy use by powering down idle workstations and infrastructure servers and by securely migrating workers to mobile devices, which increases telecommuting opportunities

#### Vestas Wind Systems A/S

Aarhus, Denmark

#### Vestas Virtualizes and Consolidates IT Management Software to Produce and Support More Wind Turbines for Green Energy Projects around the Globe

Server virtualization enables company to cut its own energy consumption and increase the number of wind turbine projects it supports, which in turn helps reduce the production of greenhouse gasses

#### Washington Suburban Sanitary Commission (WSSC)

Laurel, Md.

#### **WSSC Mobile**

Mobile application allows customers to pay bills, report problems and share ideas on improving operations and results in increased customer awareness of water management issues

Nominated by Enterprise Development Group

#### Western Kentucky University

Bowling Green, Ky.

#### WKYU PBS LED Studio Lighting Project

Pioneering use of cutting-edge technology creates a new LED lighting system that is more flexible and adaptable yet has yielded a 97% reduction in electricity consumption

## Health

#### **Beaumont Hospital**

Dublin, Ireland

#### Cystic Fibrosis IT System: CF-IT

System captures information from healthcare professionals treating cystic fibrosis patients and creates detailed records accessible to healthcare providers from any computer in the hospital, supporting continuity of care

**FINALIST** 

#### California Correctional Health Care Services

Sacramento, Calif.

#### **CCHCS Telemedicine Program**

Videoconferencing technology and clinical telepresence systems bring specialized medical care to California inmates onsite, and a related website gives healthcare providers a centralized platform to manage medical reports and data Nominated by Cisco

#### Cherokee Indian Hospital

Cherokee, N.C.

#### Implementation of an Electronic Medical Record to Improve the Quality of Health Care for the Eastern Band of Cherokee Indians

Implementation of an electronic medical record system in several departments improves patient care by decreasing morbidity and mortality rates, lowering wait times in the emergency department and boosting patient satisfaction

#### Christiana Care Health System

Wilmington, Del.

#### Insight - The Patient Symptom Self-Assessment Tool

Custom software captures and assesses symptoms reported by patients with chronic illnesses in a consistent and detailed format, allowing clinicians to respond in an appropriate, timely manner to better manage symptoms and improve patients' quality of life

**FINALIST** 

#### Grande Ronde Hospital

La Grande, Ore.

#### Improving Rural Access, Safety and Cost of Healthcare Services through Remote Presence Technology

Implementation of a telemedicine program, including use of a remote-presence robot, allows rural patients to access specialists through real-time interactive connections without having to travel long distances for care

**FINALIST** 

#### HCA Information Technology & Services

Nashville. Tenn.

#### **MySCRI Clinical Trials Portal**

System facilitates and simplifies the complex process of putting patients on clinical trials, which saves physicians' time, eases challenges for patients, and increases accessibility of new research and discoveries that can improve cancer therapies

#### **Hewlett-Packard Co.**

Palo Alto, Calif.

#### Early Infants Diagnosis in Kenya

Program allows care providers to electronically manage infant HIV test data and transmit test results via SMS to even the most remote health clinics, reducing test result turnaround times to ensure an early start to treatment



#### **Indianapolis EMS**

Indianapolis, Ind.

#### EMS ePCR/INPC

EMS agency's collaboration with local health information exchange results in first-of-its-kind system that allows EMS workers to access abstracts of patients' hospital medical records, which help them determine the best treatments

#### **KW Foundation**

Montevideo, Uruguay

#### **KW Social Network**

Ongoing social networking initiative provides patients, healthcare professionals and students with the tools to create, publish and exchange knowledge regardless of their computer programming abilities

Nominated by Instituto Nacional del Cáncer

#### Lehigh Valley Health Network

Allentown, Pa.

#### Incorporating Behavioral Health and HIV Patients Into a Shared Medical Chart

Program uses technological and procedural processes to meet privacy regulations for behavioral health and HIV patients while enabling clinicians to access information under a shared record model for electronic medical records

#### **Moffitt Cancer Center**

Tampa, Fla.

#### Enterprise Video Technologies Improve Cancer Patients' Healthcare Experience

Video-on-demand and real-time video interactions allow patients to meet with doctors, receive information and attend support groups without burdensome travel, and allow doctors to attend meetings virtually, giving them more time for patient care

Nominated by Cisco

#### **OhioHealth**

Columbus, Ohio

#### Transcatheter Aortic Valve Replacement

Advanced clinical information system used for monitoring health, reviewing medical images, acquiring and analyzing data, and documenting medical treatment enables clinical trials of a potentially life-saving heart procedure for highrisk patients

#### **Perficient Inc.**

St. Louis, Mo.

## Perficient and Texas Children's Hospital

Business intelligence technology helps Texas Children's Hospital effectively analyze its data to increase financial efficiency and operational effectiveness, conduct innovative research, satisfy regulatory requirements and provide effective, efficient patient care

#### Prize4Life

Cambridge, Mass.

#### Prize4Life Biomarker Challenge

Organization uses cloud-based crowdsourcing platform to support its search for ways to accurately track the progression of ALS and to solicit ideas on how to reduce the cost of clinical drug trials to treat the disease

Nominated by InnoCentive

#### SAFE-BioPharma Association

Fort Lee, N.J.

#### Research Collaboration in the Cloud: How NCI and Research Partners Are Using Interoperable Digital Identities, Digital Signatures and Cloud Computing to Accelerate Drug Development

Interoperable digital identities, digital signatures and cloud computing eliminate the need for researchers to exchange paper forms with participants in clinical trials, saving money and time in developing treatments



## Seattle Children's Hospital

Seattle. Wash.

#### At the Heart of Seattle Children's Mission-Critical VDI Deployment Pump Hitachi Storage Technologies

Virtual desktop infrastructure (VDI) enables increased mobility for clinical staff and faculty, resulting in better, more seamless care for patients, a 24/7 environment with no disruptions, and lower operational costs

Nominated by Hitachi Data Systems

#### Texas Health Resources

Arlington, Texas

## Reducing VTE Using Clinical Decision Support

Automated, standardized venous thromboembolism (VTE) risk assessment tool that uses real-time information from electronic health records helps identify patients at risk for these life-threatening blood clots, allowing physicians to start treatment sooner

## University of Pittsburgh Medical Center (UPMC)

Pittsburgh, Pa.

#### eVisits at UPMC: Increasing Convenience with Reduced Cost for Patients and Providers

Patients can receive online health consultations by using a secure Internet portal to fill out medical questionnaires that become part of the patient's electronic medical record, thus eliminating the need to travel to a doctor's office and ensuring continuity of care

## Wireless Reach for Qualcomm

San Diego, Calif.

#### Wireless Heart Health: Using 3G to Assist Underserved Patients With Cardiovascular Disease

Smartphones with built-in electrocardiogram screening and monitoring, Web-based electronic medical record software, and 3G wireless Internet-enabled workstations at rural clinics connect rural Chinese patients with remote cardiac specialists, ensuring timely care

**FINALIST** 

#### **ZSL**

Edison. N.J.

#### **Mobile Wound Care**

Smartphone and tablet application takes pictures and measures a patient's wound and uploads the information to the patient's medical record, eliminating time and the potential for error associated with manual record-keeping

## **Human Services**

#### 2-1-1 San Diego

San Diego, Calif.

#### 2-1-1 San Diego Military and Veterans Program

Software allows people calling or using live chat through the county's assistance program to identify themselves as military members or veterans, so their calls are prioritized or routed to other veterans who can provide peer-topeer counseling and assistance Nominated by Qualcomm Inc.

#### **American Red Cross**

Washington, D.C.

#### American Red Cross and Salesforce.com Meet the Magnitude of Need Created by Disasters

CRM software enables better management of volunteers, donors, inquiries, training, events and back-office functions, particularly when activity spikes, resulting in more cohesive operations, greater visibility of data and more effective communication following disasters Nominated by Hill and Knowlton Strategies

#### **eBay Giving Works**

San Jose, Calif.

#### eBay Giving Works

Features and functions of eBay are leveraged to help raise money for nonprofits, with users so far raising more than \$293 million for nonprofits in the United States, the United Kingdom and Canada

#### **GMHC**

New York, N.Y.

#### Food and Nutrition Bar-Code Scan

ID system based on bar-code technology allows staff to quickly verify and record clients receiving services, helping the agency track the program's success and win more funding to expand services

#### Los Angeles County Department of Public Social Services (DPSS) and Chief Executive Office Service Integration Branch (CEO-SIB)

Los Angeles, Calif.

#### Los Angeles County Data Mining Solution for Child Care Welfare Fraud Detection

County uses analytics to quickly and efficiently identify possible cases of fraud and to rank cases for investigation based on risk scores, saving the county millions of dollars Nominated by SAS

## Medi-Cal Consulting Services Inc.

Riverside, Calif.

#### Free Medi-Cal Workshops

Internet enables the promotion of free information and workshops to California residents and streamlines the exchange of important documentation and transactions with eligible benefit recipients, which makes meeting state and county deadlines easier

## Michigan Department of Human Services

Lansing, Mich.

#### **MI Bridges Expansion**

Online access to department's programs and applications for assistance gives Michigan residents timely information, including eligibility for benefits, and redirects staff's time and resources to broadening services and addressing other areas of need

#### Michigan Department of Technology, Management & Budget

Lansing, Mich.

