Anniversary



# THE LAUREATE

THE COMPUTERWORLD HONORS PROGRAM | 2013

# SAP Congratulates Our 2013 Computerworld Honors Laureates



City of Boston

**Desmond Tutu Foundation** 

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH & African Cashew Initiative (ACi)

Feeding America

Fisker Automotive, Inc.

Mitsui Knowledge Industry Co., LTD.

NuVasive, Inc.

PlaNet Finance Group & StarShea Ltd.

Plum Organics

University of Kentucky





# THE LAUREATE

Chronicling the 2013 Computerworld Honors Program

THE JOURNAL OF
THE COMPUTERWORLD
INFORMATION TECHNOLOGY
AWARDS FOUNDATION

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# 25th Anniversary INTRODUCTION

The Computerworld Honors Program, now in its 25th year, recognizes organizations that use information technology to promote and advance the public welfare, benefit society and business, and change the world for the better. This year's 267 Laureates are that rare group with the ability to recognize problems and the courage to take bold steps to solve them. They are an inspiring reminder that great things can happen when determined people explore technology's full potential.

This year's Laureates demonstrate clearly that cutting-edge technology isn't confined to corporate enterprises. Many are harnessing the power of big data, for example, to gather and analyze crucial information to help mitigate the negative effects of unemployment, minimize the impact of climate change, identify at-risk students or improve financial services to underserved populations. Mobile technologies are enabling access to healthcare information and disease prevention in impoverished and remote rural communities, increasing access to banking services for underserved citizens in Kenya, and improving health outcomes for mothers and their newborns in rural Ghana. In India, biometric data is being used to ensure individuals can apply for welfare benefits, access education, open a bank account or seek higher-level employment. Cloud technologies are being used to help deliver fresher food directly to the hungry in the U.S.

All Laureates were selected after a rigorous application and review process. A panel of judges, made up of IT executives and Computerworld editors, chose the five finalists in each category, and from those, one 21st Century Achievement Award winner 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, available to researchers, students and scholars through www.cwhonors.org and through records housed in national archives in over 350 universities, museums and research institutions throughout the world.

Congratulations to all in the Laureate Class of 2013 for their vision and their determination. The Program is honored to cast a spotlight on the exceptional work of these organizations, and the tireless efforts of the people who have tapped into the best of what technology can offer.







# AWARDS CATEGORIES FOR 2013

The 2013 Computerworld Honors Program recognizes those organizations that create and use information technology to promote and advance the public welfare, benefit society and business, and change the world for the better.

Laureates were identified for the following 11 categories:

# Collaboration

Recognizes organizations for the innovative use of IT to promote knowledge sharing and enable collaboration that results in measurable economic, social, environmental or innovation gains.

# Economic Development

Recognizes organizations for the innovative use or development of IT to create, enable, improve or expand business and job opportunities.

# **Emerging Technology**

Recognizes organizations for the bold and innovative creation or use of leading-edge and largely unproven technology, demonstrating its suitability for solving a business or societal need.

# Health

Recognizes organizations for the innovative use or creation 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 technologies or products that benefit business or society through advancements in the fields of information technology, artificial intelligence and the sciences.

# Mobile Access

Recognizes organizations for the innovative application of IT to extend the distribution of digital information, programs and services through mobile devices in order to reach the many populations around the world where mobile devices are more common than desktop computers.

# Philanthropy

Recognizes organizations that have made significant contributions of goods or services, including software, hardware, Web-based services or the talents of their technical personnel, to a needy cause, such as schools, libraries, community centers and deserving nonprofit organizations.

# Safety & Security

Recognizes organizations for the development or application of IT to measurably improve the safety and security of the populations they serve.

# Sustainability

Recognizes organizations that have implemented major IT sustainability initiatives over the past five years, reducing energy consumption in IT equipment and/or using technology to conserve energy and lower carbon emissions.

# **World Good**

Recognizes organizations for the design and development of technologies that have played a major role in supporting social good in the face of world-changing events.



# Collaboration

#### **3M**

St. Paul, Minn.

#### Use of Social Technologies to Enhance Customer Experience

Social technologies including intelligent chat and user behavioral analysis allow 3M customers and employees greater voice in the product development cycle, resulting in lower rates of product failure, faster ideation and more successful launch of products and services

Nominated by Moxie Software

#### **4-VA**

Fairfax, Va.

### 4-VA: Transformation Through Collaboration

Leaders of four Virginia universities establish a consortium that uses technologies such as immersive video to reduce the cost of delivering instruction, expand access to education, increase research competitiveness, and enhance students' success rate in science, technology, engineering and mathematics

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

Denver. Colo.

#### Colorado Information Marketplace (CIM)

CIM provides a secure, standard and reusable platform for data sharing for government and public entities by applying customer integration techniques developed in private industry to overlapping databases maintained by the state of Colorado FINALIST

#### Council for Affordable Quality Healthcare (CAOH)

Washington, D.C.

# Universal Provider Datasource (UPD)

Database allows healthcare providers to submit data required by multiple plans to one source instead of multiple locations, saving 4.6 million hours of administrative work and \$142 million annually for more than 1 million providers and 680 participating organizations Nominated by Pillsbury Winthrop Shaw Pittman

#### Cyber Defence Challenge

Winnipeg, Canada

#### **Cyber Defence Challenge**

MindSet, the Manitoba Network for Science & Technology, and the Canadian Information Processing Society Manitoba implement an educational program combining classroom learning, hands-on training and competitions to develop students' understanding of cybersecurity fundamentals

#### Defense Information System Agency, Modeling and Simulation Division, Enterprise Analysis Branch (EE44)

Fort Meade. Md.

# Joint Communication Simulation System (JCSS)

By providing a common simulation environment in which models can be shared and applied as needed, JCSS enables unprecedented collaboration among disparate Department of Defense modeling and simulation working groups, resulting in improved efficiencies and effectiveness in the acquisition process

Nominated by Booz Allen Hamilton

#### **Explorys**

Cleveland, Ohio

#### Explorys Enterprise Performance Management (EPM): Enabling Healthcare Providers to Explore Clinical Data in Real Time

A secure, cloud-based computing platform that integrates clinical, financial and operational data, EPM quickly processes, organizes and curates large batches of incoming data, answering complex questions in real time to improve healthcare and lower costs

#### George E. Brown Jr. Network for Earthquake Engineering Simulation Network (NEES)

West Lafayette, Ind.

#### **NEEShub**

Internet-accessible system stores and utilizes research data and computation tools, allowing groundbreaking research to be shared among researchers, students, practitioners and the public; relying heavily on server-level virtualization, NEEShub also provides seamless access to multiple high-performance computing venues

#### Global Health Delivery Project at Harvard

Boston, Mass.

# Global Health Delivery Online (GHDonline.org)

GHDonline.org enables virtual communities to share information, identify new research questions and test new tools across organizations, industries and geographies; more than 8,500 professionals from 173 countries have joined so far

#### Huddle

San Francisco, Calif.

#### **Huddle Foundation**

Donated and discounted access to Huddle's cloud-based collaboration platform helps hundreds of nonprofit organizations worldwide improve organizational efficiency, more easily connect workers and volunteers, and more effectively share information across networks

# ICT4TD Learning Centre

Dar es Salaam, Tanzania

#### Sisi kwa Sisi (Us for Us)

Program initiated by the Africa Upendo Group and the ICT4TD Learning Centre connects community organizations in Tanzania with youth from around the world who, working as interns, utilize the Internet to build their skills and help organizations reach their goals

#### Itasca Area Schools Collaborative

Deer River, Minn.

#### Itasca Area Schools Collaborative: Using Technology to Expand Student Opportunities

Consortium of seven Minnesota school districts and one community college deploy robust technology infrastructure, standardized IT systems and digital teaching tools to ensure rural students can collaborate with and learn alongside urban students

#### **Literacy Bridge**

Seattle, Wash.

#### The Talking Book

Robust, low-cost mobile device delivers on-demand audio lessons to impoverished people in remote communities; powered by disposable/rechargeable batteries, the device allows users to play, record and copy lessons aimed at improving their health and economic opportunities

21st Century Achievement
Award winner

#### Massachusetts General Hospital and LiveData Inc.

Boston, Mass.

#### **Perioperative Workflow Redesign**

Project integrates data streams from operating room physiological monitors, anesthesia records, procedure process records, hospital information systems and electronic medical record systems, creating a single, patient-centric view that care teams can see in real time Nominated by Morgan Stanley

# Office of Management and Budget

Washington, D.C.

#### **MAX Federal Community**

Suite of cloud-based technology services supports collaboration, knowledge management, document creation, data collection, business analytics and other functions, enabling more than 76,000 users at more than 100 government agencies to work more effectively and efficiently Nominated by TCG

#### Pennsylvania Justice Network

Harrisburg, Pa.

#### JNET Federated Background Check

Application within the JNET integrated portal enables single unified search, allowing users to conduct comprehensive investigations using numerous data sources owned by various commonwealth agencies; saves resources and cuts errors by reducing redundant searches



#### **Plum Organics**

Emeryville, Calif.

#### Providing Healthier and Tastier Food to Babies, Toddlers and Children

Deployment of a cloud-based enterprise resource planning system that runs the company's entire business enables Plum Organics to automate most processes, giving employees more time to collaborate, engage clients and focus on corporate mission Nominated by SAP

#### San Jose Water Company

San Jose, Calif.

#### **Project CCB**

Integration of company's customer and field operations information gives workers real-time insight into customer service and operation schedules, improving decision-making, productivity, responsiveness and customer satisfaction

#### Schools of Isolated and Distance Education Western Australia

Leederville, Australia

#### E-Learning and Virtual Classroom Across Australia's Largest State

Development of an advanced e-learning program provides a real-time virtual learning environment, including high-quality video, virtual breakout rooms and interactive examinations; delivers interactive lessons to serve the diverse needs of 3,000 children who live in a sparsely populated region

Nominated by Saba Software

#### **Technology For All**

Houston, Texas

#### **Texas Connects Coalition Project**

Project brings technology and hands-on computer training to low-income and underserved communities, helping participants of various ages and backgrounds participate in the 21st century economy and improve their educational and work opportunities

# U.S. Department of State

Washington, D.C.

#### Office of eDiplomacy

Collaboration and knowledge management platforms foster greater cooperation and collaboration across organizational and geographic boundaries within the State Department as well as with other stakeholders, such as policymakers, aid workers and civil society organizations

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# U.S. Environmental Protection Agency

Washington, D.C.

#### **EPA GeoPlatform**

Infrastructure allows EPA staff to collaborate around maps and place-based information by supporting workers' ability to conduct relevant geospatial analysis in their own areas of interest using common data, tools and methods

#### **U.S. Pacific Command**

Pearl Harbor, Hawaii

# All Partners Access Network (APAN)

Global online information-sharing platform enables various functions including international military exercises, interagency work groups and scientific research; APAN's social media tools allow the Defense Department to securely collaborate with nontraditional partners, such as non-governmental organizations and academia

Nominated by Booz Allen Hamilton

**FINALIST** 

# Economic Development

#### **City of Boston**

Boston, Mass.

#### Boston Public Computing Centers/ Boston Sustainable Broadband Adoption

Operation of 53 public computing centers rooted in neighborhoods focuses on delivering targeted training to low-income families with children, unemployed individuals lacking digital skills, and seniors in public housing

#### **Clackamas County**

Oregon City, Ore.

#### CBX: Clackamas Broadband Express - Information at the Speed of Light

Clackamas Broadband Express, a 180-mile countywide fiber ring, is a fiber-optic middle-mile network that links the county's rural areas with non-rural areas, providing improved communications for public agencies, local communities, schools and healthcare facilities

#### Deutsche Gesellschaft fur Internationale Zusammenarbeit (GIZ) GmbH

Ouagadougou, Burkina Faso

#### African Cashew Initiative (ACi)

Smartphones and enterprise resource planning applications allow farmer cooperatives in five African countries to more effectively govern their cooperatives, manage business processes, gain insight into financials, and handle analytics and product certifications Nominated by SAP

**FINALIST** 

#### **Ekuber Ventures Inc.**

Herndon, Va.

#### GSA Office of CIO Salesforce

Federal deployment of cloudbased Salesforce platform reduces the time it takes staff to deliver services, cuts capital costs, improves utilization of resources and heightens mission performance; it also enhances communications and collaboration abilities

#### **Engro Foods Ltd.**

Karachi, Pakistan

# Engro Milk Automation Network (EMAN)

EMAN's use of 1,400-plus pointof-sale machines tied to backoffice systems automates dairy farmers' milk sales, creating more transparency into transactions; system is expanding to bring other services, such as banking and automated bill pay, to rural areas throughout Pakistan

FINALIST

#### **Genesys Works**

Houston, Texas

#### Workforce Development for Economically Disadvantaged Young People

Nonprofit organization prepares disadvantaged high school seniors for college business careers by focusing on the IT training needed to enter and succeed in corporate IT departments

#### **Globant**

Buenos Aires, Argentina

#### TesteAR

IT job placement program focuses on training and preparing youths from vulnerable groups to enter the labor market in the software industry, resulting in expanded professional opportunities for participants

# Government of the District of Columbia - DC-NET

Washington, D.C.

#### Community Access Network (CAN)

CAN, a 100 Gbps open-access network, brings fiber-based broadband to community anchors and outdoor access points, providing free public Internet access with a focus on anchors in underserved areas of the city

#### **Horizon Telcom**

Chillicothe, Ohio

#### Connecting Appalachia Ohio Middle Mile Consortium

This nearly \$100 million effort to build a fiber-optic broadband network for 34 Appalachian counties in Ohio includes agreements with last-mile providers to bring broadband into 10,000 unserved square miles, thereby supporting more economic and educational opportunities

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

Dornach, Switzerland, and Munich, Germany

#### **HP LIFE e-Learning**

E-learning curriculum allows entrepreneurs around the globe to take courses in IT and business skills at their own convenience as well as participate in discussion boards, online forums and webinars wherever and whenever they have Internet access

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

Palo Alto, Calif.

#### **HP Net-Zero Energy Data Center**

Integration of energy and cooling supply from local renewable sources, combined with a novel demand management approach that schedules workloads based on resource availability and performance requirements, extends to more people the potential to operate data centers while lowering costs and environmental impact



#### IndiSoft/Hope LoanPort

Washington, D.C.

#### RxOffice Platform Powers Hope LoanPort Platform for Housing Counselors

Homeowner Connect provides secure platform for financially struggling homeowners to connect with and submit documentation to housing counselors and mortgage companies to engage in alternatives to home foreclosures

#### King County Department of Information Technology

Seattle. Wash.

#### Thin Client Kiosks

Replacing aging PCs with thin-client technology in facilities used by job seekers creates more flexible and reliable IT environment at lower costs and with reduced energy requirements, saving more than \$45,000 annually in equipment and support costs

#### Liebherr Mining Equipment Newport News Co.

Newport News, Va.

