

Taking Control Systems

by Lois Hammond

Out of the

IT'S 2002
AND CONOCOPHILLIPS
INC. IS OPERATING OIL
AND GAS WELLS OFF-
SHORE OF INDONESIA.

The company needs to update the software controlling the flow of oil and other processes. On each platform, the Bailey® consoles where operators command the software are rapidly becoming obsolete. Where are the experts who can upgrade them? An around-the-world web search takes the company to Ready Engineering, Corp. in Spruce Grove, Alberta—one of the few companies in the world with the expertise.

The Spruce Grove location is just one of the surprises at Ready Engineering. The young president and founder, Lee Ready (MEng Electrical '98), has no office-only a desk beside all the others—and he goes home to eat lunch with his kids. Susan Ready, his wife, is company co-founder and controller. Service means finding out what clients really need and, if necessary, creating new technology to address those needs. That's how Ready's primary client, TransAita Utilities Corp. got a state-of-the-art coal blending system, which Ready is now marketing in China.

Though Ready provides general electrical and control engineering services, it specializes in serving the niche market for Bailey®, Ovation®, and other advanced control systems. This expertise, innovation, astute management, bright employees, and what Ready calls "fanatic customer service" all account for the company's success. After steady annual revenue growth of 70 per cent, 2003 revenues reached \$2.5 million.

"The U of A has been instrumental in our success," explains Ready. In the beginning, his Master of Engineering gave him more confidence and credibility. Clients reasoned: "This guy has done a Master in control systems, so we can entrust our systems to him." The U of A also provides a pool of engineering talent; all of Ready's engineers are U of A alumni.



BOX

Ready describes the company's essential business: "Frequently, engineers know what they want the physical processes to do, but they don't know much about the computers that control them. That's the void we fill."

Often, that involves refining existing industrial control systems. When companies contract large, multidisciplinary engineering firms to build or expand an industrial facility, they usually include their standard control package. Later, customers may realize their specs were met, but they still don't have all the specifics they need. Enter Ready Engineering. "We come in afterwards to customize the control systems and make them do what the customers really need," says Ready. For example, after a large firm completed the Edmonton Compost Facility, Ready reprogrammed the controls to make delivery of the raw material and other processes more efficient.

Another company to take advantage of Ready's expertise is TransAlta. Experts at TransAlta's coal-fired power plants have an ongoing challenge: blending coal types with differing qualities to achieve maximum heat generation and emission control. Meeting that challenge makes a difference of millions of dollars. For example, the right coal blend can save

a million by preventing uncontrolled combustion that may clog the system.

Ready took on the challenge and created ABACAST™ (Automated Blending And Coal Analysis System) software

to give TransAlta the process control it needs. The system controls the mass flow of coal up to an incredible 99.6 per cent. Ready says the technical design was easy when compared to implementing it in real situations full of complex, unpredictable variables, including weather. It's been a four-year process.

"This is leading-edge technology in underground coal mine settings," says TransAlta geologist Andrew Hickinbotham. He explains that a few other coal-blending control systems are available but they're prohibitively expensive to use.

Ready's R&D continues with second-generation technology that he calls CoalFusion™. The company is now marketing the software in the world's two largest coal-producing countries: China and the United States. The marketing strategy includes partnering with local "re-sellers" who currently provide

"WE'RE TRYING TO BRING THE TECHNICAL AND HUMAN SIDES OF THE PROBLEM TOGETHER, SO THE SOLUTION REALLY WORKS FOR THE CUSTOMER." ~ MIKE SADLER

other products to potential customers and are trusted by them.

At Ready, everyone is expected to be a salesperson by building relationships—the core of its customer service—

and identifying opportunities.

"All business is about requests and offers to take care of concerns. It's a communication process," says Ready. "It starts with digging to identify the real needs and stepping back from the specs in a client's original request to understand the 'why' behind the 'what'."

Ready has a unique way of teaching this to young staff. When he works with them on R&D projects, he intentionally withholds information about what he needs, thereby training them to extract it from a client (him, in this case).

Ready sales manager and former chemical engineer Mike Sadler is another key coach. "We find new graduates can ask all kinds of technical questions, scope out the technical problem, and dial in quickly as to how to solve it," says Sadler. "But very often they leave the human aspect off to the side. Who needs this solution and how would they use it? Who else



Margaritas Anyone?

Lee Ready has fun operating on all cylinders, both in the company and outside of it. Mike Sadler relates a typical story.

One January, Sadler casually mentioned that it would be great to have a blender on their summer camping trip but, of course, they'd have no power to run it. Come August, camp is being set up and Lee disappears into the truck for awhile. He emerges carrying a gas-powered blender, created with parts from a weed whacker, a household stepping stool, and his conventional kitchen glass blender. The margaritas never tasted so good.