#### Statewide Enterprise Data Warehouse Service

Employees use state's massive amounts of data to do their jobs more effectively and to comply with federal requirements, detect fraud and distribute benefits

Nominated by Teradata Corp.

#### NAV, the Norwegian Labour and Welfare Administration

Oslo. Norway

#### Norwegian Labour and Welfare Administration (NAV) Pension Program

Self-service portal gives citizens an integrated view of their public and private pension benefits and automates the application process, gathering user information, calculating benefits, generating decision letters and enabling payments in seconds

Nominated by Accenture

21st Century Achievement Award winner

#### New Hampshire Department of Health and Human Services

Concord, N.H.

#### New Hampshire Electronic Application System (EASY)

Virtual service delivery means clients have more streamlined access to information and the application process, agency workers enjoy more efficient workflow processes, and agency sees a reduction in errors and costs Nominated by Deloitte Consulting LLP

**FINALIST** 

#### Oklahoma Department of Human Services

Oklahoma City, Okla.

#### WebFOCUS Management Software Performance Measures Project

BI and reporting system gives caseworkers timely access to accurate information to help them better manage child support cases and address all related compliance issues, which increases child support compliance

## **Social Security Administration**

Baltimore, Md.

#### Ticket to Work (TTW) Beneficiary Assistance and Support Services (BASS)

Web 2.0 and social media help administration communicate with Social Security beneficiaries with disabilities about benefits and employment options, while technology connects them with the resources that can help them develop a work plan Nominated by Booz Allen Hamilton

**FINALIST** 

#### St. David's HealthCare

Austin, Texas

#### High Alert in the Emergency Room

Program alerts emergency room staff to patients with psychiatric needs and substance abuse disorders and provides caregivers with accurate medical information so they can effectively treat patients and refer them to appropriate care



#### Tekmeca Inc.

San Francisco, Calif.

#### GoodMoio

Public virtual space provides a site where funders, service providers, clients and interested individuals can come together to exchange information and collaborate; site also provides a platform for providers to promote their services Nominated by San Francisco Chinatown Community Development Corp.

#### Texas Health and Human Services Commission

Austin, Texas

#### **Customer Flow Management**

System that queues customers and offers workers a real-time view of the services being requested increases the efficiency of office operations, helps reduce customers' wait times and improves the overall quality of services provided

#### The Boeing Co.

Chicago, Ill.

#### **Transportation Navigator System**

Web portal for the American Cancer Society allows workers and volunteers to schedule rides for cancer patients from virtually any Internet-enabled computer, replacing paper-based scheduling with a faster, more efficient system

#### Universidad Carlos III de Madrid

Madrid, Spain

#### **UC3M Titling**

Tool uses mobile communications networks to project captions, videos with sign language, and audio descriptions of live events through various channels for audience members with limited hearing or vision

FINALIST

#### Volunteers of America Chesapeake

Lanham, Md.

## Operational Dashboarding and Predictive Analytics

Business intelligence tools enable organization to measure and report outcomes, which helped it execute an operational turnaround and helps it to identify and respond to new service opportunities

#### **World Vision**

Ontario, Canada

#### Last Mile Mobile Solutions (LMMS)

Initiative aimed at rugged environments without reliable power features a roaming laptop server that runs administrative software so humanitarian field workers can efficiently and effectively track aid distribution, replacing paper-based record-keeping

Nominated by Sybase

FINALIST

#### YMCA of Metropolitan Chicago

Chicago, III.

#### Y-Zones

Use of geographic information in business intelligence analysis helps YMCA identify needs in specific locales and respond with appropriate programs, which helps it strengthen collaborations, build partnerships and have a deeper impact on the community

## **Innovation**

#### Children's Services Council of Palm Beach County

Boynton Beach, Fla.

#### **Healthy Beginnings**

Software systems collect, track and report data and statistics that support strategic management and planning decisions across multiple agencies, enabling the council to deliver services to families more efficiently

Nominated by CAI

#### **DigitalGlobe**

Longmont, Colo.

#### DigitalGlobe's Response to Japanese Tsunami Using FirstLook and FirstWatch

Satellite imagery and company's online and analytic services give users a street-by-street view of damage following natural disasters or political crises, enabling governments and organizations to better plan aid strategy

**FINALIST** 

#### Direct Relief International

Santa Barbara, Calif.

#### Customer Case Study: Direct Relief International

ERP, CRM and business intelligence applications provide an overview of the aid organization's inventory and flow of resources, allowing workers to more efficiently get the right emergency supplies to people in crisis

Nominated by SAP

FINALIST

#### Dr Lal PathLabs Pvt. Ltd.

Haryana, India

#### S-2-R (Sample to Report)

Document management system integrated with an ERP system allows lab to shorten the time it takes to get test results to patients while also improving its ability to store, retrieve and manage data

#### **IBM**

Armonk, N.Y.

## City of Bolzano's Living Safe Project (Italy)

Sensors in elderly residents' homes monitor for danger and transmit data to an off-site control room and Android devices, allowing agents to quickly respond to emergencies; residents can also communicate via touchscreen with health professionals to receive immediate assistance

**FINALIST** 

#### **iGivefirst**

Denver. Colo.

#### iGivefirst

Platform allows website visitors to safely donate to charities with one click of the "Give" button; website owners, bloggers and online publishers can implement the technology to encourage visitors to donate to charities referenced on their sites

#### Infratab Inc.

Oxnard, Calif.

## Sustain. Track. Trace. The Nicaraguan Spiny Lobster

Various technologies, including electronic tags and GPS-enabled cellphones, create a system to help the Nicaraguan government enforce regulations protecting both the sustainability of the Nicaraguan spiny lobster population and the fishing industry

#### **IntraLinks**

New York, N.Y.

#### IntraLinks Life Sciences

Online service that enables pharmaceutical and biotechnology organizations to quickly and efficiently collaborate and share research helps improve the speed and quality of clinical drug trials and the process of bringing new therapies to market Nominated by Morgan Stanley

#### Lucile Packard Children's Hospital at Stanford

Palo Alto, Calif.

#### Patient Safety Dashboard Project at Lucile Packard Children's Hospital at Stanford

Custom-developed dashboard gives healthcare team a real-time view into the status of the entire medical unit as well as individual patients, resulting in better care and increased compliance with care guidelines

**FINALIST** 

#### Morpheon Corp., ChartBase Medical Systems

Pasadena, Calif.

#### ChartBase: Delivering Paperless Efficiency to Occupational Healthcare

Practice management and electronic medical records solution fully automates the operation of an occupational-industrial medical clinic, providing documentation and assessment tools, and compiling and submitting required supporting documentation

Nominated by Sybase

#### **Network for Good**

Bethesda. Md.

#### **Unleashing Generosity**

Organization's donation-processing platform provides a foundation on which developers can build Web apps that enable nonprofits to raise money and for-profit companies to incorporate giving into commerce

#### Ninth Judicial Circuit Court, Fla.

Kissimmee. Fla.

## Ninth Judicial Court Centralized Remote Interpreting (CRI)

Audio and video infrastructure enables off-site interpreters to securely view and interact with the court, ensuring that court officials can obtain services from certified professionals when needed and helping to lower the court's interpreter costs Nominated by Cisco

#### Novartis International

Basel, Switzerland

## SMS for Life - Fighting Malaria in Africa

System consisting of an SMS management tool and a Web-based reporting tool gives healthcare providers visibility into antimalarial stock levels at health clinics, leading to more efficient stock management and better availability of the lifesaving medications

21st Century Achievement
Award winner



#### Pennsylvania Department of Agriculture

Harrisburg, Pa.

#### **USAFoodSafety**

End-to-end software creates a consistent, fully automated workflow process for inspecting facilities where food is manufactured, prepared or sold, allowing inspectors to record required data on handheld tablets and better track inspection information

#### **Seven Corners**

Carmel, Ind.

#### Seven Corners Virtual Private Cloud

Upgrade to virtual desktop environment using agile development to keep system developments, application upgrades and customer implementations on track virtually eliminates outages, supports business expansion and growth, and increases company's ability to aid its customers in crises

#### SGI

Fremont, Calif.

#### Pleiades Upgrade

Next generation of high-performance computing platform extends the computational capability of NASA's Pleiades supercomputer system, adding approximately 35% to the peak capability of Pleiades in early 2012

#### Skype

Luxembourg City, Luxembourg

## Low-Bandwidth Version of Skype for NGOs

Low-bandwidth version of software provides free or low-cost voice and video calls over the Internet for United Nations field employees working in remote areas and under harsh conditions without jeopardizing business applications

## The New York City Police Department

New York, N.Y.

## Capgemini & NYPD Property and Evidence Tracking System (PETS)

System allows police to more efficiently identify, locate, track and route property and evidence, with the ability to access a cradle-to-grave life cycle of invoiced property and evidence on demand Nominated by Capgemini US LLC

#### Westchester County, New York

White Plains, N.Y.

## TeleCorrections Inmate Kiosk and Video Visitation System

System allows Westchester County Jail inmates to securely communicate face-to-face with outside parties who can connect via the Web; family visits have a positive social impact, while virtual visits with bail expediters help county shorten prisoners' time in jail, saving costs

#### Yahoo! Japan

Tokyo, Japan

#### Yahoo! Japan Shinsai Website

Established after the March 2011 earthquake in Japan to assist with humanitarian efforts, the site is now a thriving online community supporting news and emergency alerts, community events, volunteer activities and charitable donations Nominated by Super Micro Computer Inc.