#### Liebherr Mining Training System

E-learning strategy built on Saba's Learning Management System allows company to effectively train new and existing workers in economically depressed and remote areas around the world, including Chile, Ghana and Indonesia Nominated by Saba

#### National Community Stabilization Trust

Washington, D.C.

#### **REOMatch**

Web application connects local housing providers implementing neighborhood stabilization programs to lists of foreclosed properties within specific geographic target areas; providers can also start purchase process and manage entire transaction through the application

#### **NComputing**

Santa Clara, Calif.

# Education Beyond Borders with NComputing

Adoption of desktop virtualization is a low-cost, low-maintenance and low-impact solution that allows schools, including those in economically depressed areas, to give all students access to computers and thereby equip the next generation with modern computing skills

# Nepal Clearing House Ltd.

Kathmandu, Nepal

# Electronic Cheque Clearing Implementation

Initiative to expand modern banking services in Nepal deploys advanced technologies to create the infrastructure needed to operate a national payment system, which reduces operational costs and risks while expanding services to people and supporting economic growth

#### Northwest Open Access Network (NoaNet)

Spokane, Wash.

#### NoaNet Washington Rural Access Project (WRAP)

Nonprofit broadband provider brings broadband access to 170 rural communities and 2,000 schools, hospitals, emergency responders, libraries and universities in Washington, resulting in a hundredfold increase in infrastructure backbone to serve those communities

#### Pennsylvania Department of Labor & Industry

Harrisburg, Pa.

#### Pennsylvania JobGateway

New portal uses leading technologies to bridge the gap between job seekers and employers by offering simple and improved access to re-employment services and new tools while maintaining seamless integration with existing career services

Nominated by Deloitte Consulting LLP

# PlaNet Finance Group – StarShea Ltd.

Tamale, Ghana

# Empowering Rural Women and Providing Sustainable Access to Market

Smartphones, business software and microfinance give rural Ghana women in the shea nut harvesting and shea butter business access to technical and business training, pricing data and production improvements

Nominated by SAP

FINALIST

#### **Savi Technology**

Alexandria. Va.

#### Economic and Humanitarian Benefits of Cargo Tracking in Ghana

Tracking software delivers a sustainable solution that gives realtime visibility for all cargo journeys, which cuts losses from theft and increases customs revenue; public organizations in Kenya and Tanzania are adopting this technology following its success in Ghana

#### **Solar Sister**

Kampala, Uganda

#### Solar Sister Program

Organization's use of mobile phones, Google Docs, Salesforce, cloud computing and other IT infrastructure enables it to manage inventory, direct sales and workers selling its innovative solar-powered devices to Africans with no other access to electricity

**FINALIST** 

#### Unique Identification Authority of India

New Delhi. India

#### Aadhaar

Aadhaar allows residents to prove identity through biometrics; this technology innovation is targeted first at the 400 million people who can't prove their identity, thereby allowing them to participate in transactions and programs that require ID

Nominated by Accenture

21st Century Achievement Award winner

#### United Nations Development Programme (UNDP)

Kuwait City, Kuwait

#### **Labor Market Information System**

System collects, integrates and analyzes labor market data and patterns to give various stakeholders the crucial timely data needed to formulate and implement labor and employment policies Nominated by CSB

#### **Verizon Wireless**

Bedminster, N.J.

#### LTE in Rural America

Collaboration between Verizon Wireless and rural telecom companies to build and operate 4G LTE networks in low-density markets throughout the U.S. brings high-speed mobile broadband to underserved areas, enabling individual and community economic growth

# **Emerging Tech**

#### 10gen

New York, N.Y., and Palo Alto, Calif.

# Education Technology Initiatives Powered by MongoDB

10gen's MongoDB database powers InBloom, a nonprofit tech company that makes data integration and content search easier for educators so they can quickly and securely get comprehensive history for each student to improve outcomes and personalize instruction

#### **Bexar County**

San Antonio, Texas

#### My Bexar Community Dashboard

Platform consolidates local, regional and national information into an easy-to-use interactive dashboard that allows users to access community information previously spread over multiple websites

#### **BISON**

Boston, Mass.

#### **Alternative Investment Network**

Vertical network for pensions, endowments and foundations (PEF) to learn about best alternative investment managers actively raising capital brings technology innovation, efficiencies and transparency to the market while enabling PEFs to make more informed investment decisions Nominated by Morgan Stanley

#### **Cisco Systems**

San Jose, Calif.

#### Connected Grid Field Area Network

Ruggedized field area network connects 2 million smart meters in British Columbia Hydro service area, enabling data collection, data management, theft detection and integration with utility applications to support, measure, manage and analyze energy use

**FINALIST** 

# Commercial Bank of Africa

Nairobi, Kenya

#### M-Shwari Project

Bank partners with local telecommunications provider Safarico to create fully integrated mobilecentric banking solution to bring banking services to millions of people who previously had no or limited access to banks





# Computer Sciences Corp.

Falls Church, Va.

#### ClimatEdge

Risk management suite applies big data analytics to historical data from NASA, the National Oceanic and Atmospheric Administration and other public sources, providing new insights to commercial and public interests to help them minimize risk and make better-informed decisions

#### Cook Children's Healthcare Network

Fort Worth, Texas

#### **Medical Grade Wireless Utility**

Overhaul of existing wireless network creates converged, future-ready, hospital-owned asset consisting of multiple wireless services on a single infrastructure; provides improved reliability and capacity while increasing timeliness and quality of staff communications Nominated by West Health Institute

#### Directorate of Information Technology (DIT), Government of Maharashtra, India

Mumbai, India

#### Maharashtra Cloud

Initiative to provide cloud services to Maharashtra government departments yields multiple benefits, including reduced costs, reduced time to provision servers, reduction in downtime due to maintenance, quicker restoration of servers and faster rollout of new servers

#### **Fisker Automotive**

Anaheim. Calif.

# Designing Eco-Friendly and Exciting Automobiles

Deployment of SAP platform that supports company's entire value chain leverages best practices for business processes to deliver operational efficiencies and enable effective decision-making capabilities, allowing more time to focus on company's mission Nominated by SAP

#### **Gravitant**

Austin. Texas

#### Improving Public Sector Agency Responsiveness to Unexpected Demand

Cloud brokerage and management platform powered by Gravitant seamlessly provisions IT resources from multiple cloud sources in real time to meet variability in demand from several Texas state agencies

#### **HBF**

Perth, Australia

# HBF Embraces Virtualized Storage Infrastructure

Consolidation of storage assets in an environment that's 50% virtualized combined with management software allows for optimal infrastructure growth, and provides the flexibility and scalability needed to efficiently store, access and move HBF's current and growing data Nominated by Hitachi Data Systems

# J. Craig Venter Institute (JCVI)

Rockville, Md.

#### Analyzing an Ocean of Data

Deployment of columnar database technology designed for high-volume analytics delivers the right combination of scalability to accommodate data size, speed and affordability, which allows JCVI to analyze more data, leading to new discoveries

#### **Marist College**

Poughkeepsie, N.Y.

# Open Academic Analytics Initiative (OAAI)

Business intelligence technologies and predictive analytics form the basis for an open-source academic early alert system that allows instructors to identify at the start of courses which students are at risk of not completing the class, enabling them to intervene early

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#### **MemSQL**

San Francisco, Calif.

#### **MemSQL Distributed**

By elevating data into memory, developers for a real-time bond data application are able to balance high-velocity data streaming and a high number of concurrent queries while still using a relational database with MemSQL, a strategy that saves time and reduces total cost of ownership Nominated by Morgan Stanley

#### Mercy

St. Louis. Mo.

# Open Source Web Content and Document Management for Mercy

Integrated platform allows Mercy healthcare system to consolidate more than 45,000 policies and procedures into one powerful, centralized portal with a standard layout that makes finding important information easier and enables collaboration

#### Miami Children's Hospital

Miami. Fla.

#### Telehealth Project

Integration of the hospital's electronic medical record, the MCH Global Telemedicine Command Center, smart mobile health applications and interactive mobile equipment dramatically expands MCH's service footprint and ability to deliver specialized care to medically underserved communities

**FINALIST** 

# Morgridge Institute for Research

Madison, Wis.

#### Gene Expression Analysis for Stem Cell Differentiation Using Utility Supercomputing

High-performance utility supercomputing provides an affordable research tool for scientists, dramatically condensing compute times to enable breakthroughs such as the creation of an indexing system for stem cells that could expedite research Nominated by Cycle Computing

#### Nexthink

Paris. France

# IT Infrastructure Monitoring for the Paris Fire Brigade

Real-time monitoring, analysis and visualization of the performance of IT infrastructure means problems are immediately detected and resolved before users are negatively impacted, while also simplifying daily IT work and reinforcing IT's control over the infrastructure

#### Ohio Academic Resources Network

Columbus, Ohio

#### OARnet 100 Gbps Network Expansion

OARnet, which serves the networking and technology needs of Ohio universities, K-12 schools, public broadcasting, government departments and hospitals, upgrades from 10 Gbps to 100 Gbps to create the high-performance environments needed for next-generation business applications

# Oregon Secretary of State

Salem, Ore.

#### One Stop Business Portal

New Business Xpress website features top tasks that business owners must complete when interacting with state government, allowing businesses to use a single portal to access the information they need

# Persistent Systems Ltd.

Pune. India

#### Big Data/Social Media/Viewer Response Analytics for "SMJ," a Revolutionary New Indian TV Show Dedicated to Resolving Social Issues

Comprehensive analytics platform for filmmaker Aamir Khan's interactive socio-cultural TV show in India enables real-time analysis of millions of comments and stories submitted via social media to create digital feedback loop from viewers to viewers as well as to the show's team

**FINALIST** 

#### **Search Engine Inc.**

Accra, Ghana

#### The Street Development Project

Initiative brings together private business, public entities and residents to improve the ability to navigate through Ghana by enhancing street-level navigational aids, such as signs and house numbers, as well as creating centralized digital navigation data

#### Temperature@lert

Boston, Mass.

# Temperature@lert Solar Cellular Edition

A combination of solar power, cellular communication technology and smart sensors provides 24/7 monitoring of crops; the combination of technology along with alerts sent via emails, text messages and/or telephone calls enables better crop management and lowers water and fuel use



#### United Nations Global Pulse

New York, N.Y.

#### Big Data and Unemployment Through the Lens of Social Media

Analysis of social media chatter and sentiment helps identify trends related to unemployment increases and helps inform policymakers so they can react more quickly to mitigate the negative effects of increased unemployment Nominated by SAS

#### University of Kentucky

Lexington, Ky.

# Big Data Analytics to Increase Student Graduation Rates

Big data analytic tool lets users quickly create and execute queries that can help improve student performance and graduation rates by identifying students in need of help or intervention Nominated by SAP

# Health

#### **BioGrid Australia**

Parkville, Australia

#### National Bowel Cancer Screening Program

Web-based federated platform that identifies and integrates data collected at multiple institutions for research enables the analysis of bowel cancer patients, showing that early diagnosis significantly improves survival and reduces treatment costs

Nominated by SAS Australia

#### **Carestream Health**

Rochester, N.Y.

#### Carestream MyVue Patient Portal

Portal allows patients to securely access their MRIs, PET scans and other medical images from tablets or computers, giving them the ability to share images with other healthcare providers without the time and cost of physically copying images

#### **Certify Data Systems**

San Jose, Calif.

#### Certify's HealthLogix Platform, Enhanced with Holistic Clinical-View Functionality, Enables Collaborative Patient Care

Health Information Exchange platform enables aggregated view of patients' total healthcare encounters across provider communities, regardless of differences in electronic health record systems, eliminating reviews of multiple pages of information and enabling more coordinated care Nominated by Humana Inc.

#### Christiana Care Health System

New Castle, Del.

#### eSignout: The Clinician Hand-Off Tool

Software captures patient information, care plans and progress notes in consistent, detailed and useful formats, providing continuity of care when clinicians pass patients onto other clinicians for care; reduces errors due to miscommunication

#### **Cisco Systems**

San Jose. Calif.

#### LifeConnections

Onsite medical services leverage Cisco's technologies for collaboration, data management, video, mobility, ubiquitous connectivity and security; provides employees and their families a medical experience that focuses on healthcare, not administrative details, and that ties all services together

#### Colleagues In Care Global Health Network

Sanibel, Fla.

#### Colleagues In Care

Network connects volunteer medical professionals with healthcare providers primarily in Haiti to enable them to share information and create quality, evidence-based standards of care adapted to the realities in Haiti and other poor regions

Nominated by IBM

FINALIST

#### **CURE International**

Lemoyne, Pa.

#### **Hydro DB**

Initiative supports operational oversight of worldwide network of surgeons treating and researching hydrocephalus; uses Google platforms to address variable Internet access in developing world and WordPress as a secure platform to store and track patient data

# Fort Defiance Indian Hospital Board Inc.

Fort Defiance, Ariz.

# Redefining Health Care Through Network Modernization

Medical center upgrades IT infrastructure to include wireless, VoIP, video capabilities and higher encryption standards to support the next generation of services, including telemedicine and online access to electronic health records

#### GlobalMed

Scottsdale, Ariz.

#### **Transportable Exam Station**

Mobile health delivery system enables clinicians to use audio, video and integrated software from remote locations while communicating with the Veterans Health Administration's electronic health system, allowing access to the best care while minimizing required travel

**FINALIST** 

#### **Grameen Foundation**

Washington, D.C.

# Mobile Technology for Community Health (MOTECH)

Ghana-based initiative works to develop protocols for using mobile phones and interrelated mobile applications to increase the quantity and quality of prenatal and neonatal care in rural Ghana

21st Century Achievement
Award winner

#### HCA Information Technology and Services

Nashville, Tenn.

#### Clinical Quality Improvement Research Database: Reduce MRSA

Built to house data from trials studying strategies to prevent bacterial infection, this database makes clinical, financial, supply and admission/discharge information available for analysis and continues to serve as a premier repository for clinical research

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

Dornach, Switzerland, and Munich, Germany

#### eHealth Center (eHC) - Rapidly Deployable and Fully Integrated Cloud-Enabled Health Center

Program creates easily deployable healthcare services to serve rural and remote areas in India and around the world; transportable container converted into health center is equipped with power generators and built-in connectivity to power diagnostic equipment and a videoconferencing solution

**FINALIST** 

# Independent Living Systems

Miami. Fla.

#### eCare Central

System uses medical claim, pharmacy and lab data to classify individuals according to health risks, giving individuals with high composite risk scores priority for direct outreach; system also uses survey data to help generate recommended care plans for individuals

#### MarkLogic

San Carlos, Calif.

#### IQ Solutions/SAMHSA Public Engagement Platform (PEP)

MarkLogic and IQ Solutions build new XML content repository for Substance Abuse and Mental Health Services Administration so that all data can be stored, searched for and shared, allowing SAMHSA to efficiently use and distribute content Nominated by Morgan Stanley

# Medical University of South Carolina

Charleston, S.C.

