



The Computerworld Honors Program

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Final Copy of Case Study

Status:

Laureate

Year:

2013

Organization Name:

Novation

Organization URL:

www.novationco.com

Project Name:

Driving down costs by mobile enabling the healthcare supply chain

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

Mobile Access

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.)

Healthcare organizations are facing several challenges as they encounter new and updated regulations, the unknowns of healthcare reform, changing reimbursement policies and a down economy. When hospitals look at reducing costs for their bottom line, supply costs are second only to labor costs in terms of significant expenses. Healthcare providers focus primarily on eliminating waste in the clinical operations, such as reducing hospital stays or unnecessary testing. While this is a valid area of focus, one aspect that consumes nearly one third of all hospital operating budgets often remains overlooked: the healthcare supply chain. Novation, the healthcare industry's leading supply chain contracting company, provides its alliance hospital members with contract, price and spend-

management services. Novation, in conjunction with the VHA Inc. and UHC alliances, has developed an entire suite of price-benchmarking and cost-management analytic applications in the medical, surgical and pharmaceutical areas. Novation's database includes data from over 2,500 hospitals representing \$65B in annual spend. Benchmark data is updated weekly, always displaying the most up-to-date pricing information available. To empower hospital personnel to make instant and on-the-go decisions, we created mobile applications that would allow them to get key pricing and spend information on medical, surgical and pharmaceutical products. Available on the Apple App Store are four customer-facing iPad and iPhone native apps (VHA LYNX, UHC SpendLINK, VHA PriceLYNX and UHC RxLINK, MPIProcure) and one internal field app (intellisource). These apps allow procurement resources, pharmacists, physicians and our field teams to make data-driven decisions on price, spend and other data in a mobile setting. From always-on access to the latest pricing and spending details, productivity benefits, workflow improvements to inventory cost reductions, our member hospitals utilizing these mobile solutions would be able to achieve tangible and lucrative savings.

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.)

We launched the first mobile applications in November 2010 with a small user base of less than 50 users. We have had several releases after that. Full-fledged use to our entire customer base was available in Feb 2012 Our initial goal was making key data available on a mobile device and we have achieved that successfully. We now continuously strive at improving the user experience, increasing adoption and value-add features. The applications are constantly optimized for performance and navigation as well. New initiatives that focus on further adding value to this project include: - Mobile alerts platform: Notifies users on critical information directly. The platform would enable immediate mobile notifications to hospitals and suppliers on product recalls, drug shortages and other critical pricing/spend changes. it also allows users to set specific monitoring rules and get notified when the rule is met. This empowers the user with insights for them to take an action immediately. For example, if there is an opportunity the system sees for a lower cost product, it notifies the user so that they can take action. - Superior search capabilities: In a mobile setting, getting the right information and getting it quickly is important. A user wants to go directly to their reports rather than browsing through multiple reports/filters to arrive at their intended destination. We would like to provide the mobile user with a Google-type search bar and search for a report without having to browse through multiple clicks to access their report. - Alternative input methods: To further improve user experience, prototyping the idea of using the device camera to read bar codes and use that as input to the application.

If this is a previously submitted project that has been significantly updated and/or expanded, please describe the nature of the update here. (In 300 words or less.)

First time submission. Not previously submitted.

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 core features of the project are complete. The applications have been in use for over a year now. We now continuously strive at improving the user experience, increasing adoption and value-add features. The applications are constantly optimized for performance and navigation as well.

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.)