## Safety & Security

#### **Awareity**

Lincoln, Neb.

#### TIPS - Preventing the Preventable

Web-based incident-reporting tool allows people to report suspicious incidents, security breaches, employment concerns or school safety issues anonymously, giving organizational leaders insight into potential problems so they can proactively respond

#### California Administrative Office of the Courts

San Francisco, Calif.

#### California Courts Protective Order Registry

Web-based system that provides access to a statewide repository of restraining and protective orders prevents judges from issuing multiple orders with conflicting terms, helping to ensure the safety of victims

#### **CGH Technologies Inc.**

Washington, D.C.

#### Federal NOTAM System (FNS)

Digital technology modernizes the collection, management and distribution of Notices to Airmen (NOTAM), replacing an antiquated system with one that distributes mission-critical information more quickly, more accurately and at a lower cost

**FINALIST** 

#### City of Rogers, Ark.

Rogers, Ark.

#### Rogers, Arkansas - Mobile Data Solution

Virtual computing environment and deployment of mobile devices to public safety personnel improves communication, coordination and efficiency of the workers and saves taxpayer dollars

Nominated by Citrix

#### Colorado Governor's Office of Information Technology

Denver, Colo.

#### Colorado Statewide Interoperability Training Program

Program provides free online training focused on communications equipment to all workers who use public safety communications systems to ensure that all agencies can share information effectively and deliver essential services seamlessly

#### Commonwealth of Pennsylvania Justice Network

Harrisburg, Pa.

#### **JNET Facial Recognition System**

Web-based application using algorithms and a database of high-quality, standardized photographs enables more than 39,000 county, state and federal justice professionals to identify suspects and witnesses in photographs and videos

21st Century Achievement Award winner

#### **CS STARS**

Chicago, Ill.

#### **STARS Risk Response**

Program automatically identifies and assesses external risks to organizations by monitoring data sources, determines which risks are relevant to an organization's locations and people, and sends assessments for qualifying events to the appropriate officials

#### Gemalto

Austin, Texas

## Healthcare IT Access Security at Seattle Children's Hospital

Use of user-friendly two factorauthentication devices, along with server and technical support for authorized user access to hospital servers, networks and VPNs, provides strong security with high user-adoption rates

#### Lehigh Valley Health Network

Allentown, Pa.

#### Lehigh Valley Health Network Patient Security Initiatives

Comprehensive plan to ensure data security focuses on encrypting mobile devices and corporate email, moving all sensitive data off of desktops and onto secure servers, and adopting a data loss prevention system

#### mPedigree Network

Accra, Ghana

#### mPedigree

Technology deployed throughout the supply chain allows manufacturers, regulators, distributors and consumers to use text messaging and unique product IDs to easily and quickly verify that medicines are not counterfeit Nominated by Business Ghana

#### **NTT Data**

Tokyo, Japan

#### Automatic Realtime Bridge Monitoring System (BRIMOS)

System uses fiber-optic sensors and advanced IT capabilities to monitor bridges for damage, transmit results in real time to transportation engineers, and alert them to abnormalities

Nominated by Sybase, an SAP company

**FINALIST** 

#### Rankin County, Miss.

Brandon, Miss.

#### **Mobile Virtual Desktops**

Replacing traditional computing with virtual desktops creates an always-available computing infrastructure for the county sheriff's department, increasing operating efficiency while lowering costs

#### San Bernardino County, Calif., Information Services Department

San Bernardino, Calif.

## Property Evidence Tracking System (PETS)

Web-based system streamlines the process for gathering, receiving, tracking and distributing property evidence, which results in improved tracking of all evidence, enhanced reporting and auditing, and a reduction in personnel costs

## San Joaquin County, Calif.

Stockton, Calif.

## Integrated Justice Information System (IJIS)

Web-based system modernizes public safety systems, simplifying integration among justice agencies, ensuring data security and increasing the efficiency of its users *Nominated by Oracle* 



#### SmartDrive Systems Inc.

San Diego, Calif.

#### **SmartDrive Safety**

Sensors and video recorders on vehicles collect data on drivers' performance that's analyzed to pinpoint areas for improvement and reinforce good driving practices

#### Suffolk County Department of Social Services, New York

Ronkonkoma, N.Y.

#### Police Incident Request Tracking

Program enables public safety departments and social service agencies to securely share incident request forms used for court cases, dramatically cutting turnaround times for providing courts with crucial information

## The University of Texas at Tyler

Tyler, Texas

#### Medical Special Needs Shelter: Just-in-Time Online Training Website

Website provides free training materials to help quickly prepare volunteers and workers to care for people with special medical needs who seek emergency shelter during crises

**FINALIST** 

## Troy University IT

Troy, Ala.

#### **Cyberkids Protection Initiative**

Program delivers educational information about Internet safety to youth through school and community events, and trains educators and parents on the issues so they can provide guidance to young people

#### **VBrick Systems Inc.**

Wallingford, Conn.

#### **3C Wildfire Control**

System used by Regional Command and Control Communications enables distribution of live video from mobile and fixed resources via the Internet to public safety agencies, resulting in better response and coordination when fighting wildfires

Nominated by Morgan Stanley

FINALIST

#### VeriSign

Reston. Va.

#### VeriSign's Domain Name System Security Extension (DNSSEC) Program

Program introduces technology that lets users more securely navigate the Internet, helps ready the Internet community for the enhanced security measures, and provides the tools to support their implementation and adoption

## Training/Education

#### **AMD Foundation**

Sunnyvale, Calif.

#### **AMD Changing the Game**

Program encourages youth from diverse backgrounds in various countries to pursue studies in science, technology, engineering and math by providing the technology to create their own video games

**FINALIST** 

#### Amrita E-Learning Research Lab

Kerala, India

#### Amrita Virtual Interactive E-Learning World

E-learning software connects students to all universities and colleges in India at no cost, with a particular focus on benefiting marginalized populations, such as migrants, the homeless, people with learning difficulties, the unemployed and low-income individuals

#### Carnegie Mellon University

Pittsburgh, Pa.

#### MILLEE: Mobile and Immersive Learning for Literacy in Emerging Economies

English literacy lessons built into games played on affordable cellphones help poor children in the developing world acquire the English skills they need to better compete in the workforce as adults

#### Centers for Disease Control and Prevention, Management Information Systems Office

Atlanta, Ga.

**FINALIST** 

#### Winnable Battles Sortable Stats

Application aims to increase awareness about the prevalence and severity of chronic illnesses and other conditions linked to preventable health problems by showing trends in these categories at the national and state levels Nominated by Booz Allen Hamilton

#### **Cisco Systems**

San Jose. Calif.

#### Cisco Internship Training Program

Undergraduates undergo six months of technology training and mentoring, helping them improve their academic performance, develop their technical aptitude and cultivate workforce development skills

#### Institute of Interactive Arts and Engineering, University of Texas at Dallas

Richardson, Texas

## University of Texas System Virtual Pediatric Patient Project

Game-based simulation gives nursing students virtual clinical practice opportunities and allows them to make clinical decisions in the care of acutely ill pediatric patients, helping students become better, more experienced nurses

#### istation.com

Dallas, Texas

#### **iStation Reading Program**

Program created to help address the learning deficit common among economically disadvantaged children uses a game-like multimedia environment to teach elementary school children and track their progress

#### Lone Star College System

The Woodlands, Texas

## Video-based Learning and Collaboration Network

Several enterprise video technologies transform teaching and learning by allowing faculty, staff and students to capture, share and store video content for viewing on any desktop or mobile device at any time

Nominated by Cisco

## Mooresville Graded School District, N.C.

Mooresville, N.C.

## The Mooresville "Digital Conversion" Program

Technology initiative increases access to and use of computers at underperforming schools and transforms the education environment, with students becoming more engaged and collaborative and significantly improving their scores on achievement assessments Nominated by Cisco

**FINALIST** 

#### New York City Housing Authority

New York, N.Y.

#### Training NYCHA Residents in State-of-the-Art Information Technology Skills

Housing authority and nonprofit Workforce Opportunity Services provides a training program in Siebel and Maximo software for selected public-housing residents to increase their career opportunities

#### **Pace University**

Pleasantville. N.Y.

#### **Intergenerational Computing**

Specially trained undergraduate students instruct senior citizens on computer use and help secure equipment when needed; elders learn how to navigate new technology, while undergraduates learn about adaptive technologies and issues around aging

#### **SIVECO Romania**

Bucharest, Romania

#### eSchool Portal

Nationwide IT initiative provides the framework to provide interactive virtual science laboratories that provide a realistic, engaging, safe and cost-effective learning environment for high school students

#### **SIVECO Romania**

Bucharest, Romania

#### Support for the Special Education System Through Specialized Educational Portal

Portal gives special needs children access to a repository of high-quality educational resources that transforms education into a personal experience; program also trains more than 3,000 teachers on adopting information and communications technologies for classroom use

**FINALIST** 



## SWC Technology Partners Inc.

Oak Brook, Ill.

#### Alain Locke Charter School Achieve Technology Project

Company's donation of hardware and services enables charter school serving underprivileged children to replace an outdated technology infrastructure with virtualized desktops, which simplifies maintenance, better supports integration with mobile devices and costs less money

#### Trust for the Americas

Washington, D.C.

