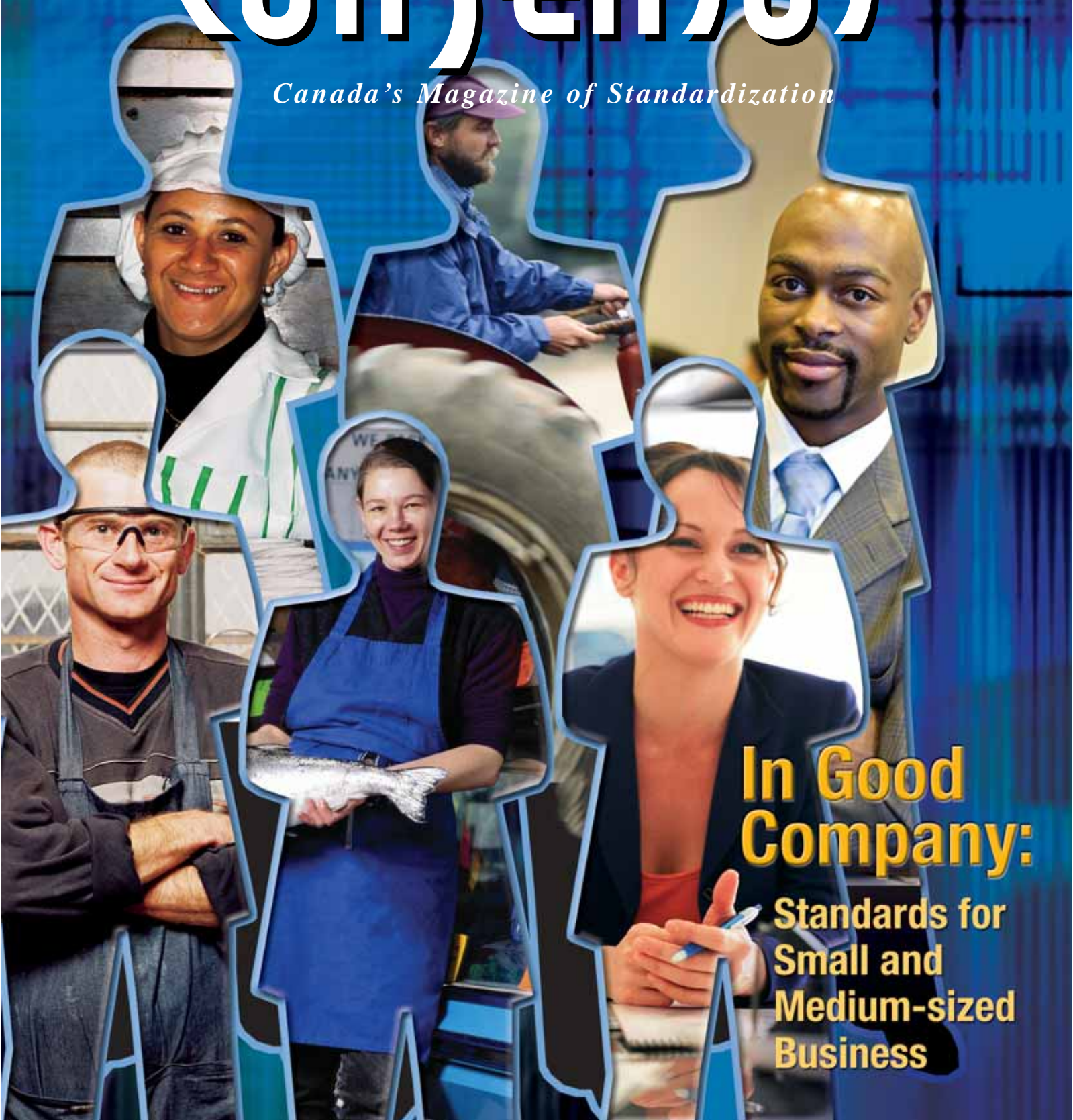


Volume 33, Autumn 2006 / Winter 2007

CONSENSUS

Canada's Magazine of Standardization



In Good Company:

**Standards for
Small and
Medium-sized
Business**

Welcome Message: *In Good Company*



Everyday, small and medium-sized business owners like yourselves defy the odds, turning ideas into paycheques through a combination of hard work and sheer determination. Despite the challenges, you somehow find the money, the right people, and the extra hours in the day to get the job done right.

Unfortunately, when it comes to using formal standards – either in relation to your products, services or business practices – the reality for most small and medium-sized businesses is a lack of awareness. The perception is that standards are only for big business, are overly bureaucratic or are too expensive to implement.

The information that too often isn't getting through is that standards can help your business save money and increase profits, enhance productivity, increase consumer confidence and open doors to new markets and new clients – both within Canada and abroad.

In this 2006 issue of CONSENSUS magazine, the Standards Council of Canada has included a range of company profiles, interviews and practical information about standardization for small and medium-sized businesses. By using real examples of small businesses that are improving their bottom line with standards and by addressing some of the obstacles when it comes to using standards, we hope that you will take a first, or even second look, at how standards can work for you and your business.

Sincerely,



Peter Clark
Executive Director

World Standards Day 2006

On October 14, the Standards Council joined with its international partners to celebrate World Standards Day and to reflect on the pivotal role of small and medium-sized businesses in today's global marketplace.