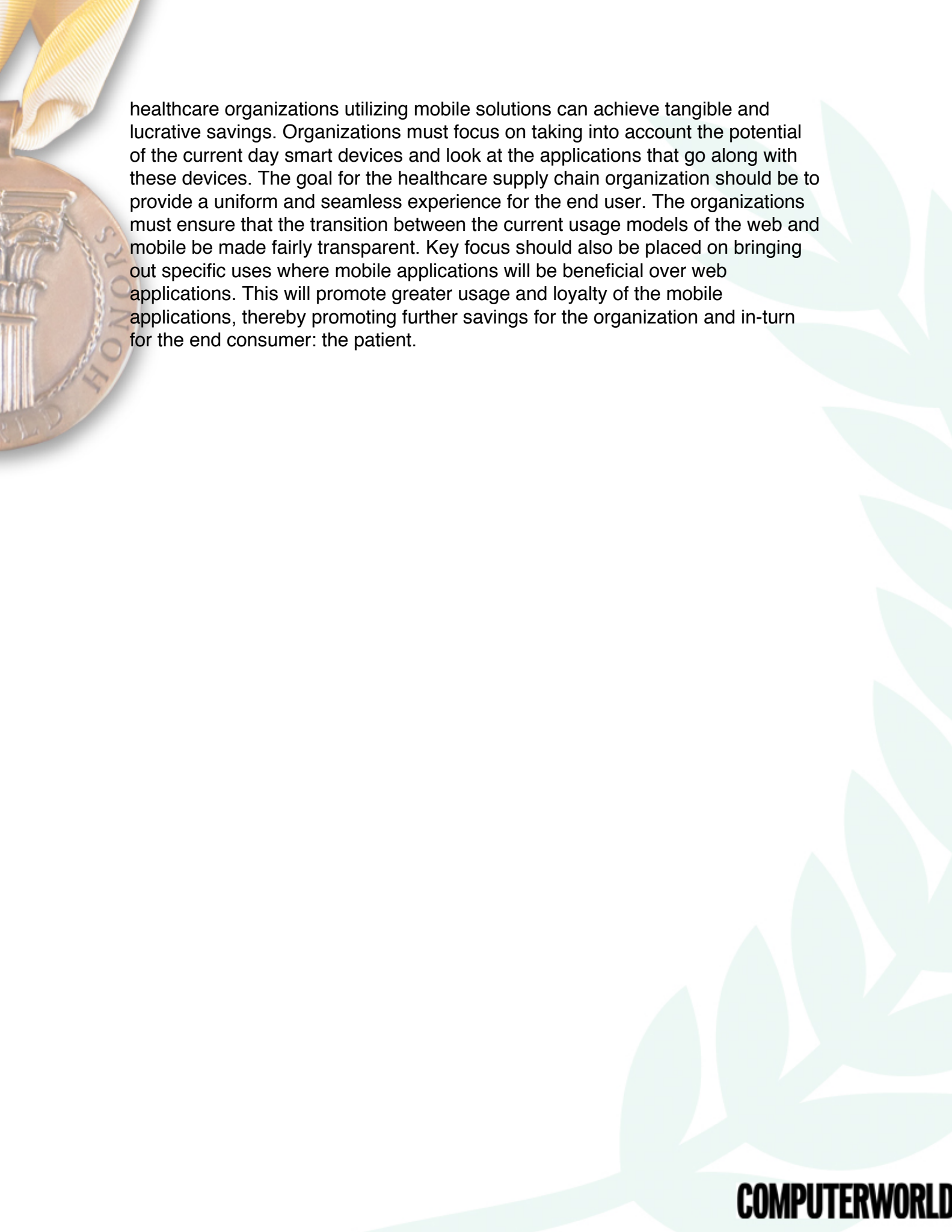
"I can sit in a meeting with a vendor while they explain how awesome their prices are and bring up their information on the VHA LYNX mobile app as they're talking to see how they compare to the benchmark prices," says John Aaron, director of purchasing, NorthShore University Healthsystem Saint Francis Medical Center -- Cape Girardeau, MO Bill Tegel, director of Materials Management: "We purchase approximately \$19 million annually in neurosurgery supplies. Through our variances, we have 20 different general ledgers to which we charge supplies. Each general ledger has a top-ten list of highest spend items. And obviously those are the items we attack first by determining where we stand. Then we start looking at other items, such as med-surg products. We just don't stand to gain as much on those because of their impact, versus a plate or screw used in neurosurgery. The last time I checked, we had about \$150,000 in implemented savings after four months of using the application, and I suspect that we'll be well over \$250,000 by the end of our fiscal year in June. Our goal was to try to cover the three years' expense the first year, and we've essentially done that in the first four months." Benefits: - Increase productivity for our hospital personnel by enabling a mobile channel: Allow procurement resources, pharmacists, physicians and our field teams to make data-driven decisions on price, spend and other data in a mobile setting when and where they are. - Notify users on critical information directly: Create a platform to enable immediate mobile notifications to hospitals and suppliers on product recalls, drug shortages and other critical pricing/spend changes. - Enable consultative decision-making: mobile devices facilitate easy sharing and exchange of information.

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 project is an innovation in the healthcare supply chain space. It also is an innovation in the field of customer facing mobile BI, which is slowly evolving. Over the course of development of these applications, we have put together a list of best practices that have enabled a superior user experience and increased adoption by our user base. We believe these best practices will help other organizations during their design stages: 1. Begin the BI application design with both mobile and web in mind: consider mobile in parallel with the web during initial design. This helps reduce development costs later in the lifecycle. 2. Design mobile applications only when needed: To increase value and keep costs low, look at specific audience members and their most common use cases in a mobile setting and build the application for those needs. 3. Design with a mobile user experience in mind: We use a few design concepts to ensure a mobile-friendly experience: - Keep screen size of device when designing. - Optimize navigation to reduce taps and bring out the relevant information first. - Make use of widgets that include swipes, pinch-zoom, flicks and other gestures when possible. - Avoid large pop-up dashboards from the parent screen when possible. They tend to cause the user to lose focus. 4. Focus on access speed: All else being equal, speed is the #1 usability factor. 5. Induce collaboration in your design - allow users to use the device in a consultative manner. 6. Design for security from the beginning: role planning permissions should be done from the beginning. 7. Design mobile applications to complement the web applications. Drive traffic to the web through mobile. 8. Allow for superior search capabilities: mobile apps are used in short bursts for quick references.

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

The healthcare supply chain is evolving and hospitals are looking for innovative ways to streamline and squeeze out savings at every link in the chain. Mobile devices have had a profound impact in the e-commerce world, in the way consumers engage with retail merchants and financial institutions. They are slowly making their way into the business environment, effectively becoming the focal point of an integrated customer experience before, during and after a transaction. Hospital supply chain organizations still must justify these developments, especially as they are in their infancy. As Novation has seen, there are clear and quantifiable benefits for a hospital supply chain organization in adopting mobile technology. From always-on access to the latest pricing and spending details, and workflow improvements to inventory cost reductions,

A gold medal with a ribbon is visible in the top left corner. The medal features a classical architectural design and the word "HONORS" is partially visible. A laurel wreath is positioned on the right side of the page, extending from the top right towards the bottom right.

healthcare organizations utilizing mobile solutions can achieve tangible and lucrative savings. Organizations must focus on taking into account the potential of the current day smart devices and look at the applications that go along with these devices. The goal for the healthcare supply chain organization should be to provide a uniform and seamless experience for the end user. The organizations must ensure that the transition between the current usage models of the web and mobile be made fairly transparent. Key focus should also be placed on bringing out specific uses where mobile applications will be beneficial over web applications. This will promote greater usage and loyalty of the mobile applications, thereby promoting further savings for the organization and in-turn for the end consumer: the patient.