#### Partnership in Opportunities for Employment Through Technology in the Americas (POETA) Accessible

Program provides adaptive technology to centers that train people with disabilities in digital skills that prepare them for jobs in their local markets



21st Century Achievement Award winner

#### **Udacity**

Los Altos, Calif.

#### ai-class.com

Video lectures of open courses are combined with interactive quizzes to create personalized education experiences for students, who are more engaged in the learning process as a result

## University of Illinois at Chicago

Chicago, III.

#### University of Illinois at Chicago Demystifies Financial Aid With GoToWebinar

Live webinar delivers financial aid information to prospective students and their families who cannot attend in person, with recording of the webinar also available on the UIC website for on-demand viewings

#### University of Oklahoma Health Sciences Center

Oklahoma City, Okla.

#### Classroom Bluetooth Audio

Connecting audio from existing classroom infrastructure to students' Bluetooth receivers and hearing aids allows students with hearing problems to comfortably hear all classroom material

## University of Southern Mississippi

Hattiesburg, Miss.

#### University of Southern Mississippi Distance Learning and Collaboration Project (DLC)

Initiative allows faculty, staff members and, soon, school district teachers and their students to connect virtually on a new, streamlined video and audio technology system that records and stores content for future teaching purposes

Nominated by Cisco

#### **Urban Ed Inc.**

Washington, D.C.

#### IT Help Desk Apprenticeship

Training program uses a blended learning approach that draws from traditional construction apprenticeship programs and combines associate-level technical education and corporate-level professional development to help low-income minorities excel in technology jobs







Every year, a select group of hi-tech innovators gather in Washington DC to honor the contributions of people using new and innovative technology to promote positive social and economic change.

At Dell, we are passionate about innovation and transforming our customers' business. We are delighted to be the Global Vision Sponsor for Computerworld Honors Program 2012. Our customers of all sizes and industries benefit from our innovative cloud client computing software, hardware and services solutions. Our transformation continues rapidly with new solutions around infrastructure and content management from the cloud helping organizations increase productivity, while reducing cost for any user, for any content on any app via any device, anytime, anywhere without constraints, conflicts or compromises.



#### Join us for the celebrations.

Learn more from Tarkan Maner, GM, Cloud Client Computing Solutions, at Dell (ex-CEO of Wyse) at this year's Computerworld Honors Program Gala Evening and Awards Ceremony: 4th June, Andrew W. Mellon Auditorium, 1301 Constitution Avenue NW, Washington, DC.



Follow Tarkan on Twitter: @TarkanManer

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

2012 Computerworld Honors Program

and, since 1999, sponsor of the

Morgan Stanley Leadership Award for Global Commerce

We congratulate the winner of this year's Morgan Stanley Leadership Award for Global Commerce

## Reid Hoffman

Co-Founder & Executive Chairman at LinkedIn and Partner at Greylock Partners

We also congratulate the 2012 Morgan Stanley
Computerworld Honors Program Laureates for the
acceptance of their works into The Worldwide Archives
of the Computerworld Honors Foundation

Atlassian Bloom Energy

Boston Technologies, Inc. Delphix

IntraLinks, Inc. JouleX Inc.

Que Innovations Socialware

Splunk Inc. SunGard

Thrupoint, Inc. VBrick Systems

**Morgan Stanley** 

# Enhancing Public Intellectual Culture

**LinkedIn Founder Reid Hoffman** aims to engage individuals in a broader public discussion for the greater good of society.

Computerworld national correspondent Julia King recently interviewed this year's recipient of the Morgan Stanley Leadership Award for Global Commerce, Reid Hoffman, for a videotaped oral history. Excerpts of the interview follow.

## Growing up in Berkeley, the only child of intellectuals

hen I walk around Berkeley today, it's like the duckling imprint. The trees, the spacing of the houses, the nature of the houses makes you feel like you are home. Berkeley was a kind of countercultural place, and there was a lot of encouragement to be an individual. There was a lot of good emphasis on

"My parents got divorced when I was 1, so I've had two families as result of that for some number of years. Both of my parents are lawyers. The principal benefit [of] being the child of an attorney was that discussions were always interesting. For example, if I wanted a new

educational systems, and it still feels in these various

ways like an area that resonates as home.

bicycle, I had to make a case for it. Any expectation for changing the arrangement around me, whether with my mother or father, was, 'What's the argument?' I learned about adducing evidence, referring to precedent, other kinds of things that were useful later skills. I'm deeply familiar with the nature of a succinct argument.

"I've always been a fan of science fiction, primarily because science fiction takes certain kinds of abstractions and beliefs in what's in the future and then makes it into a theory of the future of how human nature will adapt to certain potential kinds of changes. So among my favorite authors were Isaac Asimov and Robert Heinlein, who actually lived down the street from my uncle, so he got me a signed book early. I would also read magazines like *The Atlantic* and *Harper*'s and so forth to get a sense of their theory of society. But science fiction was the medium that I loved. I couldn't wait for the new books to come out."



## **Earning his first paycheck**

"When I was 12, I was really into fantasy role-playing games like Dungeons & Dragons. There was a local game company called Chaosium that had a game called RuneQuest, and I really wanted to get involved in that. So I started hanging around the game company. Eventually what happened is that they had published a scenario pack, which is a description of an adventure by which a group of kids would participate. One person would be the game master, and the other people would be characters running through it. It was kind of a make-your-ownadventure type of book, and they had all kinds of mistakes in it. So I went through with a red pen and edited it and handed it to the editor. He was initially irritated. Here is this 12-year-old kid claiming to edit their published work. He looked through what I did and said, 'This is kind of interesting. Here is a new one we're working on. Why don't you go and edit this?' So I took that home. I think it was on a Friday afternoon, and I was a classic kid, totally obsessive. I did nothing other than eat and sleep and work on that until Monday afternoon. After school I walked by Chaosium and handed it over, and that was my first paycheck."

## Creating and following a unique entrepreneurial path

"The entrepreneurial journey starts with jumping off a cliff and assembling an airplane on your way down.' I constructed that quote as a way to focus in the mind a simple metaphor, and a set of things that's very important about entrepreneurship. One of them is, you can't fully plan it, right? It's not per se a career path. You can't know all the

variables. When you jump off a cliff, you're not flying yet, other than downwards, right? So you have an intense focusing of your mind on the project, because you have to focus entirely on what you're doing in terms of building the plane. It's a metaphor that also includes financing. One of the mistakes that entrepreneurs frequently make is they say, 'Oh, when I get to the milestone of financing, I'm successful or partially successful.' Financing is actually nothing more than a thermal draft. It makes the ground further away, and it may give you some pieces to try to help assemble the plane, but you ultimately have to get the plane assembled. And if you assemble the plane successfully, you fly."

## Innovating against the grain to create LinkedIn

"The way that I innovate and invent is somewhat different — an intersection of what I see is possible with technology, together with what I see changing in the world. Most people tend to see the problem to solve and then work back from it. For me, it's always a joint intersection of technology and recent trends.

"I noticed that [with] the way that careers and work landscapes were changing, you should analyze every individual's career as a business of themselves. This started a couple decades back with Tom Peters talking about the 'brand of you,' but it isn't just the brand. It's actually all of the things that substantively go into a business in terms of opportunity flow, investing in yourself—the whole notion of how do you improve your skill set, how do you improve your economic prospects? You have to drive that yourself. There's no longer the 40-year career at IBM with

training classes and so forth. And then the other changing landscape was technology — the Internet. What does the Internet allow and enable? It actually enables everyone to have an individual professional brand. It enables people to search [on] each other. It enables a network to be established by which people can collaborate and help each other. And this can all be done in a lightweight way that allows you to do your job and be more effective at doing your job while also having this network. And that intersection between the change in work and change in technology was the thing that allowed me to see LinkedIn."

## The value of being a contrarian

"There's another key component to most good innovations in entrepreneurial companies, which is when they start, you should be contrarian. The majority of people should think that's kind of crazy. But it is important, because you're building up to when the market changes in the right direction, so then you're there at the forefront when that market opens up, in terms of being able to establish the business. That was another part of the reason to found LinkedIn — because in 2002, most people would kind of scratch their heads and look at you and say, 'Really? The nature of careers is changing? OK, sure. Right.' Whereas now, I think it's at least more broadly understood. The trajectory is clearer now to many more people.

"What's tricky about an investor or an entrepreneur is that you have to be a contrarian and right. Usually, if you're not contrarian, then everyone is trying to do it. So therefore, you have a kind of dog





## The entrepreneurial journey starts with jumping off a cliff and assembling an airplane on your way down.

pile that makes it very difficult for a company to break out. This can actually be surprising to people. For example, in the early stages of Google, search was considered to be a loss leader. It was considered to be not that valuable. Yahoo, AOL, etc., were priding themselves on how little people used search, and how much they used other features as a part of generating a media property. It was time on [the] site, not directing people to other sites, as a key function. Search was kind of a loss leader. And yet, Google established that search is actually the value. It was contrarian."

## Striving for a greater society

"For me, the key drive to innovate is thinking about, what are the ways that we have a better society? And what are the things that, if we then put those in place, we would all be better off as individuals and as a group? And how do you achieve that effect? Sometimes it's the spread of ideas. Part of the shift from academics into entrepreneurship for me was to actually be building software by which we all communicate with each other. We all organize our thoughts, organize our friends, and collaborate and share experiences in ways that allow us to have a better society.