“International standards can provide practical solutions to many of the challenges faced by small business in today's globalizing markets. In so doing, they allow small business owners and managers to enhance their traditional virtues of hard work, enterprising spirit and close attention to the requirements and satisfaction of their customers.”

– A joint message from the International Organization for Standardization, the International Electrotechnical Commission and the International Telecommunication Union.

**Standards:
big benefits for small business**



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Venturing Abroad:

Standards
as a business
passport
to foreign
markets

Standards – don't leave home without them! That's the advice of two executives of small and medium-sized businesses in Calgary with experience in foreign markets. It's also a business reality that can not be overlooked, according to standards experts.

Doug Smith, president of Conematic Heating Systems, says that in his experience, certification to internationally recognized standards is one of the best marketing tools for Canadian exporters in an ultra-competitive global marketplace.

"Canadians tend to be shy. We don't market ourselves well internationally. We don't have the aggressiveness of our foreign competitors," Smith says. "So when we go up against tough competition, we can let our standards certificate speak

for us. It gives us credibility."

Conematic, which manufactures energy-efficient hot water and hydronic heating and cooling systems for homes and industries, has 25 employees and annual sales revenue of \$14 million. About one third of that revenue comes from exports, mainly to the United States.

The privately-owned company also has a long list of certificates verifying its conformity to technical product standards developed by the Canadian Standards Association,

the National Board of Boiler and Pressure Vessel Inspectors, and others.

With the aim of further expanding its global marketability, Conematic is currently working towards certification to ISO 9001, the world's most recognized quality management system standard.¹ It is also seeking the European Union's CE marking, a legal requirement for gaining access to sell many products in Europe.

Smith says the company's efforts to meet the requirements of ISO 9001 have taken significant time and resources, but he expects to reap the benefits with an improved management system that will keep costs down, improve efficiency and satisfy customers. He also expects the certification to put the company in an even better position to export to emerging markets.

Conematic made an initial foray into the Chinese market several months ago, and as Smith described it at

the time, "We got banged around a bit." Although the company had been certified to North American standards, and "our standards are some of the best in the world," the company was overwhelmed by the aggressiveness of the competition.

"In the United States, we might go up against 13 or 14 competitors, but in China we would have 59 competitors. We were going up against some of the biggest players in the heating business worldwide."

Smith figures that adding ISO 9001 certification and CE marking will further enhance the company's credibility.

"You have to look at it as a value, not a cost," says Smith of his company's investment in standards.

"In the global marketplace, certification provides a measure of quality. When nobody knows who you are, a certificate gives you credentials."

A long-term investment

Delton Campbell, president and CEO of Innicor Subsurface Technologies Inc., also sees standards as vital to gaining a solid footing overseas.

"If you want to get in and out of the foreign market fast, maybe you don't need certification," says Campbell, whose company manufactures perforating guns and other equipment for oil and gas well construction. "But if you want to be there for the long term, certification is the basic ticket."

Innicor, with 300 employees, estimates its sales revenue for the last 12 months at \$65 million, with 30 to 40 per cent of that from exports, mainly to the Middle East and Asia. It has been certified to ISO 9001 since 2003.

"We are medium-sized in Canada, but in the global picture we are tiny and we go up against big multinational companies."

Campbell says ISO 9001 certification is becoming an industry requirement for large state-owned and major private oil companies.

"The small companies we dealt with in the past didn't ask for it. But when you deal with any of the bigger companies, they require it."

Although, becoming certified to ISO 9001 didn't come cheaply, in the end, Campbell says certification paid off. "It's a matter of weighing the time and cost against the advantages of credibility and acceptance to a wider foreign market."

Implementing ISO 9001: Guide for small business

For many small and medium-sized businesses, making the decision to put in place a quality management system is simple. It's figuring out what to do next that can be daunting.

The International Organization for Standardization technical committee that developed the ISO 9000 series of quality management systems (ISO/TC 176) has published a guide entitled: *ISO 9001 for Small Business – What to do*, which breaks down the process into three main stages and nine specific steps:

Stage 1 – Development

- Step 1: Identify your business activities
- Step 2: List your business activities

Stage 2 – Implementation

- Step 3: Have staff write down what their jobs cover
- Step 4: Collate job activities with business activities
- Step 5: Look at how the standard and your list of business activities link together
- Step 6: Apply the standard and the quality management system
- Step 7: Keep your quality management system simple, functional and relevant

Stage 3 – Maintenance

- Step 8: Consider improvements to your processes based on feedback
- Step 9: Monitor and measure changes so you know what you have gained

The guide can be purchased at www.standardstore.ca.



A fact of export life

Standardization is becoming a fact of life in the global marketplace, where conformity in design of products and services and adherence to health, safety and environment standards have direct impact on export opportunities. And more and more companies are seeking certification to increase their competitive edge.

ISO's most recent annual survey of certifications shows the increasing global prominence of management system standards, and ISO 9001 in particular. At the end of December 2005, more than 775,000 ISO 9001: 2000 certificates had been issued in 161 countries.

In an environment of increasing standardization, Canadian exporters need to study the markets they are entering and learn the standards requirements in advance, says Tony Schellinck, a former member of the Standards Council of Canada's Advisory Committee on Trade and co-author of a study on the role of standards in exporting.