ON READY ENGINEERING

in the company might be interested in this? We're trying to bring the technical and the human sides of the problem together so the solution really works for the customer."

To do that, Ready engineers constantly consult with the client's operations and maintenance people. Project manager Chris Stasiuk (Electrical '98) recalls an experience that illustrates this well.

While implementing ABACAS™ at TransAlta, he went down to the reclaim tunnel to see if the coal feeders were loading the belt according to software commands. There, he met an old guy who'd been shoveling coal for 20 years. "He could put his hand on the belt and tell you how much coal was there" says Stasiuk. "He knew the system inside out. It was pretty impressive." Though the man had never used computers before, he got on board to provide specific feedback needed for modifications.

These days, Stasiuk is surprised to find himself in business development and sales. "Lee saw this ability in me when I didn't. He pushed me gently to develop it. I have to say he was right, and now I actually quite enjoy this different role."

Jeff Whitt, (Electrical '94) manager of Ready Technologies Inc. in Olympia, encourages staff to consciously manage Ready's relationships on the job. Before Edmonton engineers go on site for an American project Whitt talks to them about keeping their eyes and ears open to customer needs, other work coming up, and the client's relationships with Ready or other companies.

Ready's determination to manage employees according to his high principles was reinforced by a hard lesson. After working happily for TransAlta for seven years, he managed the Alberta and B.C. Energy Services Division for a major multinational company selling electrical power, equipment, and engineering services. It was a company in big financial trouble at the time. Without any of the promised help from the sales division, Ready increased regional sales by a quarter and doubled operating profits in one year. He did it partly by training the engineers to be his sales force.

"We managed this turnaround, and in the process, we stepped on some pretty big toes in the Hamilton head office," says Ready. There were two camps in the pressured company,

and when the president was "retired" Ready found himself in the wrong camp with a six-month severance package. It financed his full-time U of A studies to finish an MBA and acquire an MEng, and motivated him to start his own company, run according to his values.

"From the beginning, Lee said he wasn't becoming rich off the backs of his employees," says Susan. Those employees praise their boss, who has never had to advertise for staff. People like Whitt, a former client, are drawn to Ready by what they see: innovative technology, transparent decisions, and clear policies so they always know where they stand, professional development opportunities supported with educational subsidies from \$2 to \$10K per year, an accessible president only a desk away, freedom to follow their own interests if they make a valid company case for it, and flex time to support family life.

What's Lee's most satisfying experience with Ready? The answer reveals his character and management style. No, it's not special technology or the steady company growth. It's the day he sat back during the mission and values exercise, listening to his employees before speaking himself. To his delight, they came up with his core values-unprompted.

What's most frustrating? "When you know you have a better offer on the table than somebody else, and for reasons that are almost completely in left field, they're not going to go with that offer. Some competitors will promise everything and they can't deliver. We know that and the customer should know that. We know because we usually go in to clean up the mistakes. Actually, a lot of our work is cleaning up mistakes. It's frustrating because it costs the customer more, and we only get a fraction of the revenue we could have had."

Ready is a self-admitted perfectionist who aims high, without going for broke. "We don't want growth for growth's sake. Growth will come naturally if we do things right, taking care of customers." He says of his proprietary coal blending technology, "Technically, I'm excited about what it does, but I'll be bouncing out of my chair once we've got customers seeing the same thing and buying. I'm always cautious about getting excited over new technology and spending our money, so

President: Lee Ready, PEng, MBA '98, MEng Electrical '98

Start-up: 1997

Offices: Spruce Grove (Head office); Olympia, Washington; Houston, Texas

Employees: 20

Annual Revenue: \$2.5 million

Core Services: Distributed control systems (DCS) and electrical engineering.

Expertise: Bailey® and Ovation® DCSs, other human machine interface specialties, programmable logic controllers, databases, historians, operating systems and networks, and commissioning services.

Innovative Technology: The automated blending and coal analysis system

Clients: Transalta Corp., EPCOR, ATCO Ltd., Luscar Ltd., Scantech Ltd. (Australia), ConocoPhillips Inc. (Indonesia), Hudson Bay Mining and Smelting Co., Ltd., and others.

Core Values: Integrity, technical excellence, innovation, opportunity, and customer service.

Awards: Spruce Grove and District Chamber of Commerce New Business of the Year ('99) and Business of the Year ('02), CIBC Alberta Small Business Award of Distinction.

Website: www.readyengineering.com

that we don't overextend ourselves. We're getting close, though. All it takes is a couple more sales and case studies, and yes, I'll be bouncing off the walls, too."



Lois Hammond is an Edmonton-based freelance journalist.