"I don't really focus on the ques-

tion [of] how to be remembered very much. I guess I would hope for three things. The first is that the impact of my work will have helped various institutions [and] technologies and have an ongoing compounding good effect on society. I don't need to be remembered for it, but I hope that LinkedIn and the other projects that I'm doing, both on the for-profit and the nonprofit side, help catalyze better lives for individuals and for society.

"The second part is I still hope to help strengthen what I think of as public intellectual culture in the U.S., which is a public discussion about who we are as individuals, deciding who we should be and who do we want to be. So [it's about] not just creating the products and the things that improve the ecosystem, but have the discussion about it.

"Then I guess the third thing would be one of the interview questions that I ask executives frequently: 'If you were to write your obituary, what would you want to have in it?' And for me, it would be that society has become a better, healthier, nobler, compassionate place, where people are reaching their potential better as a function of the work that I have done. That would be my contribution. My legacy would be a contribution to society being better in these ways."

2012 Computerworld Morgan Stanley Leadership Award Nominating Committee

Marv Adams Chief Operating Officer TD Ameritrade

Fred Matteson Managing Director Alvarez & Marsal

**Dan Morrow**Co-Founder & Principal
Jamestown Exploration
Company

**Steven L. Sheinheit**Chief Strategy and
Technology Officer
QBE Reinsurance Corporation

Jon Shirley Retired President and Board Director Microsoft

Matthew J. Szulik
Retired CEO and Chairman of
the Board
Red Hat Inc.

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

## Wyse Global Vision Awards

ranklin-McKinley School District

**Loveland Public Library** 









# When Vision Becomes Reality

How **four public service organizations** are tapping cloud technology to improve their delivery of health and educational services

ore than 200 cash-strapped school districts in Illinois now have access to state-of-the-art IT infrastructure services, collectively known as IlliniCloud. In some districts, the services replace storage and back-up systems previously provisioned on antiquated hardware stashed away in a teacher's basement. At Seattle Children's Hospital, clinicians are now able to access critical patient data in a matter of seconds, significantly enhancing the speed and quality of care they provide over the course of 300,000-plus patient visits each year.

Meanwhile, Colorado's Loveland Public Library has been able to more than triple the number of computer-based classes it offers to citizens.

And in San Jose, Calif., teachers in the Franklin-McKinley School District are able to offer both struggling and academically advanced students the kind of customized instructional content that will benefit them most.

In all four cases, what's enabling the delivery of these enhanced healthcare and educational services is the implementation of virtualization and cloud client computing\*\* technologies. Dell Wyse honors each of these organizations for their extraordinary vision and for deploying leading-edge information technology to improve the services they provide and the lives of those they serve. Their stories follow.

### **Franklin-McKinley School District**

Teachers at the 10,000-student Franklin-McKinley School District used to negotiate with one another for access to the computing resources they needed to run the digital support materials that supplement their stand-up instruction in the classroom.

"The reason was that you could knock out access to computers in a classroom down the hall by running one of the learning programs. We had constant issues with network, memory and program resources," recalls school superintendent John Porter.

Then, about a year ago, Wyse CEO Tarkan Maner offered to donate cloud PCs and WSM cloud software to the school district as a way of showcasing how the technology could improve the delivery of educational services in a diversified urban school district. Franklin-McKinley is home to a very large population of English language learners, and it has a significant population



of students with special educational needs.

"The first big thing we could do with the cloud is download to one place all of our curriculum resources – all of the CDs and other digital materials we get with textbooks – so that everyone can connect to them," says Porter.

"The connection is instant, the graphics are 10 times better than we used to have and the speed is spectacular," he notes.

"The result is that teachers are now using all of the curriculumsupported applications. These are well-designed programs to help kids who are struggling or kids who want to do more exploring or gain more knowledge in a subject area," Porter explains.

One of the biggest cloud-related success stories, he says, is the district's pre-algebra curriculum for seventh-graders. The district loaded a popular pre-algebra program from The Khan Academy onto a single server, making it available on demand to any student using a Wyse cloud PC. Individual students can view the content as many times as they need in order to thoroughly understand it. In other words, students are able to customize their lessons to their particular needs, viewing the exact content they need, as many times as they need it.

"The direct instruction is coming from the computer and teachers act

more like coaches," Porter explains.

Going forward, Porter envisions students at similar learning levels working in small groups and using different customized content delivered via cloud PCs and WSM software. The cloud enables teachers to offer individualized instruction.

"The role of the teacher becomes coach, facilitator and monitor of instruction," he says. "It's going to revolutionize education."

## Bloomington Public School District #87/IlliniCloud



IlliniCloud is what Bloomington School District Technology Director Jim Peterson describes as a community cloud – one that has significantly improved the educational outlook for hundreds of school districts and thousands of students across the state of Illinois.

In order to receive federal funding under the No Child Left Behind Act, schools are scrambling to find new and better ways to use technology, a prerequisite for receiving federal funding.

"Basically we got together a co-op of school districts to share resources and found we could lower our costs plus provide other school districts with infrastructure they need," says Peterson.

The result: Today 215 districts – more than 25% – throughout the state are the beneficiaries of Illini-

Cloud IT services, including disaster recovery, automated reporting and curriculum delivery.

Launched three years ago, the IlliniCloud is a nonprofit consortium comprising three data centers, which enables K-12 schools to share hardware, applications, services and support. All data remains within the state, which Peterson says is important to school officials whose support of the community cloud is what makes it all work.

"Adoption matters in the cloud," he says. "You want to make sure your peers are involved."

Before IlliniCloud, some school districts were buying commodity hardware at local retail stores and housing disaster recovery capabilities in their basements at home, says Jason Radford, a systems administrator in the Bloomington district.

"They were also trying to host multiple applications on one piece of hardware and in some cases very critical student information was on hardware that was way past its lifecycle," he says.

"Now, by contrast, the Illini-Cloud and shared computing has reduced costs across districts by as much as 50%," says Peterson. "More importantly, school districts can apply those savings to direct educational initiatives that they previously may not have been able to fund."

### **Loveland Public Library**

Educational games for children, online skills training courses, job search resources and genealogy tools are just a few of the many applications available on demand to Loveland Public Library patrons, thanks to virtualization technology and the adoption of Wyse cloud PCs and WSM cloud software.

The technologies were implemented as part of a recent major expansion program that initially

called for expanding the library's 37 public-use PCs to almost double that number. But there was a problem. The additional PCs came with no additional budget for technical support. Shane Adamson, the library's technology manager knew that he and one other technician, Kent Bumguardner, could not support the additional equipment.

Enter virtualization technology, which enables the library to load a



single server with various software applications that patrons can view using different Wyse cloud PCs. The cloud PCs in the library's lab, for example, are outfitted with an image containing all the standard business software, an Internet browser and job search tools. Other PCs can be quickly configured on the fly with an image of software used in conjunction with any one of the specialty classes the library offers.

"We're able to break out all of these individual images because we don't need an individual application for each PC," explains Adamson. Depending on who is in the library and what they need, "we can switch a classroom PC to a children's PC. It allows us to quickly and efficiently change images."

Before the library expansion, "we didn't have a separate classroom and if we had a class, we had to close the lab, which was always a very unpopular decision," Adamson recalls. "As

a result, we only offered two classes a month because we didn't want to close down the lab so much."

Now the library is offering about 15 different classes a month with additional offerings in the works for the future.

### Seattle Children's Hospital

In healthcare, there is a direct correlation between speed and safety, which is why very fast access to patient and medical information is an absolute priority, according to Wes Wright, vice president and chief technology officer at Seattle Children's Hospital.

By virtualizing some 400 software applications and delivering them to Wyse Xenith zero clients, Seattle Children's, one of the nation's top children's hospitals, is now able to provide clinicians with instant access to the data they need. Additionally, the hospital saves \$100 in energy costs for every traditional PC it replaces with a Wyse Xenith.

Wright describes application virtualization – which the hospital has largely accomplished using Citrix XenApp virtualization technology and Wyse zero clients – as Seattle Children's "bring-your-own-device strategy."

"We can serve a Windows 7 desktop on any device – a Mac, PC, Android or whatever else a clinician or researcher has," Wright notes. This enables clinicians to do what they do best: focus on their patients.

In addition to the XexApp technology, the hospital implemented



Citrix XenDesktop to facilitate single sign-on access to multiple applications. Single sign-on allows a nurse, clinician or physician to quickly and securely log onto a computing access device, as well as access any desired application that they are authorized for, in just one step, often via a simple swipe or tap of an ID badge or proximity card. For access to the virtual desktop environment, 3,000 Wyse Xenith zero clients were brought in and implemented across both the clinical and administrative user base. According to hospital officials, the two technologies operate together seamlessly.

"One of the things that I think Wyse did correctly is collaborate with the engineers at Citrix so the zero device is optimized for the best virtualized experience using Citrix XenDesktop," Wright says. "In the old days of virtualization, you might plug in a USB drive and it wouldn't get recognized and you would have had to reboot" − all of which takes time, a precious commodity in the healthcare environment. ■

### Footnote:

\*\*Cloud client computing is a user-centric aspect of cloud computing focusing on secure access to content from a variety of "thin" or traditional fixed and mobile devices, including tablets and smartphones, using best of breed server, storage, networking, endpoints, software and services.

Dell offers complete cloud client computing, by delivering all of the critical components to a successful customer outcome, from the datacenter to the endpoint. Dell acquired Wyse Technology in May 2012.