"What complicates matters is the wide spectrum of standards in some export markets. In the United States, for instance, many industries set their own 'international' standards, as well there may be more than a thousand jurisdictions – including state and municipal levels of

government – with their own standards or codes to be met."

Schellinck says that while many Canadian companies would argue that the quality of their products are equivalent or superior to other parts of the world, they may still need to meet additional requirements to gain market access.

Beyond broadening opportunities in foreign markets, Shellinck says companies should look at applying standards as an overall business investment.

"Many of the companies I have talked to have found an intrinsic value in certification," says Schellinck. "The ISO quality management standard, for instance, improves management practice. If it's a good standard that in itself is enough reason to adopt it." ■

¹ ISO 9001 and ISO 14001 are two examples of international standards that have been adopted or adapted as National Standards of Canada. The official name of the Canadian adoption of ISO 14001 is CAN/CSA-ISO 14001:2004, however, the shorter, more recognized name ISO 14001 is widely used, and may be qualified with the year the standard was published or revised.



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In Perspective



Carl Marcotte, Vice President, Small Business, Export Development Canada (EDC) talks to CONSENSUS magazine about standards and small and medium-sized businesses in today's global marketplace.

Consensus: Based on EDC's experience in helping Canadian businesses gain access to foreign markets, how valuable is certification to international standards?

CM: Adherence to standards can make all the difference for a firm (especially a small one) that is looking to expand its presence in foreign markets. Many of the small exporting companies that we work with go to considerable lengths to establish their *bona fides* with potential foreign customers. To be successful in the long run, you obviously have to show that you have staying power and adherence to internationally recognized standards of business practices has to be a key part of that strategy.

To go a step further, while many such standards recognize best practices around safety, or product quality, there's an emerging trend to show your commitment to or seriousness about security, and specifically the security of your supply chain.

Consensus: EDC advises small businesses to make sure that they understand the foreign market they want to enter before venturing in. How important is it for small and medium-sized businesses to be aware of regulations and standards that exist – either within the country or as part of WTO or regional trade agreements?

CM: Knowing what matters to potential customers in the market you're seeking to enter really differentiates, in our view, a successful exporter. Standards and business certification count for a lot, but the subtleties of how relationships are built and the environment within which you're trying to operate are critical. The enormous growth of international supply chains in the past decade is a great example.

Deregulation, increasing productivity and improved "connectivity" between countries and people has led to even very complex supply chains going global. Almost any business is now able to shop the world for the best quality, price and reliability for almost any sub-component that makes up what they sell. It's hard to imagine, but even a product as deceptively simple as a man's razor could have components from half a dozen different countries.

Developing the relationships to get into these global supply chains can look daunting for small exporters in particular, but knowing the local and regional "rules" makes a difference. Using the same example, not only is that razor composed of more multinational parts than ever before, but it must now be sold (unchanged) in more markets than ever before, particularly within regional trading blocks. That means products and components have to meet harmonized (or sometimes not) standards across multiple markets.

If you can be proactive in understanding what those standards are ahead of time, you increase your chances of working your way into these supply chains. Importantly, these standards are usually a lot more complex than just packaging your product with multiple languages. (Some suppliers think that's all they have to do to sell throughout the three NAFTA markets.) It pays to work with other suppliers in your industry to learn what is really the norm. ■

Export Development Canada provides Canadian exporters with financing, insurance and bonding services as well as foreign market expertise. www.edc.ca



Small software developers to benefit from improved international standards

Canada is playing a key role in international efforts to make software engineering standards more relevant and easier to apply for the more than three-quarters of software development businesses worldwide operating with 25 or fewer employees.

Leading this initiative is the ISO/IEC JTC 1¹ subcommittee on software and systems engineering, which is chaired by Canadian François Coallier. The subcommittee has created a working group to develop standardized profiles, templates and guides to help very small businesses to benefit from the ISO/IEC software engineering standards.

"By enabling small businesses to use international standards in software and systems engineering, the

working group's contributions will not only significantly expand the reach of these standards, but also enable small businesses to benefit from efficiently-proven engineering techniques and increase their participation in the global software and systems engineering markets," says Coallier.

The working group's efforts are based on the results of a 2005 survey of small software companies from more than 30 different countries. The survey confirmed that existing standards are difficult for smaller businesses to apply within their organizations. Respondents said that while they saw the value of conforming to international software standards, they lacked the human resources, time or money necessary to do so.

Fellow Canadian Claude Y. Laporte, a colleague of Coallier's at the *École de technologie supérieure* in Montréal, where both are software engineering professors, is serving the important role of editor for the suite of documents that will be produced by the working group.

"This project should help hundreds of Canadian software companies in developing their software better, faster and cheaper. And they have to. Otherwise, competitors will capture their markets," says Laporte. ■

¹ ISO/IEC JTC 1 stands for the International Organization for Standardization/ International Electrotechnical Commission Joint Technical Committee

For more information about the working group, visit: <http://profs.logti.etsmtl.ca/claporte/English/VSE/index.html>

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a safer world



Internet Solutions, Ltd. opened its doors in 1995 as an internet training company. Today, it has evolved into a full-service firm that provides websites, applications, e-marketing and web strategy advice.

Some clients were surprised that a company of its size could adopt a management system standard such as ISO 9001, which is often associated with large enterprises, says Ashfaq. However, he describes the process of putting in place ISO 9001 and preparing for certification to the standard as evolutionary rather than revolutionary course of action.

