

CHANGING THE FACE OF HEALTHCARE WITH SOCIAL BUSINESS SOFTWARE

Providing healthcare is a global, multi-level proposition that transcends single providers. The stakeholders in Cerner's world are not only clinicians, hospitals, and medical device partners but another whole world of consultants, researchers, and industry experts. Cerner leverages Jive Social Business Software to address a number of their key social business imperatives, including accelerating innovation and providing community-based support. They put Jive to work not only to make their own business operations more productive but to connect priorities and people outside of Cerner to solve broad healthcare issues for the greater good.

Strategic Challenges

Healthcare is a highly complex, constantly changing business that is delivered differently in every country. Before embracing social business imperatives, Cerner and its diverse global client base met face-to-face throughout the year to exchange ideas and information about healthcare issues. Between these meetings, information critical to improving healthcare practices was previously locked down in disparate systems or lying fallow in the minds of innovators. Cerner wanted to turn the crank faster on their ability to surface clinical innovations, gather requirements, and leverage new clinical practices and technology. The big idea: go social to leverage mass collaboration and reduce time between discovery and adoption.

Solution Focus And Goals

To meet its strategic challenges, Cerner executives stepped back and asked themselves: what do we need as an industry and what do we need as a company? How can Cerner not only improve its business outcomes but the outcomes of its clients? Short answer: a social networking platform that transcends Cerner's extended enterprise to include not only partners, clients, and associates but invited guests—researchers and industry experts, for example—who make critical contributions to the healthcare industry as a whole.

Driving Business Value With uCern

While most companies clearly separate their associate-facing and public-facing communities, Cerner's Jive-powered platform, called uCern™, uniquely combines both. Today, more than 1,700 separate healthcare organizations communicate and collaborate on uCern—of which Cerner is just one. While the focus of uCern is on the broader community and their needs and issues, Cerner also reaps a number of operational business benefits, most significantly the ability to answer questions more quickly and a significant improvement in the design quality of its solutions—driven by the ability to communicate broadly in parallel with its diverse stakeholders.



Cerner creates intellectual property in the form of software and other types of digital content and bundles it with other technologies and services to deliver complete clinical and business solutions. Cerner® solutions transform healthcare by eliminating error, variance, and waste for healthcare providers and consumers around the world. Cerner solutions optimize processes for healthcare organizations ranging in size from single-doctor practices, to health systems, to entire countries for the pharmaceutical and medical device industries and for the healthcare commerce system. Cerner solutions are licensed by more than 8,500 facilities around the world, including approximately 2,300 hospitals; 3,400 physician practices covering more than 30,000 physicians; 600 ambulatory facilities, such as laboratories, ambulatory centers, cardiac facilities, radiology clinics, and surgery centers; 700 home-health facilities; and 1,500 retail pharmacies.

Thirteen months after deployment, 80% of Cerner's associates and 1,700 client organizations are using uCern, and the business payoff is measureable across a number of fronts:

- 13% fewer support issues logged to all areas of Cerner's business by clients who are uCern users
- An 8% decrease in issues logged on Cerner software solutions year over year
- A 15% decrease in issues logged internally by Cerner associates to all areas of the business
- A 70% decrease in Human Resources issues logged internally by Cerner associates
- Software support questions answered in hours instead of days
- Shorter approval cycles for technical documentation: down from 2-6 weeks to hours or days

The Backstory

Embracing social business imperatives to blaze a trail in the healthcare industry

From its inception, Cerner has been at the intersection of information technology and healthcare delivery. With its Jive-powered platform, Cerner has taken on a unique role as facilitator, cheerleader, and mentor for the role Social Business Software can play in the healthcare industry.

The search for a social networking technology solution at Cerner began when Jeff Townsend, Executive Vice President and Chief of Staff—and one of the company's top innovators—challenged Cerner's training, IT, and marketing organizations to see how they could apply the groundbreaking affect Web 2.0 was having on their lives outside of work to their lives at work.

"When we were looking at our options, we were very clear that we didn't want to look at it from a technology perspective and shoehorn our needs into an isolated social app like a wiki, forum, or blog," says Brice Jewell, Senior Manager, responsible for Cerner's social network experience. "We were careful to first define our needs and expectations for the kind of Web 2.0 functionality that would drive our strategic business objectives."

Why Jive?

That kicked off a process to review all of their options from acquiring technology to building the solution themselves using open source software, to buying off-the-shelf software, remembers Jewell. "We quickly realized that Jive had almost everything we needed out-of-the-box for social networking and a vision for future development in line with ours."

Along with an unmatched vision and track record of success, Cerner found that Jive's platform was the only solution that allowed them to merge internal and external communities with required security measures in place, a critical requirement for connecting all of the company's diverse stakeholders inside and outside Cerner. Additionally, several features of Jive's platform stood above all other options, including:

- The configurability of the Jive platform
- The amount of control Cerner could put in the users' hands
- The user interface / ease of use / ease of navigation
- Rich user profiles

"With Jive we gained a huge economy of scale in the product development cycle. We are able to post initial requirements for feedback, follow concurrent discussions with multiple clients asynchronously, make iterative changes, and post mockups of screenshots for validation. Jive improves the quality of design in our product development cycle. We are creating a much better design in the same amount of time because of Jive."

