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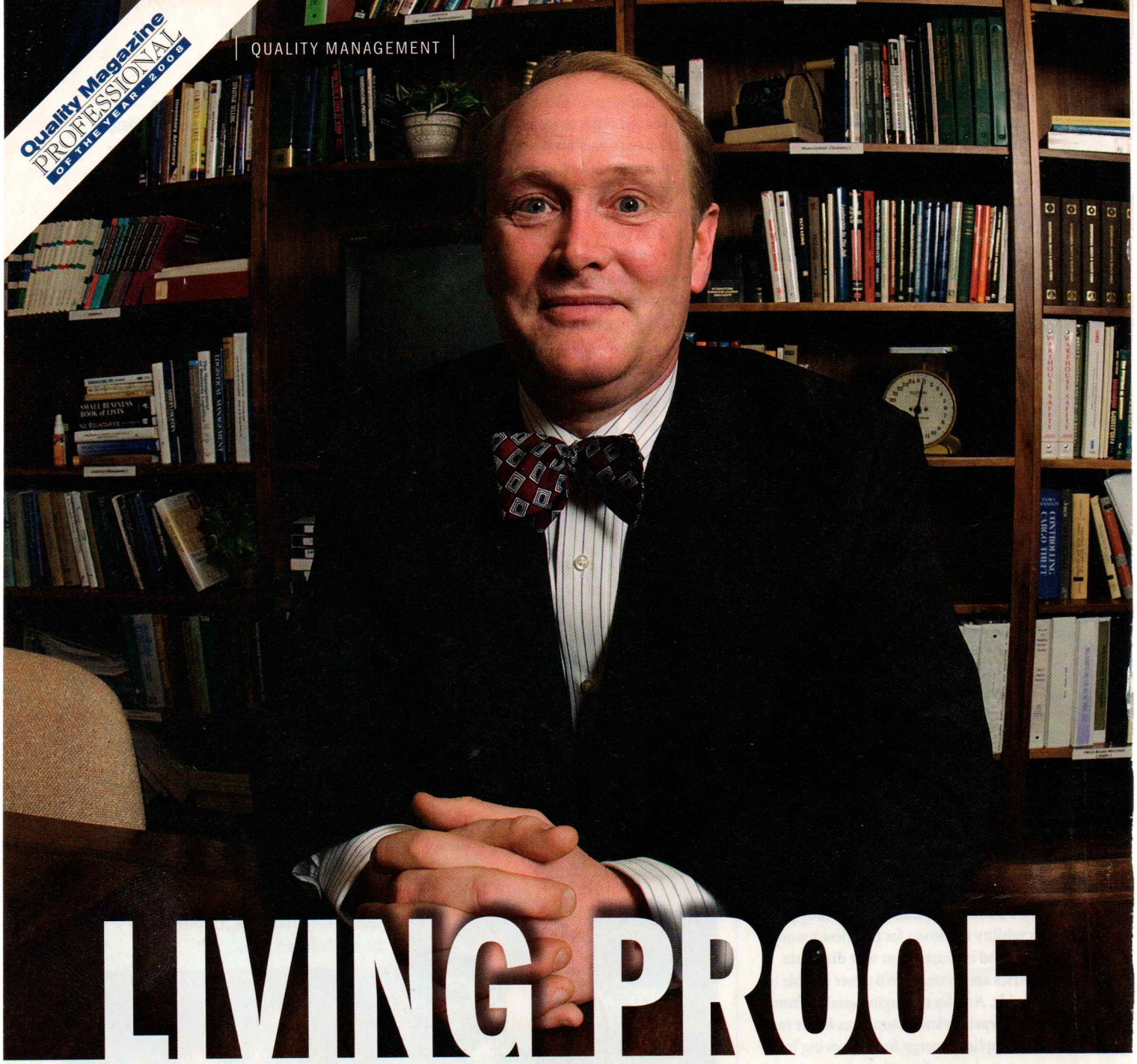