“It’s not that we were creating a whole new process for running the company,” says Ashfaq. “It was a way of documenting and formalizing processes that had been established really well in the last 10 years...

What the process has done for us is a lot more upfront consultation and documentation.”

He lists creative briefs and architectural diagrams as the new norm to prepare for clients and says they understand that this more comprehensive process results in greater efficiency.

“It really helps ensure that what they get in the end is what they were looking for. The acceptance rate without having to do any re-work is really phenomenal.”

Though it hasn’t even been a year since attaining certification, Ashfaq says the results are measurable already.

“The last dozen-or-so projects we’ve done have really followed that with minimal re-work to satisfy the customer needs,” he says.

The company’s growth into this enhanced work environment with the management system standard in place has made inviting new members to their team a more streamlined experience.

Three employees have had training as internal auditors and perform audits on a quarterly basis. On the first anniversary of being certified to the standard – April 2007 – a third party will perform an audit.

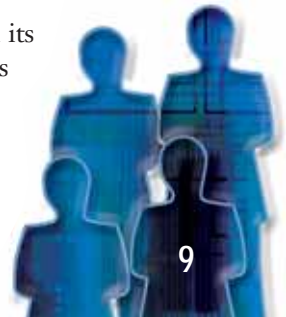
Expanding its management horizons isn’t the only growth plan for the forward-looking company. With the opening in 2005 of a satellite office in Vancouver, the company is increasing both its physical presence across the country and its virtual presence in Canada and around the world. ■

Determined not to be mistaken for “just a couple of guys working out of our basement,” a small Halifax-based web development company took a big step when it became the first web design and development firm in North America to achieve ISO 9001 certification in April 2006.

Naveed Ashfaq, one of the company’s managing partners, says implementing ISO 9001 is “setting a higher bar in the field”.

“Clients who had traditionally gone with bigger firms might consider us. With existing clients it has evolved our relationship,” says Ashfaq.

With just 18 employees, the firm’s small size hasn’t meant small clients. The company’s portfolio includes work completed for High Liner Foods and Big Brothers and Big Sisters of Canada.



Our Path to Lab Accreditation

How we overcame barriers to arrive at quality

A first-hand account by Deborah Lankin,
Senior Microbiologist at Sun Valley Foods

The reality today, especially in the food production business, is that conformance to international standards is increasingly being seen as a requirement for companies to remain competitive. Unfortunately, there is a perception among some smaller organizations that accreditation or certification to these standards is unattainable.

I know first hand that this is not necessarily true.

As the senior microbiologist for a small in-house laboratory within a medium-sized production facility, I have experienced the growing pains and challenges associated with implementing a quality management standard.

Did accreditation to ISO 17025, the international standard for the competence of testing and calibration laboratories, take hard work, time and dedication for a small laboratory? Absolutely!

But in the end, the rewards far outweighed the challenges.

My employer, Sun Valley Foods, is a division of Cargill Ltd., a global company that reaches markets both within and outside of Canada. At our production facility in London, Ont., we produce processed chicken for the food service industry. Comprising only three full-time members of the 750 employees at the plant, our microbiology lab is a small part of the overall operation, but our role is vital in ensuring the success of our business, which is dependant on meeting strict regulations for food safety.

Having an accredited lab in-house eliminates the added expense and the time of sending samples off-site (often to another city) to be tested by an independent accredited laboratory. Our in-house laboratory can also perform regulatory testing and generate data on which major decisions affecting production are made.

Our motto in the lab is “Results that are correct first time, every time and on time!” and it was this vision that led us to seek out laboratory accreditation as a means of demonstrating that we met the stringent requirements for testing set out in ISO 17025. Accreditation was also seen as a means of demonstrating our competence to our clients – both those within our facility and the end user of our products.

Getting our management team on board was the first step on our way to attaining accreditation. With ISO 17025, management participation is not only desirable; it is required by the standard itself. Our job was to convince senior management that an in-house accredited laboratory made good business sense. This was achieved by demonstrating that accreditation would eliminate the need to send samples off-site for testing or to have the products re-tested in order to meet the requirements of foreign markets. Another selling point was the fact the results from an accredited lab would be legally defensible in court. Finally, we stressed the role of accreditation as a competitive edge and marketing tool for attracting potential new customers.

The biggest challenge we faced once we had support from management was determining if we had the resources

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www.scc.ca

Canada

necessary to make the changes and to meet the ongoing requirements of accreditation by the Standards Council of Canada. Physical resources such as supplies and equipment were never a concern; rather it was our modest human resources that posed the biggest problem.

With such a small team, everyone in the lab had a full workload. The addition of another position with the sole responsibility of monitoring our quality management practices was not feasible. So how were we going to make this work?

The answer was in the delegation of duties and responsibilities. For example, our manager of technical affairs for plant operations also acts as the laboratory quality manager and technical manager, but essentially everyone shares in the responsibility of maintaining the quality system. At times the delegation of duties is not enough, so some overtime is required.

Another dilemma faced by our laboratory was internal audits. Since we were so small and we were doing the daily testing, performing internal audits would have resulted in auditing ourselves. How can you be impartial and audit your own work? The answer was to look outside the laboratory and contract an external, qualified auditor. Although there was a cost associated, we approached the audits as a valuable learning experience. We valued the

different points of view and ideas that were revealed through internal audits. This helped in the continuous improvement of the laboratory.