## CENTURY NT AWARDS



## Delivering Data

**DataDyne's software** puts the power to collect and analyze data in the hands of field workers.



THIS MAY BE THE DIGITAL AGE, but many humanitarian and development workers still rely on paper forms to collect data – an inefficient and often ineffective process that takes precious resources away from their core mission.

As a result, many humanitarian and development programs can't easily access and analyze the data they need to best guide their organizations' relief efforts.

DataDyne saw a way to address the problem by using the increasingly powerful computing capacity of mobile phones, which are now widely available around the globe, even in poor and rural regions.

## **EpiSurveyor DataDyne**

Washington, D.C.

- Nominated by: Télécoms Sans Frontières
- Challenge: Enable field workers with humanitarian and economic development organizations to effectively collect data on their programs
- Solution: Harness the computing power of low-cost mobile phones using a free software program designed to collect and analyze data



The not-for-profit organization developed a soft-ware program called EpiSurveyor to make real-time electronic data collection possible for nonprofit and government organizations. The idea for this hand-held data-collection application first emerged during the era of personal digital assistants, but DataDyne quickly migrated to using mo-

phones as they became increasingly prevalent.

EpiSurveyor is the first cloud-computing application created specifically for the public health and international development sector. Like many other tools on the market, it

enables the collection, analysis and understanding of data. But unlike others, EpiSurveyor is free to most users. It's available to anyone with access to a browser, and it's designed to be simple enough to use that organizations don't need IT consultants to deploy, use or support it.

Its impact is significant. UNICEF uses EpiSurveyor to manage child health programs, the Kenya Ministry of Health uses it to track disease outbreaks, and the nonprofit organization TulaSalud uses it to collect information for maternal-child health programs in Guatemala. The World Bank uses EpiSurveyor to conduct economic surveys of the poor in Latin America.

Camfed International uses it to manage and evaluate its education programs in numerous African countries, and the Smithsonian Institution uses it to track mountain gorillas, one of the world's most endangered species.

Since its online introduction in 2009, EpiSurveyor

## PROJECT SIGNIFICANCE

The use of low-cost mobile phones with the free EpiSurveyor software drastically cuts costs for data collection and analysis in developing regions while enabling quicker times for quality control and improving implementation speed.

has become the most widely used data-collection tool in the international development sector. More than 6,000 people in more than 170 countries now use it, with 20,000 to 50,000 data records uploaded each month.

With EpiSurveyor, DataDyne achieved its goal of enabling organizations to better collect and analyze data. EpiSurveyor is also providing a new model for successfully scaling technology for social good.

But DataDyne isn't done yet. Its workers are constantly improving and updating the product based on the feedback they receive from users in the field. And DataDyne is currently seeking growth funding for product development and expansion.



## Online Learning

**Curriki** leverages technology to bring quality educational resources to everyone for free.



FOR MANY CHILDREN, the cost of academic resources can put a good education out of their reach.

Students in poor and developing countries are often unable to afford books, and their teachers either can't access or can't pay for up-to-date online curricula. Even some U.S. school districts are finding that commercial textbooks and teaching materials are prohibitively expensive.



- Nominated by: Curriki
- Challenge: Make quality educational materials more accessible and affordable
- Solution: Develop an online community where educators, parents and students can collaborate and share open educational resources for free

Curriki.org is an online community empowering educators, parents and students to improve education by using technology to make free, open educational resources readily available to all who need them.

The nonprofit organization Curriki believes technology can help eliminate those financial barriers. Its overarching goal is to leverage technology more effectively in the classroom to deliver better outcomes for more students.

To reach that goal, Curriki has created a website where anyone with access to the Internet can contribute to and use quality and media-rich curricula for free.

Curriki, whose name is a combination of the words

"curriculum" and "wiki," also provides a collaborative social network for educators, parents and students, so they can collaborate as well as contribute and exchange free learning resources.

Response to Curriki.org has been strong. More than 5.6 million people from 192 countries

have used the site. More than 238,000 people are registered members, and more than 45,000 lesson plans, educational games, learning videos and simulations, digital textbooks, full courses, and other education materials have been contributed to the site.

More telling, perhaps, are the stories about the people who are using it. For example, a teacher at the Setumo Intermediate School, located in a small farming town in South Africa where many students are disadvantaged, uses it to access free science and mathematics resources. Meanwhile, teachers at a school district in Long Island, N.Y., use Curriki to develop, organize and share the content they're creating on American history.

Curriki developed its free, hosted services using a 100% open-source solution stack integrated though a service-oriented architecture. The development and production environments are deployed in a Tier 1 managed hosting environment.

## PROJECT SIGNIFICANCE

Curriki is leveraging technology to bring free educational resources to educators, parents and students around the world, to help deliver better student outcomes at lower costs and to eliminate financial barriers to receiving an education.

The technology's architecture enables third-party educational partners to easily integrate Curriki services and content into their websites, and the organization is helping to create and propagate useful ways to tag, find and select appropriate learning resources. Curriki plans to add enhanced community capabilities, content delivery through mobile and whiteboard devices, automated assessment tools, and more curated content aligned to academic standards.



## Moving to the Cloud

**U.S. agency** turns to cloud computing to increase availability of applications and lower costs.



THE NATIONAL RESOURCE CONSERVATION SERVICE was faced with some staggering figures: more than 100 scientific modeling tools deployed to each and every one of its 12,500 planners, who were spread out in more than 2,000 offices.

Each NRCS employee needs access to those applications as they travel into the field to help farmers and ranchers determine how best to handle the critical issues that affect their businesses and livelihoods.

But the NRCS, part of the U.S. Department of Agriculture, realized it had an increasingly costly and ineffective system on its hands.

## Cloud Services Innovation Platform U.S. Department of

u.S. Department of Agriculture, National Resources Conservation Service

Fort Collins, Colo.

- Nominated by: USDA-NRCS
- Challenge: Create a platform that facilitates the migration of existing applications to a commercial infrastructure-as-a-service cloud environment to increase access and lower costs
- Solution: Develop a tool to help move the agency's applications to the cloud environment, in part by turning them into Web services that can be run in the cloud

The CSIP came from a partnership between the NRCS, the USDA's Agricultural Research Service and Colorado State University. The NRCS, which was the business driver, provided the funding and project leadership; the ARS contributed the servers, and CSU employees contributed the brainpower.

So in 2009, the NRCS started looking at cloud computing as a way to centralize resources, cut costs, and provide a more scalable and flexible IT backbone for the organization and its thousands of field workers.

The agency, though, needed a tool to help move its legacy applications to the cloud. It developed the Cloud Services Innovation Platform (CSIP) to meet that goal.

The CSIP is designed to facilitate the migration of existing scientific modeling applications to any Amazon EC2-compatible infrastructure-as-a-service cloud environment. One of its key components is its ability to take an exist-

ing environmental model and turn it into a Web service that can run in the cloud.

The agency also sees compatibility of this opensource infrastructure with commercial cloud-hosting offerings as critical, since that compatibility will enable both successful production-level deployment and reliable availability on a stable operational platform.

The NRCS tested this new framework using Eucalyptus open-source private cloud software. Using the Eucalyptus-based CSIP, the NRCS demonstrated that these environmental modeling tools could be easily accessible as a Web service from the cloud. This capability helps the agency deliver better support to farmers and

ranchers by enabling, for example, an NRCS planner to simply use a mobile phone from the field to get answers to questions about soil erosion.

The agency is using two criteria to evaluate the success of this project: whether computational services can be quickly established on an open-source infrastructure and then moved to a commercial cloud

## PROJECT SIGNIFICANCE

The CSIP centralizes resources, cuts cost and provides a more scalable and flexible IT backbone for the NRCS.

provider, and whether the procedure generates significant cost savings that make it a compelling option for future development activities.

So far, the NRCS is reporting successes on both fronts. It has been able to set up legacy computational scientific models within a week for each one before moving them to commercial providers. Meanwhile, the agency is expecting to save money over its current server-farm approach.

The NRCS sees this project as an ongoing effort and expects to constantly update the underlying open-source infrastructure to fit changing development needs. ■



## Emerging Technology Mobile Healthcare

**Smartphone application** empowers patients with content tailored to their own healthcare needs.



DOCTORS HAVE A COMMUNICATION PROBLEM: Studies have found that patients typically remember only 25% to 35% of what they're told by their doctors during office or hospital visits.

## OhioHealth Mobile App OhioHealth

Columbus, Ohio

- Nominated by: OhioHealth
- Challenge: Increase meaningful communication with patients about their healthcare needs
- Solution: Mobile application for smartphones allows OhioHealth to deliver content tailored to patients' individual healthcare conditions and requirements

"This is something that empowers patients to be more informed when they arrive for their office visits. I don't think there is any way it won't improve quality of women's healthcare and outcomes."

Dr. Andrew Bokor,
 Grant Medical Center,
 Columbus, Ohio

OhioHealth recognized that physicians needed a better way to convey information and reinforce important medical advice and instructions and saw mobile phones as a tool to do just that.

Working with vendors, OhioHealth developed a mobile application that can be deployed on smartphones through the Apple and Google Android marketplaces to deliver real-time, up-to-date healthcare information to its patients.

The application delivers audio and video content as well as text to accommodate different learning styles. The content and messages delivered are tailored to each patient's situation so that each person experiences the app as a tool that's custom-

ized and personalized to his or her medical needs.