#### **Palmetto State Providers Network**

Broadband network carries telehealth, telemedicine, simulated caregiver training, remote ICU monitoring, psychiatric consults, medical education and other needed information to rural healthcare providers at lower costs and with more reliability than previously possible



#### Mellanox Technologies

Sunnyvale, Calif.

#### Department of Veterans Affairs 40 Gbps InfiniBand

Department of Veterans Affairs reduces latency and increases performance of storage subsystem in its data center through Mellanox 40 Gbps InfiniBand solution and Microsoft SMB (Server Message Block), making data more accessible and available for analysis across different applications

#### Miami Children's Hospital

Miami. Fla.

#### Miami Children's Hospital Telehealth Platform

Telehealth infrastructure helps doctors access crucial patient and medical information more quickly wherever they are, diagnose and prescribe treatment for remote patients, as well as consult and share best practices remotely with fellow practitioners

Nominated by Citrix

#### **Microsoft Research**

Redmond. Wash.

# Uncovering New Ways the Human Immune System Fights HIV

Thousands of computers analyze vast amounts of HIV research data; combined Microsoft Research hardware and software can complete in hours analysis that would take years to do using a single computer, speeding the fight against HIV

**FINALIST** 

#### **Moffitt Cancer Center**

Tampa, Fla.

#### Telemedicine/Telepresence Technologies Ease the Patients' Experience and Increase Physician Productivity

Expansion of videoconferencing services into telemedicine applications that include interpreting services and remote patient consults and exams provides increased level of care to patients; platform saves time and money, reduces patient stress and increases patient compliance with medical instructions

# National Government Services Inc.

Indianapolis, Ind.

#### World Trade Center (WTC) Act

Project provides comprehensive portfolio of innovative financial services in accordance with James Zadroga 9/11 Health and Compensation Act (WTC Act), helping to ensure continuous service levels for those medically impacted by 9/11

#### **NuVasive Inc.**

San Diego, Calif.

# Streamlining Spinal Surgery Field Administration

With deployment of mobile solution built on SAP Mobile Platform with security by SAP Afaria, company streamlines order process and reduces errors, speeding the timeline for healthcare customers to receive surgical products needed for patients with spinal maladies Nominated by SAP

#### **PPD**

Wilmington, N.C.

#### **PPD PatientView**

Portal connects patients enrolled in clinical trials to their health information and offers tools to schedule appointments, fill prescriptions and stay connected with professionals running and monitoring their trials; as a result, portal helps retain trial participants

#### **Practice Fusion**

San Francisco, Calif.

#### Practice Fusion Electronic Health Record

Free, Web-based EHR system is used by more than 150,000 professionals in mostly small primary care practices serving 52 million patients; this ad-supported model provides medical charting, e-prescribing, lab integrations and other services to support efficient care delivery

#### Ptolemy Data Systems (PDS)

Sheridan, Wyo.

#### **Telemedicine in Wyoming**

PDS-led effort deploys telemedicine throughout Wyoming by building out fiber-optic lines, investing in videoconferencing platform, and ensuring public and private healthcare providers' systems are interoperable; efforts help eliminate distance barriers and improve access to medical services Nominated by FalconStor Software

#### **SoloHealth**

Duluth. Ga.

#### Interactive Health and Wellness Kiosks

SoloHealth Station, a self-service cloud-based platform, offers vision, blood pressure, weight and body mass index screening, as well as overall health assessments and access to a database of local doctors, all free of charge Nominated by Dell

#### University of Tennessee Health Science Center Office of Biomedical Informatics

Memphis, Tenn.

#### Scientific Laboratory Information Management and Patient-Care Research Information Management (Slim-Prim)

Secure Web application enables researchers to securely gather, manage, maintain, report and share data; its user-driven development allows researchers to design and administer complex relational databases for their studies with little or no technical training

# UpToDate & Global Health Delivery Project at Harvard University (GHDonline)

Waltham, Mass.

#### UpToDate & Global Health Initiative

To support clinicians practicing in settings with limited resources, initiative provides donated subscriptions to peer-reviewed UpToDate content, ongoing development of clinical content specific to the needs of clinicians in these settings, continuing medical education and a community in which to share expertise and access resources

# **Human Services**

#### **Airbnb**

San Francisco, Calif.

# Airbnb Response to Hurricane Sandy

Airbnb website connects people displaced by Hurricane Sandy with hosts able to provide free housing, allowing hosts to list their places online for free; more than 1,400 listings appeared on the company's Sandy list

#### Allegheny County Department of Human Services (ACDHS)

Pittsburgh, Pa.

#### Data Systems to Support an Integrated Human Services Model Across Allegheny County

Deployment of new technologies lead to streamlined business processes, improved collaboration among ACDHS and other government agencies, and reduced costs, ultimately improving service delivery for Allegheny County citizens

#### American Student Assistance

Boston, Mass.

#### SALT

Nonprofit organization responds to escalating student debt with membership program featuring multichannel integrated services combining online educational tools and mobile applications with outreach and counseling; empowers individuals to manage and repay loans and build financial competencies

#### Big Brothers Big Sisters Canada

Burlington, Ontario

#### **Project Phoenix**

New customer relationship management system streamlines workflow and builds better connections among agencies, freeing staff from administrative tasks so they can focus on finding the right match for thousands of youths waiting for mentors Nominated by Microsoft

Centers for Disease
Control and
Prevention (CDC)
Group: Informatics
Research &
Development Activity
(IRDA), Public
Health Surveillance
& Informatics
Program Office,
Office of Surveillance,
Epidemiology, and
Laboratory Services
(OSELS)

Atlanta, Ga.

#### Public Health Informatics Research Cloud

Secure private cloud creates safe environment for IRDA researchers to test different technologies and approaches, enabling agility and rapid deployment of new technologies that support CDC's core missions

Nominated by VMware



#### ChildFund **International**

Richmond, Va.

#### Office in a Box

WAN optimization gives employees and volunteers near-instant access to critical applications, speeds communication, enables easy setup of operations at new locations, and gives agency flexibility and scalability for future applications and services Nominated by Riverbed

#### Commonwealth of Pennsylvania, **Department of Public** Welfare

Harrisburg, Pa.

#### Medical Assistance Provider **Incentive Repository**

A 13-state collaborative deploys a Web-based application that integrates with existing state systems to allow eligible Medicaid providers to complete applications for federal HITECH Act incentive payments and receive payments through existing financial systems

#### **FINALIST**

#### **Community Plates**

New Canaan, Conn.

#### Community Plates' Go Rescue **Technology Powered by** WhenToManage

Nonprofit organization that distributes surplus food from grocers and restaurants to agencies serving hungry individuals uses Web-based mobile Go Rescue App to enable self-serve volunteer management system, reducing overhead costs and speeding food deliveries

U 21st Century Achievement Award winner

#### **CredAbility**

Atlanta. Ga.

#### Interactive Case Management (iCM)

New workforce management, call recording and performance management software, along with new customer relationship management system, promotes effective communications and highquality interactions with clients as well as more efficiency to reduce operational costs

#### **Employment Development Department (EDD)**

Sacramento, Calif.

#### State of California Disability Insurance Automation (DIA)

One of the most complex technology transformations undertaken by EDD, new State Disability Insurance Online System (SDI Online) automates the nation's largest state disability insurance program, improving claims processing and fraud detection while reducing costs

#### **Feeding America**

Chicago, Ill.

#### Feeding More People by Leveraging Mobile Technology to Improve Distribution Efficiency

Deployment of SAP/Syclo Mobile Platform enables drivers transporting food to electronically capture data on mobile devices and send the information into the back-end system, reducing the time and effort involved in moving food to people Nominated by SAP

#### Ford Motor Co.

Dearborn, Mich.

#### Sustainable Urban Mobility with **Uncompromised Rural Reach** (SUMURR)

Project explores ways to use IT-equipped vehicles to improve services in four critical areas of need in rural communities: healthcare, delivery of potable water, primary education and renewable energy

#### **HCA IT&S Information Technology**

Nashville, Tenn.

#### Sarah Cannon Cancer Navigation

Specialized healthcare professionals called patient navigators guide cancer patients through treatments; **HCA IT&S's Cancer Navigation** application consolidates medical data associated with patients' care into one system to aid their work and encourage use of best practices

#### **International Rescue Committee (IRC)**

New York, N.Y.

#### **International Rescue Committee**

Hybrid solution combines traditional colocation features alongside managed services. giving IRC flexibility to build out its infrastructure on the fly and roll out new applications to field workers: creates foundation to bring modern communications technologies to less developed regions

#### Interservicios Limitada

Medellin, Colombia

#### SIGMA-V

Software enables institutions to characterize and register aid provided to victims of armed conflict in Colombia, giving the institutions the ability to target services and measure the impact of aid so they can best focus their resources

# Maricopa County MCESA and OET

Phoenix, Ariz.

# MCESA IVL and Electronic Assessments

Interactive video learning for students as well as teachers combined with electronic assessments make up the three parts of this project, which aims to use technology to increase student academic progress, achievement and success

#### **Microsoft Research**

Redmond, Wash.

# Adjusting Pneumonia Vaccination Periods to Save Lives

Modified version of software developed to support cancer research now helps track data and associated details as Oxford Vaccine Group's HimalayaHelp program tries to determine if changing childhood pneumonia vaccination schedules can protect children longer and save lives

#### MITRE Center for Veterans Enterprise Transformation

McLean, Va.

# Eliminate Veteran Homelessness (EVH)

EVH is a new computational model that leverages an internal high-performance computing cluster to reduce runtime to minutes, allowing a new level of insight into managing the Veterans Administration's interdependent programs

#### **OneCommunity**

Cleveland, Ohio

#### **Connect Your Community**

Program focusing on teaching digital literacy skills to low-income populations uses national and local partnerships, curriculum and technologies tailored to local and individual needs along with other innovations to train more than 33,000 individuals to date

#### **Parsons**

Washington, D.C.

#### Emergency Response to the Impact of Hurricane Sandy to NYCDEP's Facilities

Construction management services incorporate IT solutions, including phone cameras and a Web portal, to provide real-time communication and mobilization, helping the New York City Department of Environmental Protection quickly restore services after Hurricane Sandy submerged wastewater treatment plants

# Sahana Software Foundation

Los Angeles, Calif.

# Sahana Software Foundation Projects

Sahana develops free and opensource software and provides services for disaster response coordination between governments, aid organizations, civil society and survivors, enabling those affected to better prepare for and respond to disasters

**FINALIST** 

#### Secretaria de Educacion de Medellin, Colombia

Medellin, Colombia

# Digital Transformation of Education

Program uses desktop virtualization software to deliver cost-effective educational applications across 40,000 student and teacher desktops in 441 schools, helping to improve students' IT skills as well as build skills students need to better engage in their communities Nominated by Citrix

**FINALIST** 

#### **Secure Telehealth**

Pittsburgh, Pa.

#### Sustainable Telemedicine for Mentally III in Rural Idaho

Videoconferencing technology for ordinary PCs that uses innovative software, high-definition webcams and specialized microphones provides interaction similar to more expensive specialized equipment, enabling the rural health agency to provide mental health telemedicine services at affordable costs



#### Sense Corp.

St. Louis, Mo.

#### **Wyman TOPnet Online**

To build and expand its Teen Outreach Program (TOP), Wyman turns to Sense Corp. for a Webbased application that automates a survey feedback process, sets up an online collaborative environment and further advances partner organizations' ability to evaluate the program's impact

#### **The Smith Family**

Sydney, Australia

#### Learning for Life

Upgraded customer relationship management system streamlines organization's administrative activities, allowing staff more time to work on programming and ultimately provide more disadvantaged children with more consistent support Nominated by Microsoft

#### **Thresholds**

Chicago, Ill.

#### Thresholds' Mobile Technology Initiative

SafeBook laptops, Air Cards and Verizon Wireless subscriptions improve services for homeless mentally ill individuals by providing caseworkers with secure access to the agency's applications, giving the workers more time and resources to focus on clients

#### **U.S. Census Bureau**

Suitland, Md.

#### Census Bureau Open Data API

Application programming interface gives developers inside and outside the Census Bureau easy Web access to a single pipeline of census data, with full flexibility and control over which data variables to request and receive without the need to create copies

#### Watsi

San Francisco, Calif.

#### Watsi Launch

Crowd-funding website connects donors willing to fund medical care for patients in poor regions and medical partners willing to offer critical health services to such patients around the world Nominated by BestiT

#### **Youth Policy Institute**

Los Angeles, Calif.

# YPI Educational Technology (Ed Tech)

Focused on closing the city's digital divide, program brings broadband access and training to underserved groups through public computer centers and educational programs; since 2010, YPI Ed Tech has deployed 1,716 computers and provided 484,031 training hours

# Innovation

#### California Department of Motor Vehicles

Sacramento, Calif.

#### **DMV Social Media Program**

Evolving multipronged social media strategy using Facebook, Twitter and YouTube increases customer engagement and improves customer communication and education opportunities

#### **Cisco Systems**

San Jose. Calif.

# Smart+Connected Communities: Lake Nona

Cisco uses an intelligent network as the core technology platform to transform the city of Lake Nona into a connected community; integrated urban plan will enable information exchange between services, fulfilling the need for increased security, energy conservation, enhanced productivity and a digital lifestyle

#### **City of Boston**

Boston, Mass.

#### **Boston Citizens Connect**

Initiative strengthens connection between residents and city by providing multiple technology platforms (self-service portal, Twitter, website, online chat and text) on which to interact and communicate service needs to city workers

Nominated by SAP Public Services

# Cognizant Technology Solutions

Chennai. India

#### **Research & Development**

Project develops technology to detect different types of diseases at early stages by using image pattern recognition techniques; current project work focuses on disease detection in cotton leaves as well as skin diseases in humans

# Computer Sciences Corp.

Falls Church, Va.

#### CarIT

Business focuses on helping auto manufacturers harness new technologies in all phases of auto manufacturing and operations, bringing innovative security and safety features to car design while also saving automakers money and time during product development

#### DataXu

Boston, Mass.

# Data Science and the Art of Marketing

Real-time, multivariate decision system has ability to sense and correct course, based on changing consumer behavior across all touch points; considers creative, context and other variables dynamically, helping bridge the gap between analysis and use of consumer data Nominated by Morgan Stanley

#### **Dell SecureWorks**

Atlanta. Ga.

#### Targeted Threat Intelligence Services

Services portfolio extends security teams' visibility into threats that are specifically targeting their organizations; addresses the differences in actors behind such threats along with their behaviors to provide organizations with forward, actionable intelligence

**FINALIST** 

#### **Deque Systems**

Herndon, Va.