Our involvement in the quality process at Sun Valley Foods has not only resulted in better performance, it has also instilled us with a sense of pride in our work. I personally feel a level of accomplishment and satisfaction when I see how our microbiology lab is contributing to our company's vision: "To be the global leader in nourishing people" by ensuring the food is safe.

Our small laboratory has encountered some challenges on our way to accreditation, but these challenges have been overcome and every minute of our journey has been very satisfying. It has been said that quality means "fit for purpose" or "fitness for use". Quality is achieved when the customer's expectations and needs are brought into harmony. Quality provides a sound foundation for business relationships. Our laboratory is successful because we have a conspicuous role in achieving quality for the customer. Ultimately at Sun Valley Foods, everyone is a winner: the laboratory, the company, and most importantly the customer. ■



A Standards Primer for Small



What are standards? How are they different from regulations? Who develops them?

A standard is any guideline that sets out minimum requirements or best practices. Some standards, like your company's hours of business, are informal standards. The standards we are discussing in *CONSENSUS* are formal standards related to your products, services or business practices, which have been developed by national or international bodies.

Unlike regulations, these formal standards are usually not mandatory, but the business benefits they offer make voluntary adoption attractive to small and medium-sized enterprises. Standards may be referenced in regulations. When this is the case, adherence becomes a legal requirement.

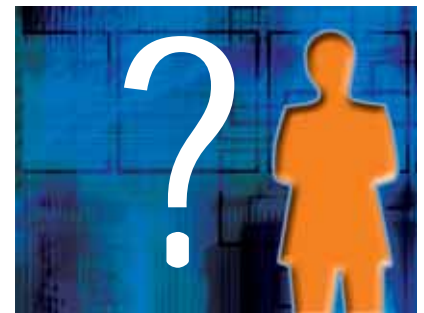
Standards are developed by people, who like yourself, have expertise and interest in their outcome. In order for standards to be widely accepted, organizations that coordinate standards development ensure as many relevant points of view are reflected in the discussion as possible. This means that regardless of the size of your business, you can have a voice in the process.

How are standards relevant or useful to my small business?

Whether your company has three or 3,000 employees, standards can help improve the efficiency, safety and quality of your business.

If you are a manufacturer, standards may help you be more competitive and enable you to access foreign markets. If you provide a service, standards related to the certification of your employees could increase your credibility.

Management system standards for quality management, environmental management, occupational health and safety and food safety are just a few other examples of standards that offer value and opportunity to organizations of different types and sizes.



How can I find out which standards are right for my business?

Depending on your type of business, there may be different standards options to consider. The Standards Council of Canada's website (www.scc.ca) and its information officers can help you identify which standards address your business needs.

Another important source of information is your competition! Ask yourself:

- Are their products certified to a specific standard?
- Are they using an accredited laboratory for their testing needs?
- Have they put in place a management system to increase productivity, manage risk or address environmental concerns?
- More importantly, have their profits increased or market expanded as a result?

Talking to your industry or trade association is good way to tap into what others are doing.

and Medium-sized Business



Where can I purchase standards? Are they expensive?

Once you have decided on a standard, you can purchase a copy online at StandardsStore.ca in either digital or paper format. StandardsStore, a joint initiative of the Standards Council of Canada and IHS Canada, sells national and international standards. Standards can also be purchased directly from the national and international standards development bodies.

The cost of standards varies, but with some exceptions, usually fall within the \$25-\$140 range.

I've bought the standard, what next?

Read the standard. This will help you determine:

- Which requirements of the standard you are already meeting.
- Which specific areas will require improvements or changes to meet the requirements.
- Whether you have the expertise and experience necessary to make any necessary adjustments.

Many smaller companies do not require assistance to implement standards, but if you do have questions or want some help in making the necessary changes, there are different resources available depending on the standards. In some cases there are guidebooks you can consider, or you may decide to hire an expert in your field or a consultant in the area of standards to guide you through the process.



How can I prove that I am using the standards correctly?

There are a number of different options when it comes to demonstrating conformance to a standard.

- You can self-declare your compliance.
- You can have one of your clients verify your compliance.
- You can seek third-party certification or testing.

Each option has advantages and drawbacks, including the amount of credibility associated with your verification method and the amount of time and money required.

When making your choice about verifying conformity, you should take into account your own needs and those of the market you serve.





Putting
STANDARDS
to work for
health & safety

Small and medium-sized enterprises in Canada have a new ally in attracting productive and skilled workers to safe workplaces.

The Canadian Standards Association (CSA) has introduced Canada's first consensus-based occupational health and safety management standard.

The new standard, titled *CSA Z1000-06, Occupational Health and Safety Management*, provides companies of all sizes with a model for integrating workplace health and safety principles into their management practices.

Canada currently ranks among the worst of developed nations in occupational health and safety, with an average of three people a day dying as a result of workplace injuries and disease. The rate of workplace injury is especially high among young workers. More than 100,000 Canadians between 15 and 24 years old, were reported injured on the job in 2005.

Robert M. Griffin, President and CEO of the CSA Group, finds the statistics troubling.

"This is Canada, a G8 country with one of the highest GDPs in the world," Griffin says. "It's difficult to believe that more than 900 workers die every year in a nation as advanced as ours."

