The Computerworld Honors Program

Honoring those who use Information Technology to benefit society

Final Copy of Case Study

YEAR:
2012

STATUS:
Laureate

Organization:
DataDyne

Organization URL:
www.datadyne.org

Project Name:
EpiSurveyor

What social/humanitarian issue was the project designed to address? What specific metrics did you use to measure the project's success?

Currently, most humanitarian and development programs lack current data with which to guide their programs, largely because of the cost and difficulty of collecting necessary data on paper forms. This is true in health -- where even after nearly a decade of spending billions of dollars on HIV/AIDS in Africa we have no reliable figures for HIV prevalence -- and many other fields. EpiSurveyor applies the tools of web and mobile to make real-time mobile electronic data collection affordable to all (and free for most). In less than three years online, EpiSurveyor (www.episurveyor.org), developed by DataDyne (www.datadyne.org), has become the most widely used data collection tool in the international development sector, with over 6,000 users in more than 170 countries -- as reflected in the facts that DataDyne has received a Best Health Technology award from the Wall Street Journal and its founder won the MIT/Lemelson Innovation Award.

Please describe the technologies used and how those technologies were deployed in an innovative way. Also, please include any technical or other challenges that were overcome for the successful implementation of the project.

EpiSurveyor leverages the expansion of web access to poorer regions of the world and the explosive spread of mobile phones (i.e., mobile computers) to provide a data collection service that is "like Gmail, but for data collection." It is: (1) free to most, (2) available to anyone with

access to a browser, (3) designed to be so simple to use that IT consultants are not required. Initially conceived of during the Palm Pilot age of PDAs (personal digital assistants: unconnected pocket computers), the project successfully and rapidly migrated to mobile phones and has leveraged the current dramatic increase in their use worldwide.

Please list the specific humanitarian benefits the project has yielded so far.

As the first cloud-computing application created specifically for public health and international development, EpiSurveyor is not only achieving its primary goal of enabling the collection, analysis, and understanding of more health and other data, but is also providing a new template for how to scale technology for social good. Specific examples of EpiSurveyor providing humanitarian benefits are too many to list, but include: UNICEF uses EpiSurveyor to manage child health programs; the Kenya Ministry of Health uses EpiSurveyor to track disease outbreaks and for many other purposes; the World Bank uses EpiSurveyor for economic surveys of the poor in Latin America; the Smithsonian Institution uses EpiSurveyor to track mountain gorillas; Camfed International uses EpiSurveyor to manage and evaluate its education programs in numerous African countries; TulaSalud uses EpiSurveyor for maternal-child health programs in Guatemala. 6. When was this project implemented or last updated? (Please specify month and year.) EpiSurveyor first went online in the summer of 2009, and has been in continuous operation as a web service since then. It is under continuous improvement and update by DataDyne's team of Kenyan programmers, based in Nairobi, and directed by Dr. Joel Selanikio, DataDyne's CEO and global health expert. It should be noted that EpiSurveyor is the only software to win the Wall Street Journal Technology Innovation Award that was entirely programmed by Africans.

Please provide the best example of how the project has benefited a specific individual, enterprise or organization. Feel free to include personal quotes from individuals who have directly benefited from the work.

There are many, many examples of organizations actively benefitting from EpiSurveyor (see list above). As just one example, the World Bank documented a "drastic" decrease in the costs of their monitoring efforts for Guatemalan government anti-poverty programs: "While [the government program] has the potential to significantly reduce extreme poverty, its main challenges lie in the effective management of its monitoring and evaluation system, including monitoring of conditionalities in health and education. A critical step to overcome this challenge is gaining access to quick and accurate first-hand information on activities at rural clinics and schools in isolated parts of the country. This puts a premium on a cost-effective mechanism to collect field data ... The use of low-cost mobile phones in conjunction with the free EpiSurveyor software drastically cuts costs while facilitating quality control and improving implementation speed." From "Cutting costs, boosting quality and collecting data real-time -- Lessons from a Cell Phone-Based Beneficiary Survey to Strengthen Guatemala's Conditional Cash Transfer Program," by Christian Schuster and Carlos Perez Brito and available at http://siteresources.worldbank.org/INTLAC/Resources/257803-1269390034020/EnBreve_166_Web.pdf.