#### Amaze

Revolutionary approach makes websites accessible to people with disabilities in real time; with Amaze, an accessibility overlay can be created to fix bugs immediately without having to reprogram source code, resulting in a rapid, costeffective solution

21st Century Achievement Award winner

#### Directorate of Information Technology (DIT), Government of Maharashtra, India

Mumbai, India

#### Aadhaar Linked Service Delivery

Following the Indian government's initiative to assign unique identification numbers to every resident, the regional Maharashtra government links bank accounts with UID numbers for public program beneficiaries so grants transfer directly to their bank accounts; this ensures delivery of benefits as well as financial inclusion of everyone

#### Federal Risk and Authorization Management Program

Washington, D.C.

#### Federal Risk and Authorization Management Program

Unified, governmentwide risk management framework for IT systems ends costly and inefficient duplication of efforts and increases confidence in security of cloud systems; fosters faster adoption of cloud services and expedites implementation of next-generation technologies

Nominated by Office of the CIO, GSA

#### **Federal Student Aid**

Washington, D.C.

# The Integrated Student Experience (ISE)

ISE initiative consolidates multiple sources of information related to financial aid and the college decision-making process into a one-stop shop, creating a better experience for users and increasing financial-aid awareness

#### Frederick National Laboratory for Cancer Research

Frederick. Md.

#### Biomedical Big Data Proof-of-Concept

Open-source technologies (Apache Hadoop, Hive and Mahout) enable analysis of information at a scale, speed and cost that could not have been previously accomplished, helping expedite work done by cancer researchers

Nominated by Oracle



#### HQDA Deputy Chief of Staff G-3/5/7 DAMO-FME Enterprise Management Decision Support (EMDS), Pentagon

Arlington, Va.

#### Enterprise Management Decision Support

System provides actionable information quickly and eliminates hassle of manual data collection and analysis by efficiently and accurately aggregating data from multiple authoritative sources; supports Army readiness

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

Dornach, Switzerland, and Munich, Germany

#### **HP VideoBook**

HP solution augments textbooks with videos; algorithm runs series to process text from books or documents and identify and present relevant videos, giving students a dynamic learning experience that improves academic performance FINALIST

# Internet2 (and Its Members)

Washington, D.C.

#### The Nation's Fastest, Coast-to-Coast Research and Education Network

New network includes advanced technologies offered as an Innovation Platform to develop a new generation of applications and deliver new, more efficient, better-yielding services for 200,000 community anchor institutions and university business functions

#### MicroTech

Vienna. Va.

#### Latino Donor Collaborative

Online collaborative knowledge portal using open-source infrastructure gives the nonprofit Latino Donor Collaborative a tool to support its initiative to expand and advance a more accurate, fact-based portrayal of Latinos and their contributions to America

#### Mitsui Knowledge Industry Co. (MKI)

Tokyo, Japan

#### POC for Accelerating Cancer Research Through Real-Time, Big Data Genome Analysis

MKI creates a single, real-time data platform prototype that shortens genome analysis time from several days to 20 minutes, an improvement that could dramatically improve cancer treatments and other healthcare services

Nominated by SAP

**FINALIST** 

#### NASA Office of the Chief Information Officer: IT Labs Program

Washington, D.C.

#### **IT Labs Program**

Program focuses on improving the innovation process for IT-related ideas at NASA; this centralized program sets policies and procedures that within a two-year span has led to investments in more than 30 potentially feasible projects Nominated by Booz Allen Hamilton

#### Online Computer Library Center Inc. (OCLC)

Dublin, Ohio

#### WorldShare Management Services Global Deployment

Web-based environment streamlines cataloging, acquisitions, license management and circulation workflows, and offers a powerful discovery and delivery tool for members of the nonprofit OCLC; enables libraries to share infrastructure costs and resources as well as collaborate

#### Pittsburgh Regional Health Initiative (PRHI)

Pittsburgh, Pa.

#### Tomorrow's HealthCare

Web-based quality improvement program based on PRHI's methodology for healthcare quality improvement and efficiency gives healthcare workers access to the tools, education and online community needed to improve patient care

FINALIST

# The Nemours Foundation

Jacksonville. Fla.

#### Nemours Children's Hospital

Application development and deployment focuses on the patient and parent experience, with applications such as Patient Care Display and Clinician Profiles pulling information from various systems to provide quick access to information at the point of care

Nominated by Software AG

#### **True Office**

New York, N.Y.

# True Office Compliance Gaming Engine

Cloud-based gaming engine for desktop and mobile delivery covers critical regulatory topics and provides an immersive experience for employees that fosters true learning while providing data for analysis, thereby helping employers better manage and mitigate compliance risk

Nominated by Morgan Stanley

# University of California, Merced

Merced, Calif.

#### **UC Merced Mobile App Challenge**

Innovative entrepreneurial competition allows undergraduates to define and solve their own problems; encourages entrepreneurship, innovation and creativity while helping retain students from traditionally underserved populations Nominated by Purple Leaf

#### **UPMC** Mercy Hospital

Pittsburgh, Pa.

# Smartphone Use in Bedside Patient Care

Deployment of multiple smartphone applications that deliver medical orders, alerts and patient information to healthcare personnel in a more timely manner, allowing clinicians to respond rapidly as well as spend more time caring for patients

#### Washington Suburban Sanitary Commission

Laurel, Md.

# Real-Time Mobile Collection of Field Data

Project provides ability to electronically capture and upload field water sampling results and chain-of-custody information at the source, eliminating delays in getting critical information about water samples to staff and customers

#### World Wide Web Consortium (W3C)

Cambridge, Mass.

# W3C: Leading the Web to Its Full Potential

W3C leads standardization of the latest iteration of Web technology, called "Open Web Platform for application development," which is a full-fledged Web programming environment, powered in part by HTML5, that transforms static Web pages into dynamic Web applications

#### Xerox Corp.

Webster, N.Y.

#### Xerox Ignite Educator Support System

One-of-a-kind workflow and software system pushes hand-marked student work (on paper today or on tablets tomorrow) into the digital analytics domain, making it faster for teachers to grade tests and easier to provide individualized instruction

# Mobile Access

#### 2X Software

Gzira, Malta

#### Voices of September 11th

Software allows Voices of September 11th workers to sign in from any terminal or device and access data, as well as scan and enter images of 9/11 victims from any location

#### American Cancer Society (ACS)

Atlanta, Ga.

#### **Mobilizing Cancer Awareness**

ACS chooses cloud-based Moovweb platform to power its mobile sites to quickly deliver its mobile presence while staying fully in sync with desktop site content and features, including the ability to accept donations

Nominated by Moovweb

#### **Arshnet Technologies**

Dallas, Texas

#### **G7Security**

System pulls cybersecurity-related Web content as well as Cyber Security Alerts from the National Cyber Alert System and delivers the content to mobile users via an app that shows security activity and trends



#### California Emerging Technology Fund, California 2-1-1/ United Ways of California

San Francisco, Calif.

#### **CETF Get Connected Grant**

New technology platform allows 2-1-1 network to share expanded resource information across 27 counties, enabling 90% of Californians to quickly get assistance from network workers; helps lowincome residents find computer training and tools

**FINALIST** 

#### **Canvas**

Reston. Va.

#### Ante Up - Sabi Sands

Companywide Ante Up program provides the Sabi Sand Game Reserve with free and unlimited access to Canvas mobile apps, enabling conservation officers to more effectively combat animal poaching

#### Cisco Systems

San Jose. Calif.

#### WebEx Social

Employees turn to the IT Mobility Services Community in Cisco's enterprise collaboration platform WebEx Social for all of their mobile device needs, including rate plans, setup information and support for all types of devices

# City and County of San Francisco

San Francisco, Calif.

#### **Street Lights Mobile App**

Application using Google Maps and GPS technologies allows residents to report streetlight problems and track repair work via mobile phone; provides residents with an easier way to submit problem notifications while giving the city more specific information, helping to speed repairs

#### City of Columbus - Department of Technology

Columbus, Ohio

#### **MvColumbus**

Application gives residents, businesses and visitors access to government, public services and community features from mobile phones; uses integrated technologies such as GPS for location services, RSS for city news feeds and a social media center

#### Continuum Health Partners Inc.

New York, N.Y.

# Improving Patient Outcomes Through Predictive Analytics

Mobile device applications access data in real time to help healthcare providers predict, profile and identify complex patients and patients not classified correctly upon admission, as well as better identify patients' conditions to produce the best health outcomes

FINALIST

#### **Hennepin County**

Minneapolis, Minn.

#### Hennepin County Medical Examiner Merger

Office merger prompts drive to create efficiencies through infrastructure redesign that includes mobile computing, which allows physicians to manage and review cases from anywhere at any time so they can more easily stay current with cases

#### **Indiana University**

Bloomington, Ind.

#### eTexts Initiative

Aiming to reduce the cost of course materials for students, university transitions to digital textbook model for its eight campuses; upgrades wireless LAN infrastructure and develops new technologies to support the initiative Nominated by Aruba Networks

#### Lehigh Valley Health Network

Allentown, Pa.

#### iPads for Home Health Services

Equipping workers with iPads creates direct connections to agency applications, allowing nurses in the field to work live on a server, which enables better security and time savings by eliminating the need to transfer data

#### LifeWIRE Corp.

Toronto, Ontario

#### Interactive SMS as an Intervention for Supporting Veterans at High Risk Suicidal

Software uses text messages to maintain contact with veterans at risk of committing suicide; improves clinical outreach, reduces workload and enables rapid response to events before they escalate into crises

#### **Merit Network Inc.**

Ann Arbor, Mich.

#### REACH-3MC (Rural, Education, Anchor, Community and Heathcare - Michigan Middle Mile Collaborative)

Constructing 2,287 miles of middlemile fiber-optic infrastructure solves backhaul problem in rural Michigan; led by Merit Network, REACH-3MC engages seven commercial ISPs to create infrastructure to serve homes, businesses and community anchor institutions

21st Century Achievement Award winner

#### **Net Power & Light**

San Francisco, Calif.

# Global Live Classroom Powered by Spin Live Studio

Spin Live Studio by Net Power & Light turns Harvard University professor's course into global classroom; requiring no hardware outside of a few iOS devices, Spin Live Studio is simple to pop up and remix in each location

#### **Novation**

Irving, Texas

#### Driving Down Costs by Mobile-Enabling the Healthcare Supply Chain

Suite of price benchmarking and cost management analytic applications in medical, surgical and pharmaceutical areas empowers hospital personnel to make instant decisions; allows them to get key pricing and financial information wherever they are

**FINALIST** 

#### Samsung Electronics America

Ridgefield Park, N.J.

#### Samsung Smart School Solution Multiplies Success for Geeter Middle School Math Students

Middle school in Memphis, Tenn., pilots Samsung Smart School Solution package, which includes tablets and an interactive whiteboard; system better engages students in their lessons by making learning more fun and better enables teachers to monitor students' progress and do real-time coaching.

**FINALIST** 

#### **Team Rubicon**

Inglewood, Calif.

#### **Operation Greased Lightning**

Veteran Emergency Response Teams aiding Hurricane Sandy victims use iPads and smartphones to take photos of damage and file requests for supplies and repairs, while Team Rubicon analysts in command center track and respond to needs

#### **Technology Works**

Clayton, Ga.

#### **Public Computer Center**

Rabun County sets up two public computer centers that offer 30 workstations, teleconferencing capabilities and free computer classes to improve workforce development, education and healthcare services

# The Smithsonian Institution

Washington, D.C.

# Audio Tour: "Romare Bearden: A Black Odyssey"

Free mobile application functions as both exhibition companion and standalone introduction to Romare Bearden's work; app uses uniquely creative approach incorporating music and website links to deliver insight to users

#### Tohono O'odham Community College

Sells, Ariz.

#### iPad Therefore I Am

Introduction of iPads at tribal college serving Tohono O'odham Nation helps increase student retention, attendance and participation in class by providing hands-on learning that students enjoy and by making material more engaging

#### **U.S.** Coast Guard

Washington, D.C.

#### USCG Provides Secure Mobile Access with Good Technology

Good Mobile Connection allows USCG to provide secure mobile access to information behind the firewall, enabling users to communicate efficiently, reliably and securely across the Coast Guard's large geographic coverage area

Nominated by Good Technology

#### Welfare Client Data Systems

Folsom, Calif.

#### **CalWIN Benefits Mobile**

Applications for Android and Apple smartphones and tablets provide enhanced self-service capabilities to families in need of health and social services assistance, including a streamlined application for disaster assistance



# Philanthropy

#### Allstate Insurance Co.

Northbrook, Ill.

#### **Allstate Fellows Program**

Program grants employees paid leave to allow them to help manage and lead short-term, high-impact projects in areas such as information systems for nonprofit organizations, enabling participants to use their professional skills to strengthen communities

#### **AMD Foundation**

Austin, Texas

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

Program seeks to better engage young people in science, technology, engineering and mathematics by having participants create video games around social issues; program focuses on four areas: game design, game competitions, curriculum and advocacy

#### **Budge Inc.**

New York, N.Y.

#### Budge

Award-winning mobile and social platform allows users to challenge friends to any activity, with the loser making a micro-donation to charity; aims to engage Gen Y users in philanthropy through a seamless and enjoyable interface

#### **CA Technologies**

New York, N.Y.

#### National Center for Missing & Exploited Children (NCMEC) Finds More Children with Successful IT Management

CA Technology solutions ensure NCMEC staff and partners as well as the public have 24/7 access to systems that help identify and protect vulnerable children; solutions give NCMEC the ability to provide faster response to potential issues and improve the quality of IT management

**FINALIST** 

#### **ConnectToTech Inc.**

Hauppauge, N.Y.

#### ConnectToTech Online

Suite of online complementary technology platforms offers educational resources as well as automated tool for volunteer groups to conduct volunteer-matching, advancing the group's mission of engaging Long Island, N.Y., students in science, technology, engineering and mathematics

# Credit Suisse - Information Technology

New York, N.Y.

#### Hurricane Sandy Recovery -Habitat for Humanity Setup

After Hurricane Sandy displaces
Habitat for Humanity from its
Manhattan office, longtime partner
Credit Suisse provides relocation
space; Credit Suisse IT staffers
volunteer time to set up Habitat's
technology, getting it operational
after just one night

#### **DataKind**

New York, N.Y.

#### **DataKind**

To foster use of data to serve humanity, initiative enlists data scientists from the private sector to volunteer for multidisciplinary teams that help world-changing organizations analyze data to solve problems

**FINALIST** 

#### **EKOICT**

Accra, Ghana

# ICT Training Kits for Hearing Impairment

Project aims to make textbooks on information and communication technologies accessible to hearing-impaired individuals by translating ICT terms into meaningful sign language context and using technologies such as Web-streaming video and a flash-animated application

#### Infor

New York, N.Y.