The new standard may help to change that. It's particularly good news for workplace safety advocate Rob Ellis, himself the former owner of an industrial kitchen equipment manufacturing company.

"When businesses want to attract bright, enthusiastic and skilled young workers, the workers that are going to support Canada's economy in the 21st century, these workers have to see that the prospective employers has the highest standards of education and training," says Ellis.

In February 1999, Ellis lost his 18-year-old son David when he died after becoming entangled in a dough mixer at a local bakery. He was on his second day of a temporary job.

"When I sent David out the door that morning, I assumed the company he was working for was operating to the same high standards

as mine," Ellis says. "I could not have been more mistaken.

"This new CSA standard is a way for small and medium-sized businesses to show that they are committed to a workplace where knowledge and safety are shared from the top down, from the executive office to every employee," Ellis explains.

The standard was developed with input from a broad range of Canadian stakeholders. It uses a Plan-Do-Check-Act approach to provide an overall framework to assist in managing preventive and protective measures, emergency preparedness, training, procurement issues, documentation, legal and many other safety-related requirements.

Integral to CSA Z1000 is the participation of all workers in the operation of the management system. Not only does this ensure that everyone understands the particular health and safety risks associated with their job, it also gives employees a chance to see how they are contributing to the organization's safety and success.

"[CSA] Z1000 differentiates us from other countries because we've



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made a real effort to engage workers,” says Leonard Sassano, Director of Strategic Alliances and Corporate Development, Industrial Accident Prevention Association (IAPA).

IAPA not only contributed to the development of CSA Z1000, it is also providing training to organizations interested in implementing the new standard.

While he sees significant opportunity for CSA Z1000 to improve workplace health and safety in Canada, Sassano acknowledges that selling the standard to smaller organizations may be a challenge:

“Small businesses have many competing priorities they have to manage day-in and day-out, says Sassano.”

For his part, Ellis is hopeful that small and medium-sized businesses will see the overall benefits of the new standard.

“To me, saying you follow a standard such as CSA Z1000 is like showing both customers and prospective employees that your company is five-star,” notes Ellis.

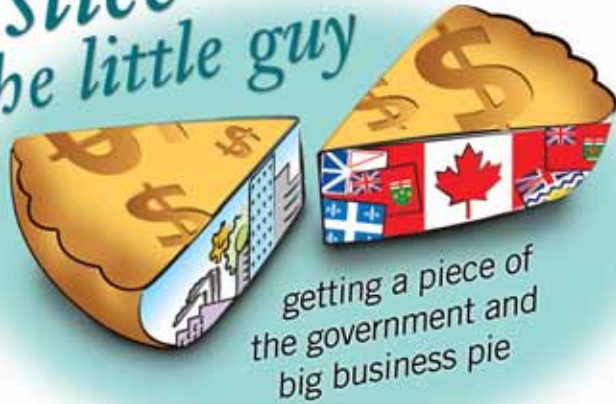
Implementing CSA Z1000 encourages a more systematic approach to meeting defined occupational health and safety objectives and helps increase awareness of health and safety in the workplace. It’s an approach Ellis sees as a win-win proposition for owners, managers and employees alike.

“Knowledge is the key – having enthusiastic employees is not enough,” says Ellis. “Following standards indicates to both employees and customers that the company is pursuing a level of excellence.”

The standard is designed to be complementary to the actions of government in tackling the issue of worker safety and to be compatible with other management system standards that a company may already have in place, such as ISO 14001 (environmental management) and ISO 9001 (quality management). ■



A slice for the little guy



ASCO Power Technologies Canada, a division of Emerson Electric, is a 65-person company based in Brantford, Ont. It supplies emergency power switching solutions to about 350 customers, including hospital data-centres, BMO, Wesco Distribution, GAL Power, Hewlett-Packard, Cummins, and Siemens. It also maintains the transfer switches on Canadian Navy frigates.

As its impressive client list demonstrates, ASCO Power is a small business that is not afraid of working with the big guys. One of the reasons for its success in winning lucrative contracts with government and big business is the credibility and competitive edge it has built through certification to standards and active participation in the development and revision of standards that impact its business says ASCO Managing Director Joe Lacko.

ASCO is certified to the ISO 9001 quality management system standard and its products meet the requirements of C22.2, No. 178, the standard for transfer switches which is referenced in the Canadian Electrical Code. Its participation in standards development includes sitting on the Canadian Standards Association (CSA)¹ committee responsible for C22.2, No. 178 and membership in the Electro Federation of Canada.

"We look at standards, and learn how to discuss them at the federal and provincial level. It's too scary to find out what would happen if we were not involved. It's in our blood to be part of standards and industry associations," says Lacko.

John Walter is vice-president of standards development at CSA. He says that in an increasingly competitive marketplace, where large organizations are dealing with multiple suppliers and tight deadlines, they regularly stipulate that the products being supplied must meet certain standards of quality and performance. This certification to a standard or set of standards often becomes a requirement of bidding for contracts.

"Whether a company is small, medium or large, if they adhere to the standard, everyone knows what they have to provide," says Walter. "The small company knows its product has to meet the standard to qualify. It allows them

to compete with companies their own size or larger because the rules are the same for all. It also prevents underbidding by people providing an inferior product."