LIVING PROOF

Proving himself time and again, Peter Sanderson, *Quality* Magazine's 2008 Professional of the Year, has made quite a career for himself. **BY STEVE WICHELECKI, ASSISTANT EDITOR**

"You don't get things in advance. You have to prove yourself first," says Peter Sanderson, president of Total Quality Management Systems Inc. (TQMS, Cornwall, Ontario) and creator of Continuous Improvement Software (CIS). This mantra resounds throughout Sanderson's career, one that has found him holding many and varied titles in quality. From technician to technologist, from quality manager to consultant, Sanderson's attitude and work ethic have enabled him to prove himself time and again. Perhaps the ultimate culmination of Sanderson's career in quality is the development of CIS, enterprise-wide, cross-platform software that automates all aspects of an organization's process and quality management systems.

Sanderson, *Quality* Magazine's 2008 Professional of the Year, has spent a lifetime streamlining processes, looking for the best and most efficient solutions, knowing that hard work will in the end pay off—whether he is putting together a jigsaw puzzle or overhauling a quality management system.

EARLY AMBITION

Sanderson grew up in St. Eustache, north of Montreal. He studied at Marianopolis University after high

Peter Sanderson revisits the International Warehousing and Logistics Association headquarters (Des Plaines, IL). He introduced video consulting to the organization in the late 1990s. From his offices in Canada, Sanderson and his employees used the Internet, cameras and microphones, as well as Microsoft NetMeeting, to take control of clients' computers and edit procedures with them in real time. "It is like being there, working with them, and I was surprised that nobody did it," says Sanderson, "because that's basically what consultants do—except they'd have to pay for the flight, hotels and everything else. This way I had three or four consultants online with me and we could service 10 to 20 clients in one day." *Source: Laura R. Peters*

school while working at Bendix Avelex, a manufacturer for the aerospace industry. After six months at the company, Sanderson decided to leave the university and focus on his job instead. While he enjoyed classes and his job—and had grants because of his high grades—he decided to build his career instead. As Sanderson puts it, "The money paid the bills."

In two years of employment at Bendix Avelex, Sanderson moved from metallurgical laboratory technician 1 through 4, and then to laboratory technologist 1 through 4. Because he accomplished his tasks quickly, Sanderson took it upon himself to rewrite the inspection procedures the company used. "We had tons and tons of procedures on testing and inspection that were written in the 1950s and they'd never been updated. I started rewriting all these procedures and, of course, I couldn't approve them because it wasn't in accordance with the company's process. Their process had to be issued by an engineer, reviewed by a head engineer and so on. I rewrote about 30% of all these testing procedures."

When it came time for Sanderson's performance review, his boss told him that for someone such as himself—someone without an engineering degree, albeit with a great amount of talent and ambition—staying with the company would ultimately be stultifying. "He told me that I was a small fish in a big pond, and what I had to do was find a small pond so I'd be a big fish," Sanderson says.

With this advice in mind, Sanderson applied at Vestshell, a manufacturer of ferrous investment castings, as a metallurgic technician to do heat-treating. His first task was to get a newly purchased heat-treating furnace certified to a U.S. military standard so clients, such as Pratt & Whitney, McDonald Douglas and Bell Helicopter, would allow their parts to be processed there.

While acting as a heat-treating technician, Sanderson tripled the furnace's output. This accomplishment was achieved by adding an extra load at the end of the workday, and then another in the middle of the night. For six months, five days a week, Sanderson drove 45 minutes to work between midnight and 1 a.m., to unload one set of parts and then load another, which would be finished when he arrived at work at 6 a.m. Sanderson says he needed to "demonstrate that it could be done."

When Sanderson first began consulting in the early 1990s, he worked for free or for very little money in an effort to build an ample reference list. *Source: Laura R. Peters*

CAREER EXPLODES

At that time Vestshell was primarily engaged in commercial casting, for customers such as Xerox, manufacturing such items as pulleys and valve parts. Vestshell wanted to get out of that market because many companies were beginning to use parts made from plastic. Sanderson realized this, and knew that the companies Vestshell wanted work from, such as Pratt & Whitney, McDonald Douglas, Bell Helicopter and Boeing, required certification to standards such as MIL-I-45208. "The people at Vestshell at the time were very good at what they did, excellent at what they did," says Sanderson, "but they just weren't technical writers."

