



## Building the Bases of Knowledge

Gaining company-wide support to purchase and install knowledge management software may not seem like a top priority during tough economic times. But as these case studies show, you can't afford not to.

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Word to the wise: Knowledge management software may offer more than you think it does, especially when companies are trying to do more with less.

As we become more of a Web culture, customers are increasingly accustomed to finding information on their own, provided they have the tools to do so. This is where knowledge management comes in.

An on-line knowledge base lets you provide customers and agents with fast and easy access to information about your company, products and services. A knowledge base can reduce the number of repetitive calls to agents, allowing them to concentrate on complex issues. And when complex issues do arise, agents have the knowledge on hand to quickly and accurately solve them.

The case studies we illustrate below involve companies that have made a significant investment in knowledge management software. Each company pursued specific goals and made careful considerations along the way.

For example, outsourcer Center Partners conducted scientifically validated trial groups to proficiently measure the benefits of knowledge management software. And the continuous help of integrators and consultants aided Cingular Wireless' implementation.

By gathering the necessary support from executives and employees, these companies were able to gain maximum value from the technology.

### **A (C)ingular Achievement**

When your business involves 22 nationwide call centers employing more than 15,000 people, things tend to get complicated. This is something that Atlanta, GA-based Cingular Wireless knows all too well.

Back in December 2001, we spoke with Cingular executives about the challenges of staffing their recently consolidated call centers. We learned about their strategies for staffing up quickly and efficiently while maintaining a high level of quality. A little more than one year later we returned to find out about their latest challenge.

"Our business - as complex as it is - keeps getting more and more complex," says Steve Mullins, vice president - customer experience for Cingular Wireless.

Cingular's agents needed a user-friendly method for accessing answers to customers' frequently asked questions (FAQs) and troubleshooting procedures.

To that end, Cingular looked to similarly complex businesses in the computer industry, such as Dell and Microsoft. Mullins and colleague Monica Browning, Cingular's director - knowledge management, met with several knowledge management software vendors. They learned how the vendors' tools operate and they visited end users.

"We thought about how [the knowledge management software] would integrate with what we envisioned the future desktop to look like," says Mullins. "This system would be the foundation for what we use throughout all of our departments."

The company chose ServiceWare's (Edison, NJ) eService Suite. ServiceWare's decision integrity department helped Cingular put together a basis for proving the software's return on investment (ROI).

"Before we began to roll out the software, we made sure that we had support from the CIO all the way down," says Mullins. "We acquainted executives with the power of the tool. And we carried out a campaign to let employees know what to expect."

Cingular began implementation by rolling out eService Suite to its tech support department across three call centers. Cingular enlisted the help of consultancies Cap Gemini Ernst and Young (New York, NY) and Innovative Management Solutions (Moorestown, NJ).

"Initially populating the knowledge base was a combined effort between internal employees who are familiar with wireless features and services and an external authoring group from Innovative Management Solutions," says Browning.

Agents access the knowledge base on-line by entering a unique ID name and password. Depending on their user profiles, they view only information that's relevant to them.

To search the knowledge base, agents use natural language to state the particular issue or problem. The software matches their search against a list of authored issues. Agents then select the appropriate issue; the software presents potential resolutions.

"The software uses a complex algorithm to decide the order to list the issues based partly on the exact text and phrase matching," says Browning. "[The software] can also match synonyms and give extra weight to particular things. The more you give it, the easier it is for the system to provide the solution closest to your issue."

Agents can provide feedback by using the software's contribute button located on their toolbars. For example, if they follow a certain path to a correct solution and notice that it didn't mention an important step, agents click the contribute button. The software automatically records their steps and displays a screen with a field for them to enter their feedback. Cingular's knowledge management team can access agents' input and make the appropriate changes.

The knowledge management team consists of about 25 people who maintain the knowledge base full time. Members of the team are located in Cingular's Atlanta headquarters.

The team works with members of Cingular's different departments. For example, if there's a new product launch, the marketing department uses templates to provide the product's details to the knowledge management team. The team then collaborates with designated subject matter experts to put the appropriate information into a user-friendly format on the knowledge base.

To input all the data into the knowledge base - a major challenge - the company divided the process into phases. Browning estimates that it was about four months before the knowledge base was ready for the first group of users.

"We have about 80% to 90% of all the tech support info ready now and a good 70% to 80% of the general info," says Mullins. Next on Cingular's list is to input all of its rate plans, which is no easy task considering the large number of plans.

Cingular also expects to have the knowledge base ready for customers' use before the end of 2003. Customers will be able to access instructions for using wireless services and features, handsets and other devices that Cingular carries, plus troubleshooting tips. The knowledge base will be available to customers on-line and in Cingular's retail stores.

For the longer term, Cingular aims to provide the knowledge base's basic information through the company's IVR system. Using speech recognition, customers will be able to use natural language to search for basic queries.

### **Centering Around Knowledge**

A lack of knowledge wasn't a problem for Fort Collins, Colorado-based outsourcer Center Partners. Instead, agents working on one client's account had a hard time managing all of the client's disparate info, which includes Web pages from the client and the client's vendor suppliers.

Because Center Partners had no control over the client's information they had to work with what they had. The main goal was to find a way to better organize information so that agents can access it faster and easier. The outsourcer was also striving to improve the quality of service that agents provide to its client's customers.