#### Infor Partners with Habitat for Humanity to Help Build Affordable Housing

Donations and discounted prices of Infor products allow nonprofit Habitat for Humanity to standardize on Infor solutions, enabling organizationwide visibility into costs as well as in-depth analysis and forecasting to facilitate improved, more informed budgeting decisions

**FINALIST** 

# Institute of Information Science (IZUM)

Maribor, Slovenia

#### Institute of Information Science Gives Entire Slovenian Population Access to Public Library System

Institution provides library information service to more than 600 Slovenian libraries, allowing the entire country's population to have anytime access to the national bibliographic system as well as resources for research, education and culture

Nominated by Hitachi Data Systems

#### (ISC)2 Foundation

Palm Harbor, Fla.

#### Safe and Secure Online Program

Program produces nearly 900 member volunteers who since 2006 have provided instruction to more than 95,000 children in Canada, Hong Kong, the U.K. and the U.S. on how to protect themselves online and become responsible digital citizens

#### Kellogg Co.

Oak Brook, Ill.

#### **Proiect Lantern**

Building on their partnership with a local branch of the National Alliance of Mental Illness, IT workers undertake project to enhance organization's Ending the Silence website, resulting in a more visually appealing site with enhanced features

#### LINGOs (Learning in NGOs)

Yarrow Point, Wash.

#### SCORM Dispatch: Enabling LINGOS Members to Make Independent LMS Decisions and Access LINGOS Catalog

Consortium that shares learning resources and experiences makes donated e-learning courses available to its members through a learning management system (LMS) that creates a seamless interface between this program and member systems to ensure easy access to material

#### Littelfuse Inc.

Chicago, Ill.

#### **Next Generation Development**

IT team helps build next generation of technology workers by mentoring and training college students and inner-city youth who want technical careers, volunteering more than 2,000 hours of time to date

#### McΔfee

Santa Clara, Calif.

#### McAfee Online Safety for Kids Program

Using content and materials provided by the company, employees volunteer to train school-age children in ways to stay safe and secure and maintain good ethics in their online behavior; safety program is free to schools and youth groups

#### MCNC

Research Triangle Park, N.C.

# Fiber Build to Serve Community Anchor Institutions

A \$144 million expansion of the North Carolina Research and Education Network results in a 2,600-mile fiber-optic network touching 82 of the state's 100 counties; gives state a competitive advantage and allows community anchor institutions to keep up with bandwidth demand

#### **NetSuite**

San Mateo, Calif.

#### NetSuite.org

Corporate citizenship program with mission to help nonprofits donates company's cloud-based business management suite and employees' expert assistance to selected charities to help them run their organizations more effectively and efficiently

### **New Signature**

Washington, D.C.

#### **Opportunities for Youth**

Company initiative engages its employees in community programs focused on youth, including Year Up, Alliance for Excellent Education and Network for Teaching Entrepreneurship; company offers financial support as well as volunteer time



#### School Board of Miami-Dade County, Florida

Miami. Fla.

# Learn Ideas, Navigate Knowledge (LINK)

Program provides digital literacy training, computers and broadband Internet service for low-income students and their families, opening up new opportunities and broadening horizons as it bridges the digital divide

21st Century Achievement Award winner

#### Silicon Valley Education Foundation (SVEF)

San Jose. Calif.

#### Stepping Up to Algebra - 1:1 Computing Labs

Intensive 75-hour summer program serves nearly 1,000 students and continues with afterschool sessions to improve students' math proficiency; SVEF achieves 1:1 computing ratio in program with donated Dell thin clients Nominated by Dell Cloud Client Computing

#### **SMART Technologies**

Calgary, Alberta

#### SMART Learning Space Anti-Cyber-Bullying Campaign and SMART Exchange

Training and professional development team develops online program to educate people about cyber-bullying; additionally, SMART Exchange provides online community and database so Canadian teachers can access classroom-ready resources and connect with colleagues Nominated by Saba Software

#### **Solstice Mobile**

Chicago, Ill.

#### **JobPrep**

Development of Job Prep mobile application gives job seekers in Illinois a comprehensive careerbuilding resource with features to assist them through all phases of job search

#### Tech Impact (formerly NPower Pennsylvania)

Philadelphia, Pa.

#### npCloud: Nonprofit Cloud Technology Services Suite

Suite of nonprofit cloud technology solutions paired with education and wrap-around implementation and support services brings cloud-based services to nonprofits, enabling greater efficiencies

**FINALIST** 

#### The Hershey Co.

Hershey, Pa.

#### Hershey's Learn to Grow: Ghana Distance Learning Program

Working with Cisco Systems, Hershey brings broadband Internet and videoconferencing to remote Ghanaian elementary school, establishing connection to Milton Hershey School in Pennsylvania and other organizations globally; also enables adult education and other services

#### TIBCO Software Inc.

Palo Alto, Calif.

# Sisters of Mercy Improves Chronic Care with TIBCO

Software enables remote monitoring of patients' vital signs so clinicians located anywhere in the health system can monitor patients while other software unifies electronic records to create a single snapshot of each patient's medical history, all helping clinicians deliver better care

# Safety & Security

# Alabama Computer Forensics Institute

Trov. Ala.

#### **WARN Project**

Project uses analytic and modeling tools to help law enforcement and child advocates identify trends and patterns of emerging criminal behavior directed toward Alabama youth

Nominated by Troy University

#### Anaheim Police Department (APD)

Anaheim, Calif.

#### **APD Maps for iPad**

Police department replaces paper maps and map books with iPad application that incorporates geographical data, building plans and features such as pan and zoom, increasing officers' situational awareness and tactical response

#### **Cisco Systems**

San Jose. Calif.

#### Cisco Tactical Operations (TacOps)

Team of networking, radio communications and systems engineers along with logistics and operations coordinators provides free IT resources and services to support relief efforts and relief organizations in crisis situations

**FINALIST** 

#### **City of Ann Arbor**

Ann Arbor, Mich.

#### Technology, Integration and Collaboration to Support Fire Incident Response and Command

Platform combines proven incident response and incident command capabilities in networked emergency management system for coordinated use across all agencies and departments; provides real-time integration between systems supporting dispatch, mobile data computers and records management system

#### City of Richmond, Va., Department of Information Technology

Richmond, Va.

# Automated Secure Alarm Protocol (ASAP)

Software allows emergency dispatch centers, where 911 calls have priority, to respond more quickly to reports from alarm companies and enables better flow of critical information about alarm incidents to dispatchers to improve emergency response

FINALIST

#### Pennsylvania Department of Public Welfare

Harrisburg, Pa.

# Enterprise Incident Management (EIM)

Internet-enabled tool allows care providers to report incidents involving elderly and physically or mentally disabled individuals in their care; replaces the former system to eliminate redundancies and inefficiencies, allowing commonwealth officials better insight and control over reports

#### Cybersecurity and Infrastructure Protection (CIP), Michigan Department of Technology Management and Budget

Lansing, Mich.

#### Integrating Cyber and Physical Security: Ending the Divide Using a Comprehensive Approach to Risk

New CIP function combines disparate security services to align policies and operations and enable technology innovation, using a comprehensive, metrics-based approach to reducing physical and cyber risks

#### **Dell SonicWALL**

Miami, Fla.

#### Our Kids of Miami-Dade/ Monroe - Case Study

Nonprofit agency providing foster care, adoption and related services uses Dell SonicWALL Aventail Secure Remote Access Appliance to enable workers using mobile devices and workers from other organizations to securely access the agency data they require

#### Pennsylvania Department of Public Welfare

Harrisburg, Pa.

#### Information Technology Risk Management (ITRM) Program

Program streamlines the department's regulatory audit management processes to enable effective risk-based decisions; establishes security risk framework and embraces automation that rationalizes more than 4,000 individual regulatory requirements into 350 unique integrated requirements

#### Federal Bureau of Investigation

Washington, D.C.

#### Sentinel

Case management tool enables much faster, more comprehensive and more secure information sharing among FBI agents, field offices and analysts; employees can now share and view new information in minutes, compared with days or weeks using the previous system

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

Palo Alto, Calif.

#### HP Global Product Authentication Service

Cloud-based application helps organizations combat counterfeit goods and activities by allowing consumers to quickly scan or send SMS text with a code to determine if a product is real or fake prior to or after a purchase



#### **IDV Solutions**

Lansing, Mich.

#### **Visual Command Center**

Software visually integrates data from internal and external systems and sources to give organizations a complete picture of possible sources of risk, such as civil unrest or natural disasters; overlays the data onto an interactive map to identify people and facilities at risk

Nominated by Morgan Stanley

#### **Intelligence and Information Warfare Directorate**

Aberdeen Proving Ground, Md.

#### **Identity Resolution Exploitation** Management Services (IREMS)

System integrates and disseminates identification data derived from biometrics, forensics and other material collected worldwide to help security officials around the globe quickly identify suspects, criminals and terrorists

Nominated by Booz Allen Hamilton

**FINALIST** 

#### **International** Multilateral **Partnership Against Cyber Threats** (IMPACT)

Cyberjaya, Malaysia

#### **Electronically Secure Collaborative Application** Platform for Experts (ESCAPE)

Platform escalates the speed with which IMPACT and organization members are able to respond to cyber threats by enabling them to access information and the collaboration of security experts in numerous locations around the globe

#### **Jersey City Office** of Emergency **Management & Homeland Security**

Jersey City, N.J.

#### Jersey City IRAPP

Interoperable Response and Preparedness Platform provides coordinated communications between emergency personnel and critical infrastructure organizations by leveraging existing communications and media infrastructure as well as next-generation broadband efforts to create a resilient and scalable collaboration framework

#### **Long Beach Police Department**

Long Beach, Calif.

#### **Using Innovative ECM Technology** to Curb Crime

Integrated enterprise content management and records management technology enables police officers to access up-to-date information from their patrol cars so they have the information they need to arrest gang members Nominated by Greenough

#### **NASA Office of the Chief Information** Officer. Information **Security Division**

Washington, D.C.

#### Web Application Security Program (WASP)

WASP employs custom methods to discover and remediate enterprise vulnerabilities before malicious actors exploit them; program conducts automated and manual testing across the enterprise to identify critical vulnerabilities and provides vulnerability scanning tools for stakeholders Nominated by Booz Allen Hamilton

#### Nationwide Children's Hospital

Columbus, Ohio

#### Zero Hero

Software collects and analyzes safety information, enabling employees to report and detail safety incidents at any computer so the system can help identify ways to reduce risks; has so far reduced preventable harm by 50% and serious safety events by 85% Nominated by CS STARS

#### **Naval Meteorology** and Oceanography Command

Stennis Space Center, Miss.

#### Piracy Attack Risk Surface (PARS)

Forecasting tool integrates environmental conditions, pirate concept of operations, commercial shipping information and relevant piracy information to forecast probability of pirate activity over a 72-hour time frame within the Somali Basin Region and the Gulf of Aden

U 21st Century Achievement Award winner

#### **Opera Solutions Government Services**

Jersev Citv. N.J.

#### **Open Source Threat Assessment** Platform

TAP searches and analyzes in real time online content in 55 languages using 85 million-plus entities to determine potential threats around the globe and then advise organizations about incidents that could develop

### **Plugout**

New York, N.Y.

### Taino Towers East Harlem Pilot Block Intelligent IP Video Surveillance with Facial Detection Access Control

State-of-the-art digital security setup with IP-based megapixel surveillance cameras, video management software, wireless two-way communication alert systems and motion identification system successfully combats crime at a housing complex and brings operational efficiencies to management staff

### Real-Time Technology Group

Flemington, N.J.

### The Secure Worker Access Consortium (SWAC) Project

Project unites information from labor groups, private contractors, public agencies and security professionals to deliver a Webbased shared identity management and background screening system that public agencies and private enterprises can use to review, verify and credential individuals

### Sensuss

Seaford, Del.

### **Sensuss Helmet**

Helmet with body area network comprised of multiple sensors collects and transmits data to the cloud, making information about physical impacts that could cause concussions (such as location of hit) available to coaches, families and doctors

Nominated by Eurotech

### Texas Department of Transportation

Austin. Texas

### **Drive Texas**

Application with user-friendly interface provides travelers with real-time road conditions, traffic and weather feeds, and links to other useful information, making it easier for drivers to access data affecting their travel across Texas

### Thailand Royal Irrigation Department

Bangkok, Thailand

### Thailand Royal Irrigation Deploys Public Safety and Data Communications Wireless Video Mesh Network for Advanced Flood Forecasting

World's first large-scale wireless mesh network transmits live highdefinition video feeds of river water levels and other environmental data so engineers and meteorologists can better predict when and where flooding could occur Nominated by Firetide

**FINALIST** 

### **Town of Longboat Key**

Longboat Key, Fla.

### Fire PrePlan, Logbook and Inspection Program

Custom applications for iPad2 enable fire department personnel to more efficiently conduct required inspections, document findings and file reports, enabling the town to do more work with existing personnel

### Sustainability

### Aetna Innovation, Technology & Service Operations

Hartford, Conn.

### Sustainable Data Center and Technology Initiative

Project to drive innovation and collaboration between IT and facilities teams yields a new, more efficient "green data center within a data center" design that uses virtualization to drastically cut power consumption and improve server utilization rate

### Biodiversity Heritage Library

Washington, D.C.

### **Biodiversity Heritage Library**

Digitization of science literature allows researchers around the world to access tens of millions of text pages without the need to travel to the library that houses the material, while an active social media presence engages scientists on the topic of biodiversity

### Chicago Metropolitan Agency for Planning (CMAP)

Chicago, Ill.

### **MetroPulse Chicago**

Website uses application programming interfaces and pulls together fragmented information to support data visualizations, downloads and exports as well as other features and functions valuable to those working on public policy issues



### City University of Hong Kong

Kowloon Tong, Hong Kong

### University Paperless Office Project

Guided by its commitment to sustainability, this project digitizes processes and storage that had been paper-based, helping to reduce paper and space consumption while making administrative processes more efficient and secure

### **Coyote Logistics**

Chicago, Ill.

### **Private Fleet**

Proprietary technology identifies trucks scheduled to travel to their destinations empty so they can be filled with freight to be shipped, eliminating so-called empty miles and the CO2 exhaust they produce while creating more value for shippers

### **Energy Future Holdings**

Dallas, Texas

### Extreme Makeover: Green Edition

Initiative to create more sustainable facilities and operations includes transforming an aging data center into an Energy Star-rated, LEED-certified building that meets strict energy-efficiency performance levels

### Hewlett-Packard Co. Data Center Services – Global Facilities

Plano. Texas

### Data Center Sustainability Initiative

Initiative aimed at reducing company's carbon footprint, increasing energy savings and lowering operational costs encompasses multiple projects and activities, including consolidation of data centers into fewer energy-efficient facilities and construction of a next-generation data center

### IBM & School District of Palm Beach County, Fla.

West Palm Beach, Fla.