Sanderson bought an IBM electric typewriter, and after six months of working each night from home, he had prepared a complete quality management system for Vestshell. Sanderson then made an appointment with the company's president and owner, receiving the cold shoulder at first. "In his eyes," says Sanderson, "I was this guy who started there six months ago, which meant I was looking for a raise." Finally, after about a week, Sanderson's request to speak with the owner was satisfied.

Walking into the president's office, Sanderson was met by the "How Bad Business Was" and "It's Been a Tough Year" speech. To the president's surprise, Sanderson said, "I know, but this may help." The quality system was presented to the

president, who agreed to read it that weekend.

The following Monday, when Sanderson arrived at work, there was quite the commotion. Sanderson's boss, the general manager, as well as the production manager and plant manager were waiting for him; they told him that they all had to see the president. The group went to meet with the president, who announced that Sanderson had been promoted to quality manager. "And that's how my career exploded," says Sanderson. "At that point I had complete control over the company's quality management system and production system, and at the same time I had freedom to go out and control my suppliers as well."

While serving as quality manager for Vestshell, Sanderson strengthened the company's market share, refined its processes and cultivated his professional capabilities. Sanderson got Vestshell certified to MIL-I-45208 and MIL-I-9858. After that, Vestshell received the work from the clients it wanted, and was the recipient of many annual supplier awards. "In fact," says Sanderson, "our process was so good that my boss sold processes to Japan and Germany—he sold licenses."

In 1983, Sanderson saw the need for some computerization at Vestshell. When a spectrometer was overhauled, part of the upgrade was the inclusion of a computer. By learning the databases, Sanderson wrote a companywide system to manage production and schedule jobs. The system was in use for the length of Sanderson's employment at Vestshell, approximately 12 years.

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Sanderson also become certified as a level 1 in X-ray, magnetic particle and liquid penetrant inspection. He taught classes to new employees, got involved in welding and machine toolmaking, as well as most other elements of the foundry business. And Vestshell's multi-million-dollar Texas Instruments account, which had the company making parts for missiles used during Operation Desert Storm, was charged to Sanderson as well.

BECOMING A CONSULTANT

Internal strife at Vestshell lead to the shortening of the workweek—which meant less pay for all employees. This cut into Sanderson's budget, so he decided to try to fill his now-free Fridays with work.

Sanderson knew that some of Vestshell's suppliers did not possess the certification that would allow them to be involved in projects with high-profile clients. In particular, Sanderson approached a nondestructive testing company that had wanted

to make this list but lacked certification. Sanderson broached the notion that he be hired to create a management system for the supplier, train its employees and get it certified.

The supplier was interested and asked Sanderson how much he wanted. "To be honest," says Sanderson, "I needed a new roof on my house and I wanted a new furnace. The total cost was $3,200, so I asked for $3,200."

Sanderson went to work, and a few weeks later the management system was complete; Sanderson trained the employees and the company received certification. Sanderson received the $3,200 check for the work and also an envelope; the owner of the nondestructive testing company told Sanderson that the contents might interest him. On opening the envelope, Sanderson was presented with several quotes from other consultants, the lowest of which was $38,000, the highest $61,000.

"At that point, I wasn't really mad; I just suddenly had an epiphany that, Gee, it might be better if I just did this as a living and not work for somebody."

A year's notice was given to Vestshell, and Sanderson started developing a system to effectively build quality management systems for the MIL-I standards, NCA 3800 and ISO 9001, which had just been released and was gaining popularity in Quebec. Total Quality Management Systems Inc. (TQMS) was the name Sanderson gave the firm, and he set out knocking on doors and sending out quotations. But to his dismay, Sanderson eventually realized that he wasn't going to be hired by anyone because he lacked a reference list.