"Agents were frustrated because the knowledge wasn't organized in a way that would allow them to rapidly and efficiently get to it," says David Geiger, Center Partners' chief information officer. "Because of the cumbersome navigation, one of the biggest problems was that agents weren't using the information. [They] were instead trying to memorize a large number of details, which change daily."

After researching their options, Center Partners decided on TheBrain Technologies' (Santa Monica, CA) BrainEKP. As an overlay client system, the knowledge base allowed the company to better map client info without changing it.

However, Center Partners wasn't ready to accept knowledge management at face value. The outfit put together a trial group of 30 agents to test the software - half using BrainEKP and the other half not. Each group contained a scientifically validated sample of people with similar characteristics and skills. The results were striking: Within the group of agents using BrainEKP, quality scores improved 3.6%.

The outsourcer also had an eye on agents' average handle times (AHT), which executives feared might increase once agents began to use the new tool. However, they were pleasantly surprised when agents using BrainEKP saw a decrease in AHT of 43 seconds. Geiger says the test results have a statistical confidence level of between 95% and 97%.

"One of our huge key success factors was running the experiment," says Geiger. "We learned a lot from it. For example, in the third week we weren't seeing the results we thought we should. And [we] realized that we didn't give agents enough time to individually configure their own set of knowledge tools."

Individual customization is an important factor for Center Partners. "People index information differently," says Geiger. "TheBrain lets each individual agent customize his or her knowledge environment. For example, agents can take existing navigation and re-map it so that it's more aligned with their individual cognitive indexing."

Another example of customization is a feature that lets agents flag issues or topics they frequently encounter. These flagged issues appear as icons on their interface for easy access at all times.

Chris Kneeland, Center Partners' chief learning officer, emphasizes the high degree of collaboration between Center Partners' IT, Learning and Development, and Operations departments during implementation.

"You can have the best technology in the world but if you can't get it implemented and have people trained and actually using it, you can't make the benefits real," says Kneeland.

Center Partners developed a team of knowledge managers who are responsible for the software. Transforming the company's existing information into useful knowledge objects required the involvement of all three departments.

The knowledge managers are a cross-functional team of employees from the Operations and the Learning and Development teams.

Since information in the client's system changes constantly, TheBrain has helped Center Partners develop a system for flagging new information. And agents contribute to the knowledge base by clicking a feedback button on each page. This alerts knowledge managers to places where the knowledge is confusing or incomplete.

"Agents realize that they can contribute to improve the way we work," says Kneeland. "They're active participants, rather than just recipients of information."

Coaches use quality monitoring software from Verint to record agents' phone calls and capture on-screen work to ensure that agents use the software properly.

At press time, Center Partners was still rolling out the software to three of its seven call centers, where they plan to have about 250 of its 2,500 agents using the software. The company also hopes to extend the tool for external use.

"As we become better knowledge managers and continue to re-map knowledge, we can export this directly out to the customers," says Geiger.

"TheBrain transformed our knowledge base from 'data' to information that is useable and quickly accessible by every agent, [irrespective] of their skill or their particular familiarity with the system," he says.

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### **Custom-Made Knowledge**

Most people eat during their lunch hour. Many expend the daily break to eat up calories at the gym. And a worthy few use the time to build world-class knowledge bases.

Falling into the last category is Mike Knapp, project manager with Crucial Technology's information systems department. He is also, you may recall, one of last month's Customer Care Leadership award-winners.

A chief reason we named Knapp Best IT Analyst was because of his innovative contributions to Crucial Technology, a division of memory-chip manufacturer Micron. Capping those contributions: development of Crucial's Memory Selector knowledge base.

Formed in 1996, Crucial is a direct sales channel for products that include memory upgrades, compact flash cards, multimedia cards and video cards. Customers can purchase memory upgrades by speaking with agents in Crucial's call centers in Meridian, ID, and East Kilbride, Scotland. Or they can order products over the Web.

Crucial offers more than 94,000 upgrades for more than 15,000 systems. That adds up to a lot of upgrades that customers can choose from, so orders can get quite complicated. Since customers needed to know their system's technical specifications to find compatible memory products, they were often at risk for selecting and ordering the wrong parts.

In 1997, Crucial's tech support department approached Knapp to devise a way to provide agents with the existing information in Crucial's database. Knapp worked during his lunch hour to create the first prototype of the Crucial Memory Selector.

The Memory Selector enables agents and on-line customers to view information about all of Crucial's PC, laptop, server and printer memory upgrades. By organizing systems based on their compatibility with Crucial's memory upgrades, the software ensures that customers make accurate purchasing decisions.

For example, when you visit Crucial's Web site, you enter your computer's make and model and the Memory Selector returns a list of all the Crucial memory upgrades that are compatible with your system.

"We take more than 90% of all our orders across our Web site," says Knapp. "Because of the Memory Selector customers are able to select their memory and place their own order without any intervention from agents."

Although customers can also purchase memory products on-line without using the Memory Selector, Crucial encourages customers to use the software by offering a 10% discount on purchases made over the Web; and by guaranteeing that purchases made through the Memory Selector will be 100% compatible with their system.

The Memory Selector has an added bonus. According to Knapp, the purchases with the lowest rate of return are those that are made through the software.