### School District of Palm Beach County, Fla.

Centralized system manages school district's entire leasing program, helping the district generate millions of dollars in extra revenue from rental fees by automating many of the tasks associated with leasing out the district's facilities

**FINALIST** 

### **IT-VETS Inc.**

Hauser, Idaho

### Hire Our Heroes

Nonprofit organization hires returning veterans to work with experienced IT staff providing IT support for clients, which gives veterans hands-on training while delivering affordable IT support services to community businesses and organizations

### **Lehigh Hanson Inc.**

Irving, Texas

### Cadman Ready Mixed Concrete Fleet Navigation & Water Meters

Computing platforms deliver real-time data on concrete trucks' locations as well as the material being delivered, allowing fleet managers to optimize truck routes to reduce vehicle idle time as well as cut use of fuel and raw materials

### **Liquidity Services**

Washington, D.C.

### Enhancing Sustainability for Leading Organizations

Company provides business and government clients as well as buying customers with a transparent, innovative and effective online marketplace for buying and selling surplus industrial machinery, equipment, materials, vehicles and inventory

### **Microsoft Corp.**

Redmond, Wash.

### Microsoft's Energy Smart Buildings Initiative

Real-time analysis of data generated from facilities' systems helps Microsoft fully understand its buildings' performance, allowing the company to better optimize operations and reduce maintenance costs as well as environmental impact

**FINALIST** 

### **Quality Attributes** Software

Bavville, N.J.

### **Haverford Environmental Center**

GreenTouchscreen application showcases community's LEEDcertified building so residents and visitors can learn about the center's energy conservation features and the methods used to reduce its carbon footprint

### SAP AG

Walldorf, Germany

### Sustainable Asset Lifecycle Management (SALM@SAP)

Project seeks to optimize the lifecycle of IT assets and increase IT's sustainability through numerous initiatives, including installation of power management software on computers, use of asset management tool to eliminate unused or duplicate devices, and deployment of automated paperless ordering process

### **Schizophrenia Society** of Canada (SSC)

Winnipeg, Manitoba

### **SSC Goes Virtual**

Nonprofit closes its head office and transitions to a virtual office model to save money and resources, relying on cloud-based collaboration tools to support remote teams and functions that were redistributed to provincial societies

Nominated by Hyperoffice

**FINALIST** 

### **SmartDrive Systems** Inc.

San Diego, Calif.

### SmartDrive Fuel

Service combines technologies including video, mobile applications for drivers and a fuel management center to minimize fuel waste: fleet managers see how fleets are using fuel, where waste occurs, and where opportunities exist for fuel conservation

### **TellEmotion Inc.**

Hartland, Vt.

### Greenlite

Conservation-promoting products draw on best practices developed by computer scientists, graphic artists, sociologists, engineers, environmental scientists and psychologists; products such as animated polar bears link consumers' use of resources to their environmental impact to encourage conservation

### The Energy Authority

Jacksonville, Fla.

### Hydroelectric Optimizer System

Software creates virtual simulations of the Columbia River hydroelectric system and incorporates dynamic programming to generate feasible schedules with the highest economic value to the utility

### The Green Grid

Beaverton, Ore.

### Improving Universal Data Center **Resource Efficiency with Metrics** and Benchmarking Models

Advocacy and education on resource-efficient data centers increasingly influences data center design and operations, with IT and data center managers using Green Grid tools as well as metrics to produce energy and cost savings

21st Century Achievement Award winner

### The Hartford

Hartford, Conn.

### Paperless e-Commerce Initiative

Project allows customers to view and download current and historical documents from their desktops and mobile devices; company representatives can also present and receive documents, including customer consent, electronically

### Verne Global

Falls Church, Va.

### **Dual-Sourced 100% Renewably Powered Data Center**

Data center campus in Iceland uses only renewable energy sources (hydroelectric and geothermal energy along with year-round free cooling) to provide an environmentally friendly, competitively priced option that leaves no carbon footprint



### **World Good**

### Dell

Round Rock, Texas

### American Red Cross Listening Center for Humanitarian Relief

The first social media-based operation devoted to human relief, this center uses Dell products and services to spot trends, better anticipate the public's needs and connect people with resources during a disaster

**FINALIST** 

### Desmond Tutu HIV Foundation

Cape Town, South Africa

### Fight to End HIV and Tuberculosis

Enterprise resource planning system brings operational efficiencies and provides staff with data where and when they need it so they can make well-informed decisions more quickly, leaving more time for direct patient care Nominated by SAP



21st Century Achievement Award winner

## Department of Electronics and Information Technology (DEIT), Ministry of Communications & Information Technology, Government of India

New Delhi. India

### DEIT and the e-District National Rollout

Rollout of e-District shortens time to deliver government services and reduces administrative burden on government by enabling citizens to access a wide selection of services online or through village-based onestop shops called Common Service Centres

Nominated by Accenture

### Federal Health Architecture

Washington, D.C.

### CONNECT

Open-source solution provides a leading edge, flexible platform for health information exchange; healthcare organizations and physicians using CONNECT can effectively and securely exchange data with their partners, reduce costs and enhance services

### Frog

Halifax, England

### 1BestariNet

Project provides all 10,000 Malaysian state schools and 10 million users with 4G connectivity to Frog's Virtual Learning Environment, an Internet operating system that gives students and teachers virtual access to education resources

### Gemalto

Sao Paulo, Brazil

### Conservation of the Amazon Rainforest in Brazil by Gemalto M2M Technology

Technology aims to help catch tree thieves in action and stop deforestation; Cargo Tracck's tracking solution uses Gemalto's machine-to-machine module to enable cellular communications so devices attached to protected trees can alert law enforcement to illegal tree harvesting

### Human Rights & International Criminal Law Online Forum

Los Angeles, Calif.

### Human Rights & International Criminal Law Online Forum

The UCLA Sanela Diana Jenkins International Human Rights Project and the International Criminal Court Office of the Prosecutor establish a forum to engage the worldwide legal community in dialogues on topics of interest to the prosecutor Nominated by Pipsqueak Productions

**FINALIST** 

### Infosys Ltd.

Bangalore, India

### Open Source Drug Discovery (OSDD)

Council of Scientific and Industrial Research launches OSDD program, providing a global platform where anyone can collaborate on developing therapies for tropic diseases, such as malaria

### **Marist College**

Poughkeepsie, N.Y.

### **World Community Grid**

College contributes its idle computer processing power to crunch work units for various humanitarian and sustainability projects through the World Community Grid, contributing more than 10,800 years of computing time since 2005

### Millenniata Inc.

Provo. Utah

### **Permanent Digital Data Storage**

M-Discs enable individuals and organizations to archive data without needing to keep discs in environmentally controlled conditions: helps organizations such as The Harold B. Lee Library at Brigham Young University preserve their digital collections for centuries Nominated by Brigham Young University

### **Ministry of Culture. Media and Information Society** of Serbia

Belgrade, Serbia

### Virtual Desktops in Serbian **Primary Schools**

Ministry outfits the nation's 1,600 primary schools with computer labs comprised of virtual desktops to enable students to direct their learning and access online educational applications; virtual environment also simplifies management and reduces costs Nominated by Dell

### **Ministry of Foreign** Affairs, Luxembourg

Luxembourg

### Emergency.lu

Satellite-based telecommunications platform designed to work in disaster zones takes less than an hour to establish high-speed Internet connectivity for voice, data and image transmission, enabling aid workers to register their laptops. tablets and cellphones on the spot and use the satellite capacity at no cost

### **ORTEC Consulting Group/ORTEC BV**

Gouda, Netherlands

### North Star Alliance Corridor **Medical Transfer System** (COMETS)

Client health registration system enables the exchange of patientspecific data in a network of roadside health clinics in Africa as well as monitors and evaluates health trends on the local, national and regional level

**FINALIST** 

### **TM Forum**

Morristown, N.J.

### **Resilient Cloud Catalyst:** Maintaining Service in the Face of **Developing Threats**

Project developed by nonprofit's security program demonstrates how to maintain critical system resources by monitoring risks like Hurricane Sandy and proactively managing the physical resources of a cloud environment that supports missioncritical services

### **United Nations Development Programme**

New York, N.Y.

### Information Security Assurance Information Security Unit

achieves ISO 27001 and ISO 9001 certifications, representing its commitment to information security and quality management best practices; improves organization's ability to meet its mission by better protecting its internal information resources, productivity and data

**FINALIST** 

### U.S. Army, Communications-**Electronics Research. Development and Engineering Center** (CERDEC), Space and Terrestrial **Communications Directorate (S&TCD)**

San Diego, Calif.

### Soldier Radio Waveform (SRW) **Reference Implementation** Laboratory (RIL)

Competitive, multivendor approach offers improved interoperability, timelier implementation and cost savings for the government; enables the government to foster more competition in the tactical radio market and eliminates the need for a single vendor to develop and sustain the radio Nominated by Booz Allen Hamilton



2013 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

### Warren East

Chief Executive Officer, ARM

We also congratulate the 2013 Morgan Stanley Computerworld Honors Program Laureates for the acceptance of their works into The Worldwide Archives of the Computerworld Honors Foundation

10gen, Inc. Airbnb

BISON DataXu, Inc.

IDV Solutions Massachusetts General Hospital

and LiveData, Inc.

MarkLogic Corporation MemSQL

True Office

Morgan Stanley

### 2013 Morgan Stanley Leadership Award for Global Commerce

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

# World Class

ARM Holdings plc is the world's leading semiconductor intellectual property supplier. The technology it designs is at the heart of many of the digital electronic products sold around the globe, and its CEO, Warren East, is among the world's top business leaders.



arren East joined ARM Holdings plc in 1994 to set up the ARM consulting business. He later held the position of vice president of business operations and was appointed to the board as chief operating officer in October 2000. He was appointed chief executive officer in October 2001.

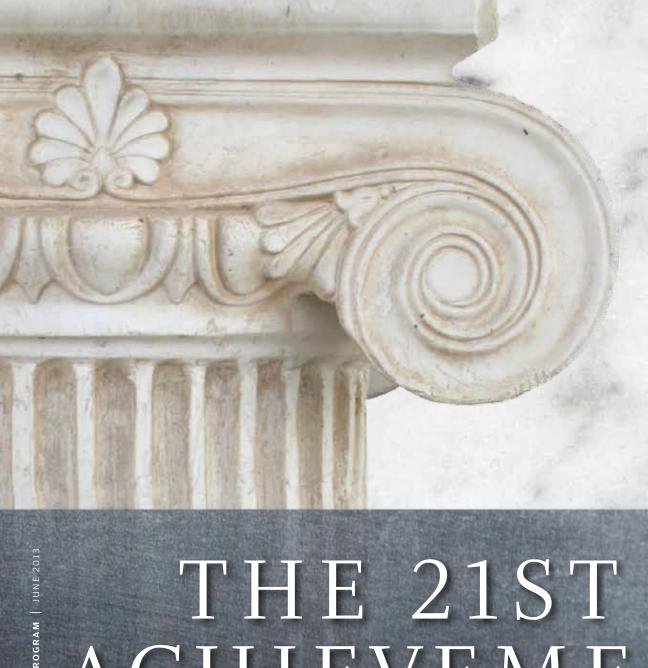
East is a chartered engineer and a companion of the Chartered Man-

agement Institute, the only chartered professional body in the U.K. dedicated to promoting the highest standards in management and leadership excellence. East is a fellow of both the Institution of Engineering and Technology and the Royal Academy of Engineering, and he's also a distinguished fellow of the British Computer Society.

In 2007, East was named Business Leader of the Year at the National Business Awards, and in 2011 and 2013, he was named in the Barron's list of the World's Best 30 CEOs.

East holds a master's degree in engineering science from the University of Oxford and has an honorary doctorate from Cranfield University.

He is a member of advisory boards for both Oxford University and Cranfield University, and he's a nonexecutive director and chairman of the audit committee of De La Rue plc.



## ACHIEVEME

### CENTURY NT AWARDS



21ST CENTURY ACHIEVEMENT AWARD

### Collaboration

## Delivering Critical Lessons

**The Talking Book** uses a low-cost mobile device and audio content to bring critically needed lessons on farming and health to those living in remote rural regions.



### THIS MAY BE THE INFORMATION AGE, BUT THERE ARE 750 MILLION ILLITERATE ADULTS WORLDWIDE

who cannot take advantage of today's wealth of data to better their lives. In fact, illiteracy, poverty and a lack of electricity impede millions from learning and benefitting from the technology advances that have marked our era.

### The Talking Book Literacy Bridge

Seattle. Wash.

- Challenge: Deliver educational material to poor, illiterate subsistence farmers who lack electricity, computers and Internet access so they can improve their economic opportunities, their health and their lives
- Solution: Deploy robust, low-cost mobile devices powered by disposable/rechargeable batteries so users can play, record and copy audio lessons on demand

Pilot results show that farmers who had access to the Talking Book program harvested on average 48% more crops than in the prior season. In contrast, the control group showed a 5% decrease.

That's clearly evident in many developing countries, where 800 million farmers live on less than a dollar a day and 1.5 billion people have no electricity. Yet access to knowledge and new skills are critical to successful development efforts aimed at lifting them out of poverty and improving their lives.

Literacy Bridge, a Seattlebased nonprofit organization, developed a way to work around these obstacles: The Talking Book.

As its name suggests, the Talking Book delivers information orally, an important teaching

strategy that's particularly relevant because many of its users come from cultures with oral traditions.

Individuals living in remote rural communities without electricity can use the Talking Book to access on-demand audio lessons recorded by local experts, selecting from a library of lessons that address the critical issues they face. Its audio content management system enables local organizations to arrange recordings by language and topic, such as livestock diseases or malaria prevention. They can also use the system, along with usage statistics and a user feedback application, to make improvements to the lessons.

The Talking Book does not rely on computers, the Internet or mobile networks for distribution of the audio lessons. Lessons can simply be played or recorded on the device itself and can be copied from device to device, allowing them to reach greater numbers of

individuals in need.

Additionally, the mobile device does not need to be plugged into the electrical grid for charging. Unlike standard mobile phones, the Talking Book is powered by disposable and rechargeable batteries.

### PROJECT SIGNIFICANCE

Since 2011, the Talking Book has delivered more than 200,000 on-demand lessons on health and farming to 20,000 of the poorest people in Ghana. Some 90% of the material is put into practice by men, women and children, empowering them to take actions that improve their lives.

Trials started on the Talking Book's core technology back in 2009, when it was first deployed during a pilot study in rural Ghana. Development of the device's current technology system was completed and deployed in 2011, when Literacy Bridge kicked off its integrated health and agriculture initiative designed to improve the health of 24,000 women and at-risk children in remote rural Ghanaian communities.

Currently, Literacy Bridge is improving the efficiency of content development and delivery. Additionally, it's working on its content management software to allow it to track geographic-based contextual information, such as resource constraints, and to break down usage statistics by client, community and group.

Literacy Bridge also is developing a new custom chip for the Talking Book, which will help it lower both production costs and energy use.



21ST CENTURY ACHIEVEMENT AWARD



## ID-Powered Inclusion

Government program that uses biometrics to assign **unique identity numbers** gives all residents in India the opportunity to participate in society.