During the interview for one particular job, Sanderson decided there was only one way to rectify this problem. "I looked the owner straight in the eyes and said, 'I know you're not going to hire me,'" says Sanderson. "'The reason you're not going to hire me is because you don't feel I've done a complete job from beginning to end except for this one nondestructive testing company.'"

Sanderson then suggested doing the job for free. "I said, 'Listen, how about I just do the job for free, under the conditions that I get a reference.'" The company owners agreed to this and Sanderson soon received his first reference; he continued to build his reference list in a similar manner, working for cut-rate prices on the grounds that references be provided. This went on for about six months, after which he had sufficient references in a number of industries, such as machining, manufacturing, electronics and medical manufacturing.

At this point, in 1992, TQMS started to grow; Sanderson opened offices in Lachine, Quebec, and was able to hire a few employees to grow the ISO business. The business grew to such a point that it soon was able to move to better offices is Beaconsfield, Quebec.

In 1999 Sanderson felt the need to simplify the creation and maintenance of quality management systems, creating a Web-based approach that allowed clients to enter procedures into a Web site. Also in 1999, Sanderson decided to leave

the province and move to Cornwall. TQMS employees did not want to follow, so Sanderson went off alone, soaking all the resources he had into further developing his Web-based software.

This early system proved cumbersome because it required a lot of maintenance on his end, which warranted the services of programmers to further develop the software. "I could spec out all the database fields, what I wanted to do, all the inter-relationships between the different tables—so basically all the programmers had to do was just put it together," says Sanderson.

CIS

The result was Continuous Improvement Software (CIS) Version 1.0, launched in 2001. Today, CIS Verson 4.1 is automating process and quality management systems throughout the United States, with TQMS having clients in all but three states. Sanderson has even sold the product to the International Civil Aviation Organization (ICAO), a part of the United Nations.

The creation of CIS stemmed from general discontent Sanderson perceived in industry over the implementation of ISO 9000. Many companies were ISO certified solely because customers required it, seeing it as something that resulted merely in a lot of meetings and wasted paper, but not any real benefits. "So I started to ask the question," says Sanderson, "What is it all about? What will it take to make the owners feel that ISO or any quality system would make them faster, reduce their costs and make them outstanding global citizens at the same time?"

Sanderson set out to create a Web-based, cross-platform program that employed standardized templates resulting in an automated enterprise management system that would be both easy to implement and maintain. "We looked at it from the point of view of—obviously ISO is part of it, but so is human resource management, planning, management meeting, improvements, preventive actions and calibration—all of this was part of managing a company—from purchasing to managing vendors. We started to create a software system to do that."

