



## Balancing Act

# WHAT DO YOU KNOW?

*Getting employees to share their knowledge isn't as simple as installing new software. Just ask Buckman Labs.*

By SCOTT THURM

**W**EEKS AFTER starting its new recycled paper mill last year, Manistique Papers Inc. realized the peroxide it was adding to remove ink from old magazines wasn't working. Frustrated, it turned to its chemical supplier, Buckman Laboratories Inc.

From his post in Michigan's Upper Peninsula, Buckman sales manager David Crownhart posted a message describing the problem on his company's online discussion group. And within two days, Buckman salespeople in Belgium and Finland identified the likely culprit: bacteria in the paper slurry producing an enzyme that breaks down peroxide. Mr. Crownhart recommended a chemical to control the bacteria, and Manistique's paper turned a brighter shade of white.

To Buckman, finding the antidote for Manistique's ills so quickly—and cheaply—demonstrates the power of sharing ideas. Buckman's technical experts and far-flung sales force conduct dozens of these virtual conversations each day, trading tips on arcane points of paper and leather making, water purification and sewage treatment. In the process, they've made this closely held, Memphis, Tenn., chemical company with \$300 million in annual sales a leading practitioner in the emerging field of "knowledge management."

Here's the theory: Instant communications and powerful computers are shifting the competitive edge in business to intellectual rather than physical assets. In order to sift through a mountain of information and reap the biggest gains, however, companies need to improve the identification, cataloging and sharing of ideas.

From rump gatherings of a few dozen executives five years ago has come an industry. Consulting firms buzz about knowledge management. More than 50 companies market software purporting to help businesses mine their hidden intellectual riches, and more are emerging each month.

There are knowledge-management conferences and magazines. Big companies such as Chevron Corp., Xerox Corp. and Warner-Lambert Co. have knowledge-management initiatives. Delphi Group, a Boston-based industry analyst, estimates sales of knowledge-management software alone last year at \$218 million. Including consulting and other services, Delphi projects that knowledge management will be a \$4 billion business next year.

Amid the hoopla, Buckman's experience offers important insights. The company has shown that it's possible to get workers to share a resource that, in more competitive work environments, is usually hoarded: hard-earned technical knowledge. But getting people to open up is not as simple as installing a software program. It takes time, and painful changes in corporate culture, which have costs as well as benefits. After all that, the results may not be easily identifiable in the bottom line.

"This is messy stuff," says Robert Buckman, chief executive of Bulab Holdings Inc., Buckman's parent company. "People think it's a technical problem. It's not. It's a cultural problem."

### Getting Answers

The core of Buckman's "knowledge-sharing" system is its 54 online discussion groups, available only to employees as an extension of the corporate e-mail system. Similar to computer bulletin boards, most of the groups revolve around Buckman's main products — chemicals for paper making, leather making and water treatment. A salesperson might survey colleagues around the world for tips on how to woo a big client, or a lab team could ask employees in the field how a new product is working. Employees also can access customer reports and technical data on Buckman products.

Employees are expected to read the postings regularly and to respond to questions whenever they can help. A single query can prompt a half-dozen responses from as many countries in 24 hours, fueling a dialogue that lasts for days.

Salespeople say the system short-circuits frustrating delays, from the days when questions were passed through the chain of command to technical experts in Memphis. "One heck of a time saver," says Jim Gehlhoff, who is also based in Michigan's Upper Peninsula. The typical time for getting a question answered has shrunk to less than 48 hours from three to five days, says Alison Tucker, who used to manage the online forums. A discussion leader, usually

*(over please)*

based in Memphis, monitors each forum, keeping up with the messages posted.

Researchers at Buckman—the people to whom many technical questions went before the online forums began—worry that misleading information may be circulated. There are no controls on the accuracy of the information, and answers posted in good faith can turn out to be wrong. But the researchers also say they feel liberated from answering the same questions repeatedly. Before the online system was put in place, “you would always be reinventing the wheel,” says research manager Vanja King.

Some Buckman customers say they have seen improved responsiveness. “One of the reasons they have business around here is they are faster than the competition,” says Leif Christensen, manager of the Manistique mill. “I’m not aware that their competitors can pool the whole brainpower of the organization” to solve problems.

That’s what Mr. Buckman envisioned in the mid-1980s, when he set out to re-make the company his father, Stanley, founded in 1945 and led until his death on an office couch in 1978. Buckman’s traditional method of disseminating technical information—hiring Ph.D.s and putting them on airplanes—was losing steam as the company spread around the globe. “We couldn’t hire enough and get them to run fast enough,” Mr. Buckman says.

He found inspiration in the words of former Scandinavian Airlines System President Jan Carlzon: “An individual without information cannot take responsibility; an individual who is given information cannot help but take responsibility.”

But getting the information to the right people is easier said than done. Mr. Buckman quickly discovered. In 1985, he told senior managers in Memphis to swap examples of successful, innovative ideas through the company’s in-house e-mail. The system became a network for social chat, and little else. “I realized the managers weren’t going to share,” he says. “They had the information.”