Penny Silberhorn is the manager of the Conformity Assessment Division, Acquisitions Branch, for the Canadian General Standards Board (CGSB). She says that being able to demonstrate conformance to standards can provide a competitive leg up on government and other contracts with large organizations. She says governments look to certification bodies such as CGSB for lists of qualified suppliers. ISO 9001 is among the most sought-after certifications for small business, according to Silberhorn.

"Organizations that implement an ISO 9001 quality management system find that their operations are more streamlined and efficient," she says.

"Extraneous processes are eliminated, freeing staff for more relevant work, and managers are enabled to bring control and consistency to the operation. This in turn decreases costs by making the processes faster and cheaper."

Companies like ASCO, who actively contribute to the committees that develop standards for their industry, further improve their chances of landing big contracts, according to Rae Dulmage, director of standards for Underwriters Laboratories of Canada (ULC).

"Small and medium-sized businesses who tap into the standards system can get access to and contribute to international and national standards that will directly affect them. In doing this they may come upon opportunities and contacts that they otherwise would not make," says Dulmage. ■

¹ CSA is one of four organizations accredited by the Standards Council of Canada to develop national standard. The other three accredited standards development organizations are the *Bureau de normalisation du Québec*, Canadian General Standards Board and Underwriters Laboratories of Canada.

New regional offices to help small business win government contracts

The Office of Small and Medium Enterprises, a division of Public Works and Government Services Canada, is opening six regional offices in Halifax, Montreal, Toronto, Ottawa, Edmonton and Vancouver. The centres will make it easier for small and medium-sized businesses across Canada to bid for federal government contracts.

To learn more about government procurement opportunities visit: www.pwgsc.gc.ca/sme

TASTE *of* Success



Donald Poole, president of Essences Bonnie and Don Flavours.

Getting international recognition for your food safety management system is a big feat for a small company. This year, Mississauga-based Essences Bonnie & Don Flavours Inc. was one of the first businesses in North America to achieve ISO 22000:2005 certification.

“We worked hard to get that stamp of approval. In the end, you really gain customer confidence and tremendous credibility. Our food safety management system can now stand up to any audit,” says Donald Poole, President of the company, which manufactures flavour extracts used in a variety of foods from juices to ice cream.

ISO 22000:2005 is designed to help businesses incorporate the principles of the world-recognized HACCP (Hazard Analysis and Critical Control Point) with the disciplines and controls related to the ISO management series standards.

The company worked closely with BDC Consulting to implement the food safety management system. This also involved demonstrating compliance with applicable statutory requirements and registering the firm’s food safety management system with a recognized third-party certifier.

“BDC was an excellent partner for us and provided a solid project leader who helped take the initiative in hand. It was a lot of work, but it was worth the investment,” Poole says.

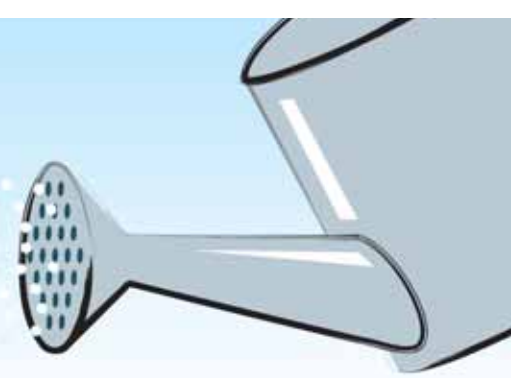
Today, Essences Bonnie & Don Flavours Ltd. is certainly beginning to see the fruit of its labour with more than 52 per cent growth in sales. He attributes part of that success to the company’s focus on quality and customer service.

“To stand out in the crowd, you need to give your clients a reason to want to deal with you. If the customer wants your product tomorrow, then you find a way of doing that,” he concludes. ■

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Greening practices, Growing profits



As the importance of protecting the environment becomes increasingly apparent, small and medium-sized businesses are asking whether it is possible to be both environmentally conscious and profitable. Two Canadian companies are showing that it is a reality with the help of standards.

Bryan Emmerson is the chief operating officer of PolyCello, a packaging manufacturer that employs over 300 people at its facility in Amherst, NS. He says he is surprised that more small and medium-sized businesses haven't picked up on the fact that being good to the environment is also good for business.

"When environmentalism first hit the stage in business, it was originally seen as an additional cost. But now many companies see that environmental processes and business processes aren't mutually exclusive; they can be synergistic," he says.

In 2000, PolyCello became certified to ISO 14001, an internationally-renowned environmental management standard.¹ ISO 14001 provides organizations with a management framework to help identify and minimize the negative impact of operations on the environment and address compliance with any relevant environmental laws or regulations.

Putting in place an environmental management system helped PolyCello identify the impact of its operations on the environment. As a result, it set a goal of reducing its levels of solid waste by 50 per cent.

With a 62 per cent reduction of solid waste to date, PolyCello has surpassed its objective by reusing a wide range of products used in processing its packaging (including batteries, empty propane tanks, knife blades and paper)



in its production cycle. This has resulted in significant savings, both from decreased fees for the processing of waste and less money spent on new materials for its products.

“If we have scrap that we can recycle instead of sending it off to a landfill, it just makes sense to do it,” says Emmerson.

To ensure that PolyCello’s environmental management practices are as effective as possible, two internal audits are performed annually in addition to the audit required for the upkeep of its certification to ISO 14001.