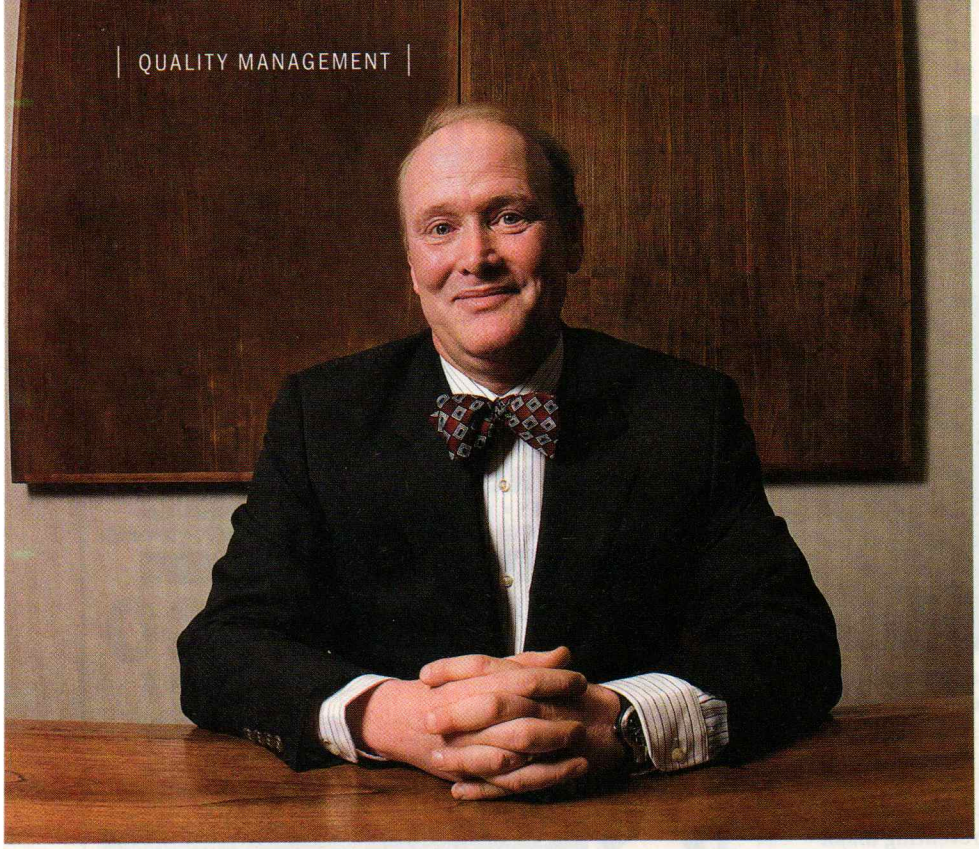
With CIS each employee has his own personal homepage. This serves to outline all action items that have not been completed, such as meetings, training schedules, calibration, corrective actions and nonconformities.

CIS also automates new employee training. After an employee is entered into the system, CIS automatically plans all future training for that employee, advises the appropriate managers and adds training dates to calendars.

The cross platform aspect of the program gives a company's customers, suppliers and even auditors controlled access to its management system. For example, suppliers can access requirements, or see all inspections, in process receiving and nonconformities, with root corrective actions and root causes, that pertain to them. Customers can log on and submit complaints or failures, and CIS will alert the appropriate manager in real time so immediate action can be taken.

There are clients in almost every U.S. state using Sanderson's Continuous Improvement Software (CIS). *Source: Laura R. Peters*

With CIS, auditors can see everything within a client's management system in real time, enabling the ability to provide oversight on an ongoing basis, preventing major nonconformities, and, therefore, making an audit quicker and easier. "So instead of auditing a company once a year, a consultant using CIS can do monthly reviews of a customer's system online, getting a real picture of the state of



While working as a heat-treating technician at Vestshell, Sanderson wrote a complete quality management system on his own accord, which earned him a promotion to quality manager. *Source: Laura R. Peters*

things within an organization at any given time," says Sanderson. "So now ISO has a new guide that is going to allow consultants to audit electronic systems without having to spend so much time in the organization, thereby saving money and having a more effective audit."

Perhaps the most notable attribute of CIS is the speed with which it is implemented. In a matter of weeks a company can be up and running with CIS. This is possible because the software has a module and procedure for every element in various standards, such as ISO 9001. "If you're using the CIS software then there's hardly any procedure writing at all—then it's the reverse," says Sanderson. "You're doing CIS, so you just have to say you're doing CIS. Then your procedures focus more on authorities and responsibilities, but the actual process and procedures with respect to quality management are online with simple templates that can be modified for specific needs."

Sanderson, an avid Star Trek buff, felt that CIS Version 4.0 was so

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advanced that he introduced it at a seminar held in the midst of a Star Trek convention in a Captain's Lounge replica. "I had 40 companies attend that seminar and I was in full Star Trek uniform," says Sanderson. "And the theme was, if you were 500 years in the future, in the Star Trek era, CIS would be what you'd be using to manage your management system."

Sanderson's mantra has certainly proved itself, and the success of his career is the proof. Whatever the future brings to Sanderson, it can be believed with confidence that the objective at hand—whatever that may be—will surely be met. Q