AN ESTIMATED 400 MILLION INDIANS CANNOT PROVE THEIR IDENTITY. As a result, they're shut out of countless opportunities. They cannot access educational programs, open a bank account, apply for welfare benefits or seek higher-level employment. Lack of identification is

### Aadhaar Unique Identification Authority of India

New Delhi, India

- Nominated by: Accenture
- Challenge: Develop an identification system that works for all 1.2 billion residents of India, including the estimated 400 million Indians who cannot prove their identity using traditional methods of personal identification, such as birth certificates
- Solution: Assign unique identity numbers that are tied to individual biometrics

"This is the stuff that excites me the stuff that I know can make a difference to millions of people."

 Nandan Nilekani, head of the Unique Identification Authority of India

also problematic for the government, because as much as 40% of the \$40 billion it directs yearly toward helping these individuals doesn't reach the intended beneficiaries.

The Indian government, however, has found a solution to this problem: use biometrics to provide everyone with a method of personal identification.

The Unique Identification Authority of India (UIDAI) launched its innovative Aadhaar program to give all residents the ability to prove their identity through a unique identity (UID) number tied to their biometrics.

To do this, the UIDAI photographs individuals, scans their irises and collects their fingerprints. The data is uploaded to a central repository, where an algorithm checks whether each individual's biometric data already exists in the database. If no duplicate record exists, a unique

Aadhaar number is sent to the resident by mail.

The system can compare each set of biometric data to existing records in just minutes, and the biometric search and deduplication process can handle up to a million enrollments daily.

Once a UID number has been assigned, it is integrated with the government's National Payments system as well as registered cellphone numbers, enabling payments to be made to UID-linked bank accounts through mobile phones and one-time passwords. The government is also working with banks to establish

a network of micro-ATMs equipped with fingerprint readers so residents in underserved rural areas can access banking services.

The UIDAI went live with Aadhaar on Sept. 30, 2010, and enrolled more than 235 million people during the program's first two years of operation. Its goal is to enroll 600 million people — half of India's population — by 2014.

Aadhaar is more than a technology program that collects biometric data from residents. It is a transformative initiative that will allow all Indian residents the

### PROJECT SIGNIFICANCE

By enabling personal identification, Aadhaar gives all Indian residents the opportunity to seamlessly receive the services they need, a crucial step in promoting social inclusion and ensuring that every resident has the opportunity to benefit from India's tremendous growth.

opportunity to participate more fully in society. Having a UID number allows residents, particularly those who previously could not prove their identity, to access services and benefits that had once been out of their reach. The program also helps the government eliminate fraud and misdirected welfare spending by ensuring that benefits are received by the intended recipients. Moreover, Aadhaar gives the Indian government a more accurate demographic picture of communities, which allows officials to allocate spending, resources and personnel where they are needed most.



21ST CENTURY ACHIEVEMENT AWARD

### **Emerging Technology**

### Mobile Money

**Commercial Bank of Africa** develops a mobile phone platform that brings banking services to many Kenyans for the first time, allowing it to expand its customer base and promote the goal of financial inclusion.



THE COMMERCIAL BANK OF AFRICA (CBA) WANTED TO REACH MILLIONS of potential customers in Kenya, but most of those potential customers did not have access to traditional brick-and-mortar banking facilities.

### **M-Shwari** Commercial Bank of Nairobi, Kenya

- Challenge: Reach the millions of Kenyans who have little or no access to banks
- Solution: Offer banking services via mobile phones

Local banking industry pundits have called M-Shwari a game changer in Kenya and beyond, as users of the mobile phone platform opened more than 1 million bank accounts and transacted in excess of \$18.75 million within two months of the product's launch on Nov. 27, 2012.

So the Nairobi-based bank developed M-Shwari, a mobile phone platform designed to expand its services to Kenyan customers while providing the same personalized service and excellent customer relation experience that the bank cultivates as part of its brand.

To do this, CBA partnered with local telecommunications provider Safaricom, a Vodafone Group affiliate, to deliver M-Shwari to 16 million Safaricom customers who use the mobile money platform M-Pesa. M-Shwari allows customers to open accounts and make deposits and withdrawals, as well as borrow money and pay loans.

CBA had several challenges to overcome before the product's launch. It had to integrate its core banking

system with the government's population registry system to enable customer verification. The bank also had to enable integration and communication of various systems managed by different organizations and residing in different geographical locations - for instance, the M-Pesa system resides in Germany while

the core banking system and the Kenyan government population registry system reside in Kenya. In addition, CBA had to ensure that communication between the systems needed for service delivery had a turnaround time of about five seconds. Moreover, the bank had to make sure the operational and technical processes

among the different organizations were aligned for optimal M-Shwari service delivery.

CBA deployed several significant technological innovations to meet these challenges. It developed the M-Shwari application within the M-Pesa platform to allow accessibility via the existing M-Pesa user interface, as well as transaction validation using an M-Pesa PIN. It customized its core banking system to support the mobile-centric banking product and to also allow interfacing with the other systems. In addition, it established data center colocation to ensure seamless and secure VPN communication between the various technologies.

The bank is continuing to work on the M-Shwari platform, with plans to improve the user interface and

### PROJECT SIGNIFICANCE

M-Shwari allows the Commercial Bank of Africa to provide banking services via mobile phone to more than a million Kenyans who have limited or no access to brick-and-mortar banks, thereby expanding financial inclusion to a larger segment of the country's population.

> include additional features during the next phase of development.

> CBA launched M-Shwari on Nov. 27, 2012, and within two months gained more than 1 million new customers, many of whom gained access to savings and loan products from a bank for the first time.



### Modern Medical Medical Practice

**Mobile health platform** aims to improve the availability and quality of healthcare services in rural Ghana and demonstrate best practices in mobile health services.



THE STATISTICS ARE STAGGERING: Worldwide in 2011, 6.9 million children died before their fifth birthday and nearly 300,000 women died during pregnancy or childbirth.



### Mobile Technology for Community Health (MOTECH) Grameen Foundation

Washington, D.C.

- Challenge: Improve healthcare, particularly for pregnant women and young children, in rural areas of Ghana
- Solution: Deliver healthcare advice and support healthcare services via mobile phones

### "I have decided that I will do anything MOTECH asks me to do because I know it will benefit me."

 Patricia Akologo, a 26-year-old Ghanaian teacher who is six months' pregnant

Many of those deaths were due to a lack of trained healthcare professionals working in rural areas, which leaves residents in such regions highly vulnerable to diseases and debilitating emergencies. They often face significantly shortened life spans as a result.

Modern technology can change that situation, with one example being the delivery of health information via mobile phone to improve the accessibility and quality of healthcare and therefore individuals' health in many poor, remote regions of the world.

The Mobile Technology for Community Health (MOTECH) initiative in Ghana is examining how to best achieve that result. The program aims to deter-

mine how to use mobile phones to increase the availability and quality of prenatal and neonatal care in rural Ghana, with the goal of improving health outcomes for mothers and their newborns.

MOTECH has two interrelated mobile applications: Mobile Mid-

wife and the Nurse Application. MOTECH links these components, so if a patient misses a scheduled prenatal appointment, the Mobile Midwife service sends a message to remind the woman to go to the clinic. If she fails to attend, her nurse is alerted via text message, enabling the nurse to quickly follow up with the patient.

Through the initiative, community healthcare providers collect patient data and upload records to a centralized database. Patient records are analyzed to establish personalized care schedules, and reminders are sent to nurses and patients about care visits.

The MOTECH system was launched in the Upper East Region of Ghana in June 2010 and was brought to Ghana's Central Region in September 2011. So far, the project has trained 266 community health workers, uploaded close to 150,000 medical records and reached more than 20,000 enrollees, including 10,000-plus Mobile Midwife patients. It has delivered close to 60,000 messages.

Like any technology project, MOTECH had to successfully deliver on numerous points, from developing content to registering users to providing nurses with dedicated mobile phones. And the project continues to address additional challenges and needs, such as creat-

### PROJECT SIGNIFICANCE

MOTECH-based applications are improving healthcare for rural patients and demonstrating which mobile health platforms make the most impact in health outcomes.

ing a simplified register that gathers the most essential patient data to streamline data collection for health workers in rural health facilities and to better track patients over time.

As the project moves forward, there are plans to develop culturally appropriate content for more regions and translate content into more languages, as well as expand MOTECH's uses and geographic reach. The project team is also working with the Ghana Health Service to carry out a baseline study and establish monitoring and evaluation frameworks.



21ST CENTURY ACHIEVEMENT AWARD

### **Human Services**

## Speedy Delivery

**Community Plates' Go Rescue** Web-based mobile application streamlines the redistribution of surplus food, getting fresher food to the hungry while saving time and money in the process.



### COMMUNITY PLATES' IOB IS STRAIGHTFORWARD:

move surplus food from supermarkets, grocers and restaurants to agencies that help feed the hungry.

Although this task may seem simple, the conventional way of managing this food redistribution was marked with high overhead and waste stemming from the need for a fleet of trucks and drivers to move the food around and warehouses to store it in.

THE COMPUTERWORLD HONORS PROGRAM | JUN

### Community Plates' Go Rescue Technology Powered by WhenToManage Community Plates

New Canaan, Conn.

- **Challenge:** More efficiently move donated surplus food to agencies that feed the hungry
- Solution: Enable volunteers to schedule food runs through a Web-based mobile application

"Now that Community Plates' food runners have been directly transferring food to St. Stephen's, we are able to provide significantly more fresh food to our clients. As a result, we are serving more than double the number of families each month."

– Debbie Stokes, coordinator of the
St. Stephen's Food Pantry in Bridgeport, Conn.

Volunteer-driven Community Plates saw a better way. It deployed Go Rescue technology from WhenTo-Manage to cut down on inefficiencies, overhead and waste. As a result, it delivers fresher — and therefore healthier — food to those in need.

Go Rescue is a Web-based mobile application that provides a unique self-service volunteer management system. Volunteers sign up for food runs, either in advance or at the last minute if they find themselves with free time. The application then tracks information

about the food runs, such as driving directions and donor contact information. By using volunteers to redistribute the food directly, the middleman process is eliminated, cutting distribution time and costs, as well as the potential for wasted food.

WhenToManage, a provider of cloud-based software for the restaurant, hospitality and retail industries, founded Community Plates as a nonprofit organization in January 2010. WhenToManage built Go Rescue as a platform-as-a-service model, which allows quick iterations and innovations. Already, improvements to the software have been made. Go Rescue App 2.0, launched in 2013, adds a social feature designed to give volunteers a greater sense of community and support. Because a self-managed volunteer process could leave volunteers feeling isolated, Community

Plates sought a way to connect participants. Go Rescue's new features will allow them to chat about their food runs, share ideas about new opportunities to help feed the hungry and swap inspirational success stories about the people they've helped. The upgraded app also includes game elements to acknowledge the volunteers' achievements and encourage community interaction.

Together with WhenToManage, Community Plates is looking to add more features to Go Rescue and to possibly create a separate app to allow receiving agencies

### PROJECT SIGNIFICANCE

By using a Web-based mobile application to coordinate food runs, volunteers cut out a middleman distribution process and now get surplus food to agencies more efficiently, reducing not only time and costs, but also the potential for wasted food.

to better manage their own volunteers and inventory.

Community Plates has expanded from its first operations in Connecticut's Fairfield County to two additional markets: Albuquerque, N.M., and Columbus, Ohio. To date, more than 650 Community Plates volunteers have rescued the equivalent of more than a million meals. The organization plans to move into about a dozen or more markets by 2014. Its volunteer-driven model and technology make the organization extremely scalable and sustainable as it moves toward that goal.



21ST CENTURY ACHIEVEMENT AWARD

# ACCESS Deque Systems' Amaze technology makes it easier to deliver websites that are accessible to individuals with disabilities.



THE WEB PROMISES TO DELIVER INFORMATION TO ALL, but those with disabilities are often unable to access the content on many websites.

Amaze is changing that.

Deque Systems developed Amaze as a way to more easily make websites accessible to people with disabilities. The technology works by looking for patterns inside an application and replacing pieces of the code in real time with HTML code that is accessible or that



### Amaze Deque Systems

Herndon, Va.

- Challenge: Find a rapid and cost-effective way to make websites accessible to individuals with disabilities
- Solution: Look for patterns inside an application and replace pieces of the code in real time with HTML code that is accessible or that makes the application accessible to a variety of different assistive technologies

The U.S. Department of Veterans Affairs is using Amaze to remove barriers to its online content, ensuring that it is accessible to the millions of disabled users who need information about VA-provided healthcare, employment, education and other resources and benefits.

makes the application accessible to a variety of assistive technologies.

Deque Systems uses the following example to explain how it works: A website has a "Submit" button that is invisible to a customer who is blind and using a screen reader. The traditional approach to correcting this problem would entail pull-

ing up the source code, reprograming the form and then testing to confirm that the bug has been fixed. Even after testing, the correction might not happen until the website is scheduled for a revision. This means

the organization that owns the website would remain noncompliant with accessibility guidelines, while disabled users would continue to have problems accessing information on the site or using its functions.

Further complicating the situation, many organizations use third-party content and applications on their websites and would not have access to any faulty source code, meaning they would not have the ability to fix inaccessibility issues.

But with Amaze, users can create an accessibility overlay that fixes bugs on third-party content or applications immediately, without having to reprogram a single line of source code.

Moreover, the Amaze Accessibility Overlay can be used as a guide to update source code when making scheduled revisions to a website.

Amaze provides real-time remediation on a massive scale without impacting load times, and it is capable

### PROJECT SIGNIFICANCE

By providing a way to fix inaccessible websites in real time and on a massive scale, Amaze can make online information available to the millions of individuals with disabilities.

of complying with stringent security requirements without impeding effectiveness. It is a fully developed software tool that Deque Systems has offered to clients since its launch in November 2012.

Amaze is already being used as part of the U.S. Department of Veterans Affairs' compliance program. The VA is using the Amaze Accessibility Overlay to make all VA Web content, including all of the third-party content it uses on its websites, accessible while code is being remediated. The VA's use of Amaze will directly help more than 50 million disabled individuals who use VA services by ensuring that the agency's website is accessible.



## Reaching Out

**Merit Network** leads the effort to expand broadband in Michigan.



REACH-3MC IS BRINGING HIGHER LEVELS OF INTERNET SERVICE, availability and affordability to remote and rural areas of Michigan by constructing 2,287 miles of middle-mile fiber-optic infrastructure.

Merit Network, Michigan's nonprofit research and education service provider to community anchor institutions (CAI), is leading the broadband expansion project.

Starting in 2010, Merit Network received two Broadband Technology Opportunities Program grants through the federal American Recovery and Reinvestment Act to help



### **REACH-3MC** (Rural, Education, Anchor, Community and Heathcare – Michigan Middle Mile Collaborative) **Merit Network Inc.**

Ann Arbor, Mich.