—**Scott Ackerson**, Director, Cerner
Personal Health IP

- Jive's support for multiple browsers
- Mobile and email functionality, especially the ability to reply to discussions / comments from email
- Robust security functionality



“With uCern, we have embraced a new culture that says, ‘Not only is it okay to share information, but we should be sharing information sooner rather than later.’ In this industry, which is typically very guarded, there are not many organizations doing what we are doing on the scale we are doing it.”

—Brice Jewell, Senior Manager, responsible for uCern, Cerner's business social network experience

Coupled Technologies Drive The uCern Experience

uCern's Social Business Software platform includes extending Jive to incorporate user workflows that leverage Cerner's past technology investments, including:

- An existing issue tracking system, Jira
- An existing wiki, Confluence
- Integration with its supply chain management system, Siebel
- Source code management software, Subversion
- The online ecommerce part of their website, the Cerner Store

On uCern today, more than 28,000 members representing 1,700 client organizations—hospitals, medical device partners, physicians, and other healthcare associates—have established groups to talk about broad healthcare topics as well as how they use Cerner software. Cerner has conversations with clients, and clients have conversations among themselves. And, in the most striking use case of all, Cerner encourages its stakeholders to use uCern to hold their own internal conversations. Cerner not only invites its stakeholders to join the uCern community, but they dedicate resources to jump-start their adoption of social networking with training and education in the business value it delivers.



“Our clients don't want to hear about the ‘potential’ impact of Web 2.0 on their business,” says Jewell. “They want real, proven examples from people like them. We first correspond with stakeholders to understand their communication and collaboration challenges and then schedule a 30-minute demo of uCern to show their teams how it can address their challenges. We share real examples of what other clients have done, focusing on group/project collaboration, the number of people who respond to a question, the speed of those responses, and how to find people and information they care about throughout the site.”

uCern By The Numbers

- 28,061 total members
- 1,062 client-facing communities
- 1,712 client organizations represented
- 42% of clients have contributed content
- 82% of Cerner associates have contributed content
- 900,000 page views each month

uCern At Work

The conversations taking place on uCern are, not surprisingly, both far-ranging and highly specific:

Conversations among clients about Cerner software

Case in point: a Cerner client posted a question asking how others implemented a piece of Cerner software into their clinical workflow. A chief medical information officer from another client responded, explaining how they use the software to meet Joint Commission Core Measures, which is a regulatory body. Another client response not only described how they use the software but included a bug they had uncovered and the fix. A fourth client response described their company's physician-adoption strategies and listed three "lessons learned" about implementing the software.

“We are definitely early adopters of uCern and many of us use it daily. When we have new questions, the first thing someone here will say is: ‘Did you put it out on uCern?’ In contrast to the old List Serve, this is a life-saver for us. We have gotten many great ideas and answers from other Cerner clients. Safe to say, we love it.”

—Gail Fannin, RN, BSN, Florida Hospital

Conversations among clients about broad healthcare issues

Among the groups talking about broad healthcare issues on uCern are the Stimulus Collaboration Group, which is dedicated to discussion and collaboration around Meaningful Use provisions of the American Recovery and Reinvestment Act (ARRA), and the Cerner Physician Community, a forum for collaboration, information sharing, and project visibility for the growing network of physicians who are Cerner clients. A number of other communities bring together people with common interests, including pediatric hospitals, community hospitals, academic hospitals, chief medical information officers, and Spanish, French, and German-speaking clients.

Conversations about best clinical practices

Case in point: a consultant wanted to create a sample clinical form for one of his clients but lacked the clinical knowledge to make it accurate. He posted a request on uCern for sample scenarios, including medications and diagnostic tests. Within four minutes, a clinical solution designer in Cerner's IP organization replied, saying he had started working on some ideas. In less than four hours another consultant, who is a former ER nurse, posted four scenarios. Within two days, three more detailed scenarios had been uploaded to the thread.

Conversations internal to Cerner

Cerner has a consumer-driven health plan, and the benefits, incentives, and processes have always been hot topics, but the primary channel for them was auditorium-style meetings, phone calls, and emails to HR. Today, most health plan communications happen on uCern, where more than 1,200 pieces of content have been viewed more than 35,000 times.

Conversations internal to clients

An emergency room department was able to eliminate its regularly scheduled monthly meetings—which were plagued by the inefficiencies and attendance issues inherent in all staff meetings. Today they discuss issues more broadly and more efficiently online in uCern. Staff meetings now focus on specific issues and are scheduled only as needed.

Looking Forward

Jewell reports that the focus going forward with uCern is to do a better job of connecting users to the right information in the right context at the right time.

“uCern is a big, broad system that merges internal and external communities to drive innovation and collaboration across the healthcare industry,” says Jewell. “As a consequence, our biggest navigation hurdle is the wealth of content on the site. We are currently employing a number of context-based approaches to help users find information relevant to them. Going forward, we’re looking to further integrate other business systems with Jive.” Driving business value with uCern.