



The Computerworld Honors Program

Honoring those who use Information Technology to benefit society

Final Copy of Case Study

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STATUS:
Laureate

Organization:
Gemalto

Organization URL:
<http://www.gemalto.com>

Project Name:
Healthcare IT Access Security at Seattle Children's Hospital

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

Gemalto's healthcare IT project with Seattle Children's Hospital (SCH) was designed to set an example of best IT practices for the changing healthcare industry. In the United States, the healthcare system is in the midst of moving from a paper-based system to an electronic one. As this happens, healthcare providers and their employees are struggling with how to access electronic medical records in a manner that is secure but also non-disruptive to daily activities. Additionally, these organizations are feeling the pressure to meet requirements set forth for meaningful use of electronic health records in the Health Information Technology for Economic and Clinical Health (HITECH) Act. In summary, the U.S. medical industry is in flux, and in need of IT guidance and road maps to make the move to an electronic era successful. This project was humanitarian in nature in that it addresses the security of very private and sensitive U.S. citizen data: medical information. According to a recent Ponemon Institute study, nearly 1.5 million Americans have been victims of medical identity theft with an estimated total cost of \$28.6 billion, or approximately \$20,000 per victim. It is of utmost importance to protect medical information, and Gemalto accomplishes this with the Seattle Children's Hospital with secured and limited access. Gemalto's Seattle Children's Hospital (SCH) project was deemed a success using the metrics of: how many of the hospital's employees are using the technology: 4500+; and how many data breaches the hospital has faced since implementing the solution? Zero.

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.

Gemalto provides the entire 4500+ Seattle Children's Hospital (SCH) staff with two-factor authentication devices, server and technical support for authorized user access to the hospital servers, networks and VPNs. This is an innovative way to replace weak and static passwords with strong security that keeps medical information safe. Gemalto's solution was deployed in an inventive way that did not disrupt the day-to-day operations of the hospital or require a lot of user training. Gemalto's Protiva .NET solution leverages the plug and play capabilities of their existing Microsoft infrastructure. With this, the SCH deployed three types of .NET devices, provisioned and managed through Protiva Strong Authentication Server -- the .NET USB key, the .NET Dual token, and the Easy OTP token, effectively replacing all legacy tokens. Gemalto's Protiva line of devices contains secure smart card technology to provide hospital staff with two-factor strong authentication for authorized user access to the hospital network. Today, they use either one-time passwords or public key infrastructure (PKI) as the underlying authentication technology, as well as digital signature. The only technical challenges in setting up the new access system were new users becoming accustomed to the new way of logging into servers, networks and VPNs. This was a short-lived issue that was solved with brief user training and more repetitive use.

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

For the patients of the Seattle Children's Hospital (SCH), they benefit because their personal medical information is safe and free of leaks. This saves them from the pain and suffering and financial losses of medical identity theft. On a broader scale, the SCH implementation has created awareness of the need for this type of strong security for medical information. The SCH implementation received a lot of attention in the media, which has led to this broader awareness. Today, more healthcare providers are implementing this kind of strong access security.

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.

Gemalto's project with the Seattle Children's Hospital directly benefits the hospital because it does not have to be concerned with costly data breaches and all of its patients whose medical information is protected. SCH's Mike Kindle, senior director, enterprise architecture, for Seattle Children's Hospital, stated: "We view Gemalto as a long-term partner as our organization and data security needs continue to change. With Protiva, we have the access protection we need today, a cost-effective path to PKI, and the flexibility to evolve our security technology to meet future requirements."