Content is delivered at strategic times to maximize the effectiveness of the information the app provides. For example, a post-operative patient is sent instructions on how to care for an

incision after the surgery, while an expectant mother receives messages reminding her about a particular test that can be performed only during certain weeks of her pregnancy.

The mobile app also has an integrated map application, so patients can use their smartphones to easily

access directions to their doctors' offices.

OhioHealth had to contend with several challenges as it developed and deployed its mobile app. From a technical standpoint, there were data integrity problems within physician databases, and multiple interfaces needed to be developed for various smartphones. On the people side, OhioHealth had to persuade physicians to contribute current photos for online use, and it had to raise awareness of the mobile app among its patient population once it was available.

OhioHealth tackled those issues and successfully deployed the app, with metrics indicating that it was well received by patients. In the initial pilot with ob-

## PROJECT SIGNIFICANCE

The delivery of customized healthcare information to patients via a smartphone app results in educated patients who are better consumers of healthcare resources and better able to manage their medical conditions.

stetric patients in the spring of 2011, 24% of enrolled patients visited the app more than five times.

OhioHealth has already rolled out the mobile app to obstetrical and cardiology patients and plans to expand it to more patient groups as additional content is developed.



## Rapid Response

**Fujitsu** marshals its resources to help itself and others recover after the historic 2011 earthquake.



THE MASSIVE MARCH 2011 EARTHQUAKE AND TSUNAMI in Japan impacted people and businesses throughout the country, including global company Fujitsu Ltd.

But the Tokyo-based organization did not let the disaster shut it down. Fujitsu formed a Central Disaster Response Headquarters in the earthquake's aftermath. That effort, headed by the company's president, consisted of two units: one focused on supporting in-house restoration, and the other on the company's customers, plants and R&D locations. Using teleconferencing to communicate, the two units worked together to assess

## Great East Japan Earthquake Response Program Fujitsu Ltd.

Tokyo, Japan

- Nominated by: Fujitsu Ltd.
- Challenge: To restore its own company and employees to everyday life and help others do the same
- **Solution:** Leverage its technology, including teleconferencing, free Web services and loaned PCs, to facilitate communications and the recovery response



the safety of employees and customers, collect damage reports and support recovery efforts.

Fujitsu also offered products and services to enhance the safety and security of its customers. For example, it developed a free cloud service support program and made it available to companies, local authorities and other organizations working on recovery efforts. Fujitsu provided servers, storage and other infrastructure, as well as SMS, email, webconferencing, e-learning and other SaaS applications. And it shared information via a website that collected details on customer damage

Meanwhile, Fujitsu's cloud services enabled workers to monitor and rapidly respond to the continually changing needs of evacuation centers in areas affected by rolling power outages. Fujitsu loaned 2,000

and restoration.

PCs to more than 100 evacuation centers to enable those living there to rapidly access information via the Internet. The company also used Internet TV capabilities to let people view local TV programs, and linked the TV stations with evacuation centers by providing live, on-demand equipment for free. This enabled evacuees to stay informed about what was happening within the disaster areas.

Although the magnitude of the 2011 earthquake was unprecedented in Japan, Fujitsu's efforts were not. It already had a track record of using technology to better respond to crises. For example, it had previously provided on-site, cloud-based services for the early detection of cases of foot-and-mouth disease and avian flu; those cloud-based services enabled officials to rapidly share information and help prevent the spread of disease.

Fujitsu provided the free cloud services through

## PROJECT SIGNIFICANCE

Fujitsu's contributions of various resources, including free cloud services, communications applications, PCs and volunteers, helped workers, customers and Japanese residents as they worked to recover from the devastation caused by the 2011 earthquake and tsunami.

March 2012; at that point, the major activities associated with the initial response to the earthquake and tsunami were completed. But the company plans to continue to support recovery and rebuilding efforts through services that address real, on-site needs. It is also one of nine companies teaming up to build an earthquake-resilient, environmentally friendly urban community in a city damaged by the earthquake.



## Special Delivery

**HP's Early Infants Diagnosis program** enables the efficient delivery of infants' HIV test results in Kenya.



MILLIONS OF PEOPLE AROUND THE WORLD don't have access to basic health services, and millions more are at risk because of inefficient healthcare systems or inconsistent quality of care.

## Early Infants Diagnosis in Kenya Hewlett-Packard Co.

Palo Alto, Calif.

- Nominated by: Hewlett-Packard Co.
- Challenge: Speed delivery of infants' HIV test results to healthcare providers throughout Kenya, including those working in remote clinics with no Internet access
- Solution: Sending results via SMS means test results get to healthcare providers within days instead of months

The HP technology delivers test results to even the most remote clinics, typically just a day or two after analysis in one of the national laboratories. As a result, HIV-positive infants can begin receiving life-saving antiretroviral (ARV) treatments within days of diagnosis.

Hewlett-Packard Co. not only recognized the problem but realized that its technology could improve healthcare delivery for many underserved populations. As a result, HP has been collaborating with health authorities to reinvent processes, modernize systems and develop solutions that dramatically expand access, improve care and save lives.

One such HP project is the Early Infants Diagnosis program, which was fully implemented by June 2011.

The program, the product of an alliance between HP, the Clinton Health Access Initiative and the Kenyan government, resulted in a system for efficiently diagnosing and treating HIV-positive infants in Kenya. HP also donated the server, storage and networking equipment.

Through the HP-developed system, each test sample is assigned a bar code, processed and recorded in a database. Then each lab result is sent by text message to an SMS-enabled printer in the local clinic, where it can immediately be printed out. If the clinic has Internet access, the result is also emailed, plus the local healthcare provider can access results online.

The use of SMS to reliably send and receive test results is key in this program, because even clinics without Internet access can receive SMS messages.

One of the biggest benefits of the program is the

early diagnosis of HIV-positive infants. The Kenyan government tests all infants at birth, but prior to this program, use of an inefficient postal system for communication meant that healthcare providers at local clinics could wait up to four months before receiving the results.

But the HP technology delivers test results to even the most remote clinics, typically just a day or two after analysis in one of the national laboratories. As a result,

## PROJECT SIGNIFICANCE

Delivering HIV test results quickly allows healthcare providers to start life-saving treatment right away, improving the infants' chances for survival.

HIV-positive infants can begin receiving life-saving antiretroviral (ARV) treatments within days of diagnosis instead of months, a time difference that gives these babies the best chance of survival. Without early treatment, only half of HIV-positive infants are likely to survive past their second birthday.

The program also helps healthcare providers make more informed decisions, monitor infant progress and ensure the receipt of ARV treatment by providing richer near-real-time data, timely analysis and process transparency. ■



**Human Services** 

## Systems Upgrade

Norway's investment in new IT infrastructure delivers better services to retirees today and readies the country for future demands.



LIKE MANY COUNTRIES, NORWAY IS FACING A GROWING SENIOR POPULATION. As a result, the country is also expecting dramatic increases in the amount of money it will need to spend in order to care for its older citizens. In fact, Norway expects the number of retirees to double by 2050, when that group will account for 40% of its population.



Oslo. Norway

- Nominated by: Accenture
- Challenge: Create a system to support the government's pension program that is more efficient, controls costs and better serves citizens
- Solution: An end-to-end transformation of its systems, using world-class technology to implement a multichannel, customercentric strategy

Meanwhile, the Norwegian Labour and Welfare Administration (NAV), which pays out nearly one-third of the national budget in benefits, was contending with sweeping welfare reforms that would go into effect in 2011.

But the government was saddled with old technology and paper-based processes for its pension system, which left the government unable to keep pace with demand and Norwegians unable

to adequately plan for retirement.

Given these dynamics, Norway needed to find a way to increase its efficiency, curb its soaring pension costs and better serve its surging older population.

It opted for an end-to-end transformation of its systems, using world-class technology to implement a multichannel, customer-centric strategy. The government pension system is now integrated with those of private pension providers and has centralized case-handling functions, fully automated pension administration processes and national call centers.

At the heart of this new system is a user-friendly, one-stop self-service portal called "Din pensjon" (Your Pension). Norwegians can use it to apply for benefits online with just two clicks.

Since the launch of Norway's self-service pension portal in 2010, 17,000 Norwegians have logged on each week on average. A recent public survey confirmed that more people are choosing to seek pension assistance online.

Norway is currently the only country providing citizens with an integrated view of both their public and private pension benefits. And its system is the only one worldwide with an end-to-end, automated process that can gather user information, calculate benefits, complete applications, generate a decision letter and enable payment transactions in seconds.

Using the portal may be simple for users, but its creation was quite complex. The NAV invested \$500 million over four years to launch this groundbreaking pension system. It required the development of a service-oriented architecture and technologies that automated the paper-based pension application process. The project required the agency to combine 290 services and more than 30 application components,

## PROJECT SIGNIFICANCE

The new IT infrastructure features a self-service portal that radically improves the way the Norwegian government administers pensions to 1 million residents and readies it for an expected increase in retirees.

and to essentially reinvent all of its pension processes.

Norway also had to convince its older citizens to switch to this self-service model, a goal it accomplished through an extensive communication campaign that included traditional and social media and a smartphone application that has been downloaded by 20,000 people.

In the end, the NAV's efforts transformed outdated systems and created a coordinated, customer-focused enterprise. ■



## Medicine Management

An SMS application helps remote and rural health facilities maintain stocks of antimalarial medicines.