- Challenge: Lack of backhaul infrastructure limits Internet service performance, availability and affordability in rural and remote parts of Michigan
- Solution: Push forward with a fiber-optic network extension project

"It's been a long haul, but [it is] worth it financially and a benefit to the communities it serves."

-James Jones, IT director, Jackson Community College

pay for the work. In total, Merit Network succeeded in bringing more than \$100 million in federal funding to Michigan in addition to \$30 million from private and local sources.

This is how REACH-3MC works: Merit Network is engaging seven commercial Internet service providers as grant sub-recipients to create the infrastructure that services all sectors of society, including homes, businesses and CAIs. The REACH-3MC network consists of a mainline network. Merit and the grant sub-recipients construct fiber-optic laterals from the mainline to connect individual CAIs and businesses and to access cell towers and central office facilities.

Both the mainline and laterals are constructed in parallel.

Merit and sub-recipients each own fiber strands over various portions of the REACH-3MC network, ensuring competition at every interval. The network is governed by open-access principles enforced by

the grant; ISPs cannot be denied access to the network where capacity permits.

The project aims to solve the lack of backhaul infrastructure in Michigan's remote and rural areas, where residents have had challenges accessing information and CAIs and businesses have had to contend with substandard levels of Internet, telecommunication and networking access and services, putting those organizations at a disadvantage.

To address such limitations, REACH-3MC is providing 143 CAIs with 1 Gbps-dedicated connections to Merit, enabling collaboration with more than 230 other CAIs that are already connected.

Moreover, by expanding Merit's footprint to more than 4,000 miles, Michigan's public institutions have a mechanism to cut costs and provide more service to their constituents. More than 900 additional CAIs will have the opportunity to connect over time.

As a middle-mile project, the aim of REACH-3MC is not to directly connect every home and business in the network service area. Rather, the goal is to bring the

### PROJECT SIGNIFICANCE

The construction of 2,287 miles of middle-mile fiber-optic infrastructure gives residents, businesses and institutions access to high-speed Internet service so they can better access information, engage, compete and provide services.

backhaul infrastructure into rural regions and then give ISPs the opportunity to use the infrastructure to provide faster, cheaper and more reliable service.

All told, more than 1 million homes and 55,000 businesses in the REACH-3MC service area will benefit either as direct customers of a REACH-3MC sub-recipient or indirectly through an existing service provider that obtains backhaul from a REACH-3MC sub-recipient.



## Philanthropy Digital Inclusion

**School program** providing low-income families with affordable computers and free digital literacy training chips away at the digital divide.



MIGUEL ORTA RELIED ON THE COMPUTERS AT HIS LOCAL LIBRARY TO DO HIS HOMEWORK, but because the library had a two-hour time limit, Miguel often couldn't finish his assignments.

So his mother, Myriam Orta, turned to a new program for help: Learn Ideas, Navigate Knowledge (LINK). The program provided Miguel with a low-cost computer, and he's now able to download material to complete his assignments. He can also access a student portal



### Learn Ideas, Navigate Knowledge (LINK) School Board of Miami-Dade County, Florida

Miami, Fla.

- Challenge: Better engage low-income students in their education and provide better access to digital educational resources
- Solution: Give students low-cost hardware preloaded with educational software, and provide computer training for parents

"I'm just overwhelmed at this opportunity to own a computer. All I can say is thank you."

> Christian Reyes, parent of a Barbara Goleman Senior High School student

that engages him with customized educational software, and his mother regularly logs onto a parent portal to check Miguel's grades, assignments and attendance.

The School Board of Miami-Dade County in Florida devised LINK to help families like the Ortas. The program places technology and basic computer training within the reach of low-income households facing significant disadvantages today without digital literacy, which includes a disproportionate number of minority group members.

Funded through the American Recovery and Reinvestment Act, LINK provides computers for \$25 to participating families. Each computer comes with a tutorial video in English, Spanish and Haitian Creole, along with antivirus and word processing

software. LINK also works with other organizations to provide families with free digital literacy training in English, Spanish and Haitian Creole. The training workshops cover computer basics and how to use the Internet. They also teach families how to use the district's parent and student portals, which are valuable online educational resources that extend learning beyond the school day and help parents monitor their

children's academic progress.

Started in 2010, LINK first provided refurbished desktop computers to elementary and middle school pupils and refurbished netbooks to high school students. By the program's second year, all students received refurbished netbooks. Now all students receive new netbooks, most of which are Wi-Fi enabled. LINK also broadened its focus during the 2012-2013 school year to support the bring-your-own-device trend by equipping

### PROJECT SIGNIFICANCE

By providing low-income students with low-cost computers and software along with training for their parents, LINK helps bridge the digital divide and better engage families in their children's education.

all high schools with wireless Internet connections.

To participate in the program, students within the district must be enrolled in the free or reduced-price lunch program. As of January 2013, LINK has provided low-cost computers to more than 7,400 elementary, middle school and high school students and has offered discounted Internet service to more than 3,000 households.



21ST CENTURY ACHIEVEMENT AWARD



## Combating Piracy

**The Naval Meteorology and Oceanography Command** uses technology to forecast the probability of pirate activity, helping military and shipping officials devise more effective strategies to combat the problem.



IN YEARS PAST, PIRATE ATTACKS OFF THE COAST OF SOMALIA WERE RISING, climbing from 60 cases in 2007 to 181 in 2009. Pirates were killing innocent people and taking others hostage. Their attacks were disrupting commerce and shipping traffic, as well as costing the world's economy billions of dollars every year. President Obama called piracy a threat to both U.S. national security and foreign policy.

### Piracy Attack Risk Surface (PARS) Naval Meteorology and Oceanography Command

Stennis Space Center, Miss.

- **Challenge:** End pirate attacks off the coast of Somalia
- Solution: Use technology that considers various factors to forecast the probability of pirate activity during a 72-hour time frame

As mariners implement good practices to minimize the piracy threat, pirates' tactics, techniques and procedures are evolving. In the past, there was anecdotal evidence of how and when pirates would attack. With PARS, a much-needed scientific rigor is applied to the process of predicting where and when attacks are most likely to occur.

To combat the age-old threat, the Naval Meteorology and Oceanography Command turned to a modern weapon: technology.

In early 2009, the command developed the framework for the first-generation Piracy Performance Surface (PPS) model, which produced maps showing the probability of attacks based on how environmental conditions such as wave height and wind speed affected the pirates' small-boat operations. The model highlighted areas where shipping would be susceptible to piracy.

Following up on the success of the PPS model,

command leadership decided to develop a more advanced antipiracy model called the Piracy Attack Risk Surface (PARS). The Monte Carlo probabilistic forecasting tool integrates environmental conditions, pirate concept of operations, commercial shipping information and

other relevant data to forecast vulnerability to piracy as a function of latitude, longitude and time. The model then forecasts the probability of a pirate presence over a 72-hour period.

PARS is the only Navy product that fuses shipping information, environmental data, pirate locations, pirate operating procedures and predicted pirate behaviors into a cohesive forecast environment.

To make the program work, the command had to clarify stakeholder needs to technical requirements as well as address early performance issues, specifically around the time required to produce an end product.

Following the deployment of PPS and then PARS, pirate-related events off the Horn of Africa dropped dramatically, going from a high of 181 in 2009 to 32 in 2012, an 83% reduction.

Task force commanders continue to use PARS to determine where to allocate antipiracy assets in a vast area, and the Navy is moving forward with building a

### PROJECT SIGNIFICANCE

The number of pirate-related events in the Somali Basin Region and the Gulf of Aden has dropped significantly since the first forecasting tool was deployed in 2009, with forecasts helping naval officials and others make better decisions about where to place their assets to combat piracy.

forecast model for areas with the highest probability for attacks.

At the same time, other operations have taken notice of the tool's success. The same techniques now are used to conduct counter drug operations off the coasts of Central and South America, smuggling operations in the Red Sea, criminal operations in the Gulf of Guinea and small-boat operations in the Persian Gulf.



### Sustainability

## Centers of Sustainability

**The Green Grid** continues to develop and promote the tools that organizations need to design and maintain more efficient data centers.



DATA CENTERS REQUIRE HUGE AMOUNTS OF ENERGY, and as the demand for new and updated data centers continues to grow, energy requirements could increase exponentially.

The Green  $\operatorname{Grid}(\operatorname{TGG})$  is trying to counteract the growing energy demands by enabling IT leaders to employ proven sustainable solutions as they capitalize on the new digital economy.

TGG is the global authority on resource-efficient data centers. It is influencing data center design and maintenance by developing and providing metrics, models and educational resources that demonstrate best practices in sustainability. And its influence continues to



### Improving Universal Data Center Resource Efficiency With Metrics and Benchmarking Models The Green Grid

Beaverton, Ore.

- Challenge: A lack of agreed-upon metrics and methods for quantifying data center efficiency, along with a need for more discourse among IT and government sustainability officials, hinders the adoption of best practices
- Solution: Develop and distribute metrics and methods to promote best practices in data center efficiency

Faced with growing demand for data center capacity, eBay used the Green Grid's Data Center Maturity Model and Power Usage Effectiveness targets as it consolidated its data center portfolio. As a result, eBay has free year-round cooling for computing equipment and makes equipment purchases based on lowest total lifetime energy consumption, helping it cut capital and operating costs by 50%.

grow as more and more IT and data center managers use TGG tools and metrics.

Such tools include the Data Center Maturity Model (DCMM) and the Power Usage Effectiveness (PUE) metric, which has been formally adopted by the U.S., European Union and Japanese governments as a baseline method for quantifying energy use.

In February 2012, TGG created a case study highlighting eBay's implementation of DCMM, a benchmarking model that touches on major components of the data center, including power, cooling, compute, network and storage. The company used the model to

consider all areas of operation in its new data center facility in Phoenix, enabling it to significantly lower its PUE and create one of the most efficient data centers in the world. DCMM offers a 360-degree analysis of how well a current data center is performing in terms of meeting efficiency standards and how well positioned it is for future growth. For eBay, the tool helped identify opportunities to become more efficient in its operations and track progress toward that goal.

TGG's case study of eBay's implementation of the DCMM has provided an ideal proof point, offering further industry validation and influencing other companies to follow suit.

Similarly, Facebook's adoption of TGG's Water Usage Effectiveness metric, which the company publicly

### PROJECT SIGNIFICANCE

Through its efforts to promote and advise on sustainability, the Green Grid has increasingly influenced data center design and management, helping the industry reduce power and cooling energy overhead by 20% over the past five years.

announced in August 2012, illustrates how TGG's measurements and metrics are impacting some of the world's largest companies and leading others to follow in their eco-conscious footsteps.

More than 200 data centers globally now use the online DCMM tool and offer their performance publicly. Moreover, over the past five years, the growing use of TGG tools and metrics has helped reduce data center power and cooling energy overhead by 20%.



### World Good

### Better Technology, Better Results

**The Desmond Tutu HIV Foundation** implements an integrated enterprise resource planning system that allows it to focus even more resources on its mission to serve patients with HIV and tuberculosis.



THE DESMOND TUTU HIV FOUNDATION is on the front lines in the fight against HIV and tuberculosis in South Africa, whose population has been hit hard by both diseases.

Founded in 2004, the DTHF was one of the first public clinics to offer anti-retroviral therapy to HIV patients. It provides free education, testing and treatment for HIV and tuberculosis from multiple locations as well as access to clinical trials. The foundation also has a mobile unit that travels to outlying townships.

### Fight to End HIV and Tuberculosis Desmond Tutu HIV Foundation

Cape Town, South Africa

- Nominated by: Nominated by SAP
- Challenge: Better manage the foundation's increasingly complex and expensive administration requirements
- Solution: Deploy SAP Business One, an integrated enterprise resource planning system, to bring operational efficiencies and provide staff members with data where and when they need it

"With the HIV and tuberculosis disease, people are dying, so there's no time to waste. SAP Business One frees up everyone's time to focus on what we're all about: to end HIV and tuberculosis. We have a vision of an AIDS-free South Africa, and our research, treatment and prevention efforts to reduce the effects of this pandemic on South Africans have grown 90% over the past four years with the help of SAP."

Linda-Gail Bekker, director,
 Desmond Tutu HIV Foundation

Not surprisingly, as DTHF projects and services have grown over the past decade, so have its administrative costs, operational complexities and regulatory requirements.

The DTHF in March 2012 implemented SAP Business One, an integrated enterprise resource planning (ERP) system, to help it better manage its operations as well as its compliance with stringent governance requirements.

The foundation already has seen several significant benefits from the system.

First, SAP Business One is substantially reducing the organization's audit costs even as it grows. The system reduced transaction processing times by 30%, which gives traveling project leaders the ability to authorize and approve projects from anywhere on their mobile devices. Creditor summary reports have improved creditor management while

multicurrency reports automatically calculate exchange rate risks, a capability the DTHF did not have prior to the implementation.

The organization estimates that the new software system will help it save more than \$45,000 annually.

The system has brought other improvements, too. SAP Business One enables greater operational transparency, so physicians managing individual clinical trials have better insight into their budgets and, as a result, are making spending decisions that they were previously

hesitant to make. And because they can ascertain budget information more quickly, they now have more time to spend on patient care.

Moreover, SAP Business One is supporting the foundation's management staff as they work around the world, giving the foundation the ability to utilize personnel resources in the best ways to serve patients and focus on the services that improve patient health—instead of on administrative support functions. For instance, users can see with just a few clicks of a computer button where procurement processes might be held up, rather than

### PROJECT SIGNIFICANCE

The implementation of SAP Business One enables DTHF workers to spend more time on clinical trials and treatment and prevention efforts in South Africa, which worldwide is estimated to have the highest rate of HIV/AIDS and the fourth-highest rate of tuberculosis.

having to contact multiple staff members to get updates and status reports, as had been done in the past.

SAP Business One, with its centralized, credible and robust financial system, also has increased the organization's ability to receive grants and extend social benefits. It enables the DTHF to efficiently and transparently manage money as well as track and measure donor funds. Such insight ensures that the DTHF can attract future grants, so it can continue to serve all those who need its help.

### PROGRAM ARCHIVES

**The Computerworld Honors Program** maintains two 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/searchableArchives.htm">http://www.cwhonors.org/archives/searchableArchives.htm</a>, the online archives contain all of the Laureate case studies accepted since 1989—literally thousands of outstanding applications of information technology.

Finally, we call your attention to the Oral History Archive. Though included in the program's online 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 Author of "Moore's Law"

Dave Packard Co-Founder HP

**Pradeep Sindhu**Founder
Juniper Networks

### ACKNOWLEDGMENTS

### The 2013 Chairmen's Committee

The Chairmen's Committee is an invitation-only coalition of chairmen and chief executive officers of leading technology companies around the world. Each year the Chairmen's Committee supports the Computerworld Honors Program by nominating organizations whose use of IT fits the mission of the Program. Select Committee organizations also lend their financial support, for which the Program is eternally grateful.

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