### Starting a Revolution

So Mr. Buckman decided to adopt a more revolutionary strategy—empowering the field staff to communicate with one another, rather than routing all information through managers in Memphis. His goal was particularly ambitious, even by today’s standards. Mr. Buckman wanted to share not just written reports, but also the “tacit” knowledge inside employees’ heads, gleaned from years of working inside paper mills, tanneries and treatment plants. “That’s the real gold in the organization,” he says.

The tool he would use would be a new computer network, one that linked not just senior managers in Memphis, but Buckman employees around the world.

At first, Mr. Buckman again found nothing but trouble. Many managers loathed yielding control over the flow of information. They “didn’t want to open their file cabinets to people,” says Dean Didato, vice president for leather chemicals. Salespeo-

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ple, meanwhile, resented lugging around a portable computer the size of a small suitcase and logging on to Buckman’s computer network from strange motels at midnight.

But Mr. Buckman persisted. He cajoled, telling managers they should think of themselves as mentors to their employees. If someone had a question, they should ask it; if someone had an answer, they should share it. He stroked the egos of frequent users.

He let people know he was watching, ordering Ms. Tucker to compile weekly statistics detailing each employee’s use of the network. “You wouldn’t believe the activities in those databases on Thursday night,” before she ran the report, Ms. Tucker says.

He threatened, once ordering research director Wallace Puckett to fire the three employees who used the system least. (Mr. Puckett dissuaded him.) And he rewarded information sharers, promoting people such as Mark Koskiniemi, now a 13-year veteran and vice president for human resources, over more-experienced colleagues. In 1994, Mr. Buckman took the system’s 150 most frequent users to a Scottsdale, Ariz., resort for a week.

Slowly, attitudes changed. Richard Zinn says his skepticism dissolved during a 1994 breakfast, when he was a manager in Michigan and one of his salespeople told him the president of the company had just resigned. The salesman had gotten the news from the discussion groups. “I realized it wasn’t good to have people who work for you know more about the company than you do,” says Mr. Zinn, now an assistant to Mr. Buckman.

It wasn’t always easy. Mr. Koskiniemi says Buckman’s attrition rate—historically very low because of generous benefits such as free college tuition for employees’ children—increased in the mid-1990s, when people realized Mr. Buckman was serious. The Scottsdale trip stirred resentment from employees in administrative departments who thought the statistics favored more-technical employees.

### Cultural Divide

Even today, Ms. Tucker says that as many as one-fourth of Buckman employees need to be prodded to use the system. Many

work overseas, from cultures that are less supportive of such free-ranging discussion. “They don’t want to sound stupid,” says Edson Peredo, president of the international division.

Still, nearly everyone at Buckman tells stories about how the network helped solve a problem. A few months ago, the leather division was stumped when an Australian customer reported that hides being shipped to tanneries in China were disintegrating en route. Then, Mr. Didato, the leather-division executive, recalled a similar problem a decade ago that was traced to the use of sea salt rather than mine salt in the brine solution in which the hides are shipped. He posted a suggestion that mine salt be used, and the hides were saved.

“That’s the power” of the network, says Jeffery Thorne, assistant to the vice president in the paper division. “It ignores rank. It ignores department barriers. It ignores country barriers.”

Mr. Buckman credits the knowledge-sharing system with keeping his company alive in a consolidating, heavily regulated industry dominated by competitors five and 10 times as large. “I don’t think we’d be a player today if we hadn’t done those things,” he says. “We’d be too small.”

It’s not clear, however, whether these anecdotes add up to a healthier business. As a private company, Buckman does not disclose profits, but sales have been growing about 5% annually in recent years, slightly faster than its competitors. Mr. Buckman likes to highlight a sharp rise in the share of sales from products less than five years old, which he considers a measure of innovation. Others note that some of the increase reflects an unrelated decision to broaden Buckman’s product line.

In fact, there’s a lively debate inside Buckman Laboratories, and in broader knowledge-management circles, about whether returns from these efforts can, or even should, be measured. Trying to quantify the gains “may be chasing rainbows,” says Susan Hanley, a senior principal at consultants American Management Systems, Fairfax, Va. “Nobody had to do a [financial calculation] for Bob Buckman to convince him they needed to change some behavior.”

To skeptics, that’s just another rationalization from sales-hungry consultants and software companies. Knowledge management is but “the latest management fad,” says Ron Shevlin, a senior analyst for Forrester Research Inc., Cambridge, Mass. Mr. Shevlin praises companies such as Buckman Labs, and says that efforts to categorize and disseminate information inside corporations will endure. But he predicts that the knowledge-management label will fade away within a year.

In a sense, Mr. Buckman wouldn’t mind. The man who helped create the movement is uncomfortable with the way it’s now being sold. “We spent 15 years getting to where we are,” he says. “It’s not a project, it’s a journey.” ■■

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