



The Computerworld Honors Program

Honoring those who use Information Technology to benefit society

Final Copy of Case Study

YEAR:
2012

STATUS:
Laureate

Organization:
ZSL

Organization URL:
www.zslinc.com

Project Name:
Mobile Wound Care

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

ZSL's Mobile Wound Care Assistant is an automated innovative solution for patient care management in the healthcare industry. The solution assists nurses, physicians and doctors in the process of caring for wounded patients. The solution is available for iOS, Blackberry and Android platforms. The solution is developed based on iOS, J2ME, Objective C, Android and .NET technologies. A report in Computerworld has estimated the mobile health market to hit \$2.1 billion by the end of the year and growth by 17% in each of the past two years. According to market research firm Research2guidance, healthcare-related smartphone apps are set to become hugely popular and projects that some 500 million people will be using such apps within five years. According to the Global Mobile Health Market Report 2010-2015, compiled by Research2guidance, more than one-third of 1.4 billion smartphone users in 2015 will be running some kind of mobile healthcare app. With growing mobile health presence, we expect ZSL's Mobile Wound Care to gain a greater breakthrough in the healthcare market in hospitals, casualty centers, wound care treatment centers, and doctors' clinics.

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.

ZSL's Mobile Wound Care is developed based on J2ME, iOS SDK, Objective C, and Android technologies and is available for iOS, Blackberry and Android devices, including smartphones and tablets. The camera in the mobile device captures the picture and gives the measurement (length and breadth) of the wound. The measurement is automatically updated into the patient record or sent as an email to the physician. The data transfer is facilitated by integration between the mobile and the patient record applications used in the patient/healthcare centers. The solution will transform the manual and paper-based process of measuring the wounds by tape manually and entering the data manually in the patient record or physician's system into an automated system. This will avoid the manual errors, providing error-free data and facilitating a faster treatment process. The major technical challenge faced while developing this solution was to develop an app that i) works in smartphone and tablet environments; ii) the integration with patient care/medical record applications; iii) compliance with healthcare norms and regulations. The strong technical expertise and capability to develop innovative solutions on the latest emerging technologies, coupled with deep industry knowledge about healthcare, helped ZSL to overcome these challenges in taking this solution to the market.

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

ZSL's Mobile Wound Care helped the nurses and clinicians in patient care and treatment centers to manage their wound care activities and deliver the utmost quality service to their patients in the wound healing process. The solution will automate wound care activities carried out by the nurses and clinicians. The solution will transform the manual and paper-based process of measuring the wounds by tape manually and entering the data manually in the patient record or physician's system into an automated system. This will avoid the manual errors, provides an error-free data and facilitates a faster treatment process. The solution has addressed the challenges in: providing error-free measurements of lesions and wounds; creating error-free patient records, a basis for providing the right treatment at right time; managing the treatment process -- a simplified measurement process and automated patient record will help the nurses care for more patients per day in a shorter time frame, and the clinicians/physicians will have instantly updated patient records handy, helping them avoid the delay incurred in waiting for the updated patient record; helping the nurses and physicians by automating the manual process involved in wound measurement and patient record creations; enabling go-green initiatives by transforming from a paper-based manual process to a paperless automated process.

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.

ZSL's Mobile Wound Care has won NJTC's (New Jersey Technology Council) Mobile Innovation Award jointly hosted by Blackberry RIM and the Canadian Consulate for innovation rendered in the wound healing process in patient care management using the latest technologies. It generated a greater interest among the healthcare service providers and the end users. We are working on the opportunities and we can measure the impact in 4-6 months.