MODERN MEDICINE CAN CURE MALARIA IN ALMOST ALL CASES.

Still, 2,200 people die from malaria every day; young children in sub-Saharan Africa account for most of the disease's victims.

## SMS for Life - Fighting Malaria in Africa Novartis International

Basel, Switzerland

- Nominated by: Novartis International
- Challenge: Develop an easy-to-use, affordable tool to help health clinics better manage their stocks of antimalarial medicines
- Solution: An SMS management tool and a Web-based reporting tool give increased visibility into antimalarial medicine inventories among health facilities

Most of the deaths can be blamed on a lack of access to effective antimalarial drugs.

Many health facilities in the developing world — particularly those in remote rural communities in poor countries — have trouble maintaining adequate supplies of effective antimalarials.

Novartis International saw an opportunity to help by leveraging technology to improve the availabil-  $\ensuremath{\mathsf{L}}$ 

ity of these life-saving drugs. Working with IBM and Vodaphone, the pharmaceutical giant embarked on a project that focused on eliminating stockouts and increasing access to malaria medicines for hundreds of millions of people

in rural areas. The result of its efforts, SMS for Life, has helped reduce the number of deaths from this disease throughout Tanzania.

The SMS for Life system consists of an SMS management tool and a Web-based reporting tool. The SMS application stores a single registered mobile telephone number for one healthcare worker at each health facility. Once a week, the system automatically sends an SMS message to each of those telephone numbers and asks for a report of the current stock of antimalarial drugs at the facility. Each healthcare worker sends a message back to report inventory levels, using a short

SMS for Life's effectiveness has been impressive. It has given healthcare workers visibility into antimalarial stock levels and has led to more efficient stock management.

code number so that the message is sent free of charge.

A standard message format is used to capture stock quantities, with formatting errors handled through follow-up automated SMS messages to a facility. Using the Web-based reporting tool, the data captured from the SMS stock-count messages are collected and stored centrally on a secure website that requires a unique user ID and password for access.

The website provides current and historical data on stock levels of antimalarial medicines and malaria rapid diagnostic tests at the health facility and district levels. It also incorporates Google mapping of district health facilities, with stock level overlays and stockout alerts, SMS messaging statistics and usage statistics. Statistical tools can be used to provide early warnings of malaria outbreaks.

SMS for Life's effectiveness has been impressive. It has given healthcare workers visibility into antima-

## PROJECT SIGNIFICANCE

The SMS application enables health facilities to better manage the availability of antimalarial medicines, thereby increasing access to the life-saving drugs and helping to save lives.

larial stock levels and has led to more efficient stock management.

The program, which was piloted in 2010, is being rolled out across Tanzania and is moving to other African countries, where it is expected to save hundreds of lives every day.

Novartis donated the technologies and resources for the design and development of the SMS for Life solution and the pilot implementation. The service is now offered on a commercial basis by Vodafone. Pricing is set to be commercially sustainable but affordable, even for developing countries. ■



Safety & Security

## Face Time

**Facial recognition technology** gives investigators a new tool for fighting crime.



POLICE OFTEN CAPTURE SUSPECTS IN A PHOTO OR ON SURVEILLANCE VIDEO, but an image alone isn't enough to make an arrest; investigators need to put a name to the face.

## JNET Facial Recognition System Commonwealth of Pennsylvania Justice Network

Harrisburg, Pa.

- Nominated by: Commonwealth of Pennsylvania Justice Network
- Challenge: Find a way for investigators to identify unknown individuals from photographs or video footage
- **Solution:** Create a Web-based application that uses algorithms to match unidentified individuals with photos stored in a database, providing another crime-fighting tool for investigators throughout the state

More than 39,000 county, state and federal justice professionals were already using the Pennsylvania Justice Network (JNET) to conduct secure investigations in a Web-based environment. JNET is an integrated portal that provides authorized users with access to public safety and criminal justice information compiled by federal, state and local sources.

But JNET couldn't help investigators who only had a photo. So the Commonwealth of Pennsylvania Justice Network developed the JNET Facial Recognition System (JFRS) to help those investigators identify individuals in photos or videos.

JFRS uses the distinct measurements of each person's facial features to compare an image of an unknown individual with images stored in the Commonwealth Photo Imaging Network (CPIN), which has more than 3.5 million photos of indi-

viduals who have been arrested by police. The system creates a facial plate from each photo when it's entered into CPIN, which provides a uniform platform with centralized quality control for capturing, storing and processing images.

The plate detects and measures facial dimensions,

JFRS can provide law enforcement with its only leads by identifying suspects from photos or video footage. It also can save weeks or months of investigative work.

which are documented for use within JFRS. The system then uses two distinct algorithms to compare faces to ensure that investigators receive a thorough set of results.

JFRS is accessed through JNET, so it's available to every law enforcement agency in Pennsylvania, regardless of its size or technological sophistication.

First deployed in 2006, JFRS has since been updated with features to improve its usability and accuracy. The system is now completely Web-based, so users can access the application from within JNET without needing to download any software as they had before. The new system also includes improved algorithms for more accurate image-matching. It now has 3D facial-comparison tools that allow users to generate 3D models of both suspect and CPIN images. New tools also allow investigators to enhance poor-quality images for use in JFRS, and a video extraction tool enables users to upload images from video footage.

## PROJECT SIGNIFICANCE

JFRS, which is available to law enforcement throughout Pennsylvania at no cost, has helped investigators solve homicide, robbery, fraud and identity theft cases by identifying suspects from photos and video footage.

JNET plans to complete its training of investigators in the use of the new JFRS platform by mid-2012. But the system has already proved its worth since it was first introduced; investigators have used it to solve numerous cases, including homicides, robberies, and fraud and identity-theft cases.



Training/Education

## Targeted Training

Trust for the Americas uses adaptive technology to train people with disabilities, giving them a path out of poverty through employment.



THE TRUST FOR THE AMERICAS WAS WITNESSING A PROBLEM of nearly epidemic proportions: Some 80% to 90% of the 50 million people with disabilities in Latin America were unemployed due to widespread discrimination and limited access to rehabilitation, education and training tailored to their needs. As a result, many individuals with disabilities were living in poverty.

## Partnership in Opportunities for Employment through Technology in the Americas (POETA) Accessible Trust for the Americas

Washington, D.C.

- Nominated by: Trust for the Americas
- Challenge: Combat the discrimination and poverty, as well as the lack of job training, that affects individuals with disabilities in Latin America
- Solution: Deploy adaptive technology to designated training centers to provide disabled people with technical skills

Those statistics prompted the Trust for the Americas to implement the Partnership in Opportunities for Employment through Technology in the Americas (POETA) Accessible program in 2004.

The nonprofit organization, an affiliate of the Organization of American States, started with a pilot project in Guatemala, where it used Microsoft's Unlimited Potential digital literacy curriculum to train individuals with disabilities to enter a competitive employment market.

The program has grown over the past eight years, and today it provides dozens of training centers throughout Latin America. Partnerships with public and private sector organizations enable POETA to train people with disabilities and at-risk youth at the centers, and to promote social inclusion through awareness efforts.

The Trust equips each center with up-to-date adaptive technology that enables individuals with disabilities to take full advantage of the program's curriculum. These resources include voice recognition and screen reader software, adaptive keyboards and mice, electronic pointing devices, sit-and-touch systems, hand wands, and mouth sticks. This range of technologies makes POETA unique among technology training programs, many of which remain limited for individuals

"This center had tools that allowed people with visual disabilities to access the world of technology. This adaptive technology made learning much easier, and I enjoyed the training and acquiring the skills that help me greatly in my new job."

 Jessica Montserrat Santeliz Granados of Guatemala City, Guatemala

with disabilities in Latin America.

The program measures its success based on the number of participants trained in information and communication technology skills and job-readiness skills per quarter, as well as the number of students graduating per term and the number of graduates who have obtained employment. It also considers, among other measures, the impact each center has on the lives of participants and its effect on a community as a whole.

The organization has experienced challenges in reaching its goals, particularly around placing POETA participants in jobs and furthering their education. To address this, the Trust requires its local partners to

## PROJECT SIGNIFICANCE

The Trust for Americas' tech-based program gives individuals with disabilities throughout Latin America job skills tailored to their region's job market, helping to alleviate the lack of education and training available to the disabled, and helping to lift them out of poverty.

conduct targeted analyses of the job markets in their communities so the centers can focus their technical skills training programs and curricula to meet local workforce demands.

Since its inception in 2004, POETA has trained more than 70,000 individuals with disabilities, increasing employment and education opportunities for them. It has also partnered with more than 200 businesses and universities and has achieved employment placement rates of up to 30%. ■

## 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 <a href="http://www.cwhonors.org/archives">http://www.cwhonors.org/archives</a>, 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 website at <a href="http://www.cwhonors.org/archives.">http://www.cwhonors.org/archives.</a>

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:

Tim Berners-Lee Inventor, World Wide Web

Vinton Cerf
The "Father of the Internet"

John Chambers Chairman & CEO Cisco

Michael Dell CEO Dell

Larry Ellison Co-Founder, President & CEO

**Bill Hewlett** Co-Founder, HP

Robert Metcalfe
Co-Inventor of Ethernet and Founder
3Com

**Gordon Moore** Chairman Emeritus of Intel and Inventor of "Moore's law"

Dave Packard Co-Founder HP

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