



# The Computerworld Honors Program

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## Final Copy of Case Study

**Status:**

Laureate

**Year:**

2013

**Organization Name:**

NuVasive, Inc.

**Organization URL:**

[www.nuvasive.com](http://www.nuvasive.com)

**Project Name:**

Streamlining Spinal Surgery Field Administration

**Please select the category in which you are submitting your entry:**

Health

**Please provide an overview of the nominated project. Describe the problem it was intended to solve, the technology or approach used, how it was innovative and any technical or other challenges that had to be overcome for successful implementation and adoption. (In 300 words or less.)**

NuVasive improves the lives of people who suffer from debilitating back, neck, and leg pain by developing minimally disruptive surgical products and procedures for the spine. The company creates cutting-edge products and procedures that have revolutionized spine surgeries while focusing on the speed of innovation, responsiveness to patient needs, and superior clinical results. To help achieve these key objectives, NuVasive needed to standardize its highly flexible business model that allowed sales personnel to manage their accounts with paper processes. The company also wanted to provide sales personnel with secure access to appropriate data to streamline the order process and reduce billing errors due to inaccuracies. Implementing these capabilities would speed up the timeline for healthcare customers to receive surgical products so that they could provide a higher level of care for patients with spinal maladies. As part of this technology deployment and for a faster development cycle, NuVasive also wanted to build a focused mobile technology platform for sales process integration that leveraged its existing infrastructure and investment in SAP. By deploying a mobile solution built on

the SAP Mobile Platform with security delivered by SAP Afaria, the company has decreased its order error rate significantly. The platform currently supports Apple iOS devices and will soon support Android devices. NuVasive now has faster insight into open sales orders so customer order issues can be addressed proactively. In addition, the company has simplified the process for the sales force to cover other surgeries when needed. NuVasive also has a technology platform for long-term sales process improvement through faster access to accurate information. Most importantly: Time frames for which physicians receive spinal surgery products and procedural information has been accelerated. The application also helps the NuVasive sale force assist physicians during surgery, resulting in higher quality of service in the OR.

**When was this project implemented or last updated? (Please specify month and year.) Has it incorporated new technologies and/or other innovations since its initial deployment? (In 300 words or less.)**

Original go-live was January 2012, with monthly enhancements and new functionality ever since and a major rewrite to better utilize the SUP architecture going live in October 2012. The project has added increased features and functionality. The application consumes SAP BEX queries via function modules to MBOs, regular SAP business logic write-back functionality (sales order create and change) via MBOs to RFC/BAPIs and now utilizes the mobile reporting SDK to deliver reporting into the application.

**Is implementation of the project complete? If no, please describe the project's phases and which phase the project is now in. (In 300 words or less.)**

The application/platform continues to be expanded upon. There is a feature roadmap that will make the application the "one-stop" shop for sales reps to carry out all field-based sales and inventory/asset management activities and reporting.

**Please provide at least one example of how the technology project has benefited a specific individual or organization. Feel free to include personal quotes from individuals who have directly benefited from the work. (In 300 words or less.)**

With the assistance of SAP technology accelerating the product delivery cycle, NuVasive can now quickly help physicians assist patients with a range of back pain problems including cervical disc degeneration, lumbar degenerative disc disease, degenerative scoliosis, degenerative spondylolisthesis, and lumbar spinal stenosis. As an example of the innovation that NuVasive provides, in December 2012 following FDA approval, the company announced the first patient in the U.S. to be treated with the NuVasive PCM® Cervical Disc as Paul Sawin, M.D., performed the surgery on a patient in Orlando, Florida. Surgeon proctors, who will instruct upcoming training courses, have started scheduling surgeries now that the new device is available. Surgeon demand for training is strong, and courses began in January 2013. NuVasive received FDA approval for the PCM Cervical Disc in October 2012 after successful completion of a prospective, multi-center, randomized investigational-device-exemption (IDE) clinical trial. The novel device is now provided to patients and surgeons in the United States as an innovative option to preserve motion in the cervical spine instead of a traditional, motion-eliminating fusion procedure. In addition to helping out our sales force it has helped our administrative



function by greatly reducing the manual workload of creating and changing sales order manually based off of e-mails and faxes.

**Would this project be considered an innovation, a best practice or other notable advancement that could be adopted by or tailored for other organizations and uses? If yes, please describe that here. (In 300 words or less.)**

The SAP solution deployed by NuVasive could be adopted by other medical product manufacturers to accelerate their rate of innovation and their ability to deliver products to market faster. Having this capability is critical within the spine industry, for example, which is experiencing a variety of challenges that threaten patient healthcare as well as U.S. leadership in medical innovation. This includes insurance payer pushback and denials; increasing government restrictions that delay innovation; and a new tax structure that reduces corporate job creation and research and development. NuVasive is committed to taking action to offset these challenges so the company can create a blueprint for others in the industry that want to help patients continue to receive access to the care they need and to promote solutions that keep innovation moving forward in the U.S. Because SAP technology helps NuVasive deliver products to physicians faster, SAP is helping the company in its efforts to achieve this mission.

**If there are any other details that the judges should know about this project, please note them here. (In 300 words or less.)**

SAP technologies are utilized in an ancillary fashion to help move the NuVasive Spine Foundation forward. The foundation is dedicated to providing life-changing spine surgery to individuals in disadvantaged communities in the U.S. and abroad as well as advancing spine surgery technology in these communities by training local surgeons. The Foundation was born out of one of the key attributes embraced by the NuVasive Family: having an "attitude of gratitude." This core value was actualized in 2009 when the company developed the NuVasive Spine Foundation as a non-profit organization dedicated to supporting members of the NuVasive Family who were in need as well as local and national charitable organizations. As the Foundation evolved, it began to focus on supporting medical missions to developing countries. In 2010, the NuVasive Spine Foundation sponsored 10 missions to developing countries, led three missions to Kenya, and donated over \$4.9 million in spine surgery products. In 2011 and beyond, the NuVasive Spine Foundation is solely focused on supporting medical missions abroad, training spine surgeons in disadvantaged communities, and providing assistance to spine patients in the U.S. The Foundation looks forward to increasing its scope and impact as it continues to grow.