“The audits are a component of continuous improvement. If we did well last year, we’ll have to do better next year,” he says.

Emmerson concludes that when one considers the “big picture” in the manufacturing industry, environmental responsibility more than pays for itself.

Echoing Emmerson’s remarks a few provinces westward is Alan Alty, general manager of Laser Cartridge Services Inc.

Recycling materials has always been part of the Pickering, Ontario-based company’s operations, but standards have helped make this practice profitable says general manager Allan Alty. As a leader in the niche market of compatible toner cartridges, the company has built its business around taking empty printer cartridges from big-name manufacturers, including Lexmark and Canon, and reusing components of them. The new cartridges it makes are compatible with the original product and are less expensive.

Laser Cartridges has a quality management system certified to the world-renowned ISO 9001 standard and its products are certified to the Canadian national standard for remanufactured toner cartridges: CAN/CGSB-53.148-2004. While certification to the quality management system standard provides overall confidence in the company’s processes, product certification by an accredited third-party demonstrates that the remanufactured cartridges meets specific requirements for print quality, image density and page yield, and either meets or outperforms original cartridges. But the company’s involvement doesn’t stop at simply

meeting the standards. Laser Cartridges was part of the committee that developed CAN/CGSB-53.148-2004.

“I can’t see belonging to an industry and just sort of sitting on the sidelines and watching the industry go by, because that’s exactly what will happen; opportunities will go right by you,” says Alty.

The use of product and quality management systems standards have played an important role in increasing consumer confidence in the remanufactured cartridge because it allows Laser Cartridges to differentiate itself from companies who produce an inferior product.

“Once someone tries a compatible cartridge product, if it fails catastrophically in their printer, that bad taste is going to be in their mouth for years to come,” says Alty.

The company’s quality management system has also helped the company to better measure its success. He says

that the inputs like feedback, warranty claim analysis and performance analysis from in-house testing allow the company to measure outputs like production, bottom line and profitability.

“It’s easier to communicate the expectations of the organization when you have the measurements of the inputs and the outputs,” Alty adds. He says employees can measure their improvement against the benchmarks set by ISO 9001.

Whether it’s using standards to reduce the volume of waste sent to the landfill or to increase consumer confidence in a product made from recycled materials, companies like PolyCello and Laser Cartridges are

proving that standards can help small and medium-sized business green their practices while growing their profits. And that’s a bottom line that everyone can be happy with. ■

Putting in place an environmental management system helped PolyCello identify the impact of its operations on the environment. As a result, it set a goal of reducing its levels of solid waste by 50 per cent.

¹ ISO 14001 and ISO 9001 are two examples of international standards that have been adopted or adapted as National Standards of Canada. The official name of the Canadian adoption of ISO 14001 is CAN/CSA-ISO 14001:04, however, the shorter, more recognized name ISO 14001 is widely used, and may be qualified with the year the standard was published or revised.



All in the Family

When quality engineer Ferdinand Ulrich founded Ulrich Metrology in 1976, he thought he would carve out a niche offering dimensional calibration services to the aerospace and automotive industries. His approach was unique: provide Friday pick-up, weekend service and Monday morning delivery.

"I saw an opportunity, built a small laboratory in Laval, passed the necessary audits and managed to secure 25 clients in the first year," commented Ulrich's founder. "It really began as a professional side-line."



Thirty years later, Ulrich Metrology has hundreds of clients across Canada. While much has changed, the business has remained in family hands. Today, the Ulrich in charge is daughter Ingrid, who joined the family business in 1996.

Ingrid says that while there are many factors for the lab's success, commitment to meeting international standards has been very important.

"As a small business, we must continuously sharpen our competitive edge by enhancing our customer service and improving efficiency," says Ingrid.

"Over the years, adherence to international standards has provided us with a framework to improve our management practices, our quality standards and our service capabilities. We view standards as a tool for self-improvement and growth."

The early years

During the first decade, Ferdinand ran the technical side of the enterprise, while his wife Erika handled the administration of the business. With ISO standards not yet on the horizon in Canada, many industries needed to be convinced of the value of calibration.

"I remember going to machine shops and explaining the practical benefits of maintaining, cleaning and calibrating gauges," said Ferdinand.

"These were companies that would regularly have their typewriters serviced, yet not the gauges that affected the quality of their production. Most times, they quickly recognized the value."

Growing the business

Striving for firsts in the commercial calibration field proved to be Ulrich's path to growth and national accreditation by the Standards Council of Canada. By 1986, the company had moved to expanded facilities in Montreal and began receiving recognition for superior processes and quality. Son Anthony Ulrich, a

professional engineer, brought his skills to the technical team in 1990, and by 1994 the company was one of only four commercial laboratories in Canada to be recognized by the Department of National Defence.

In 1996, through Anthony's efforts, Ulrich became the first Canadian calibration laboratory to be certified in dimensional measurement by the National Research Council's Calibration Laboratory Assessment Service (NRC/CLAS).

"This technical accreditation was a major achievement for our company," explained Ferdinand. "It is one thing to have a quality system in place, but with CLAS, NRC professionals actually came to our laboratories to observe the team in action and assess our level of competency."

Keeping quality key

During this period of steady expansion, quality levels remained the utmost priority. Whether providing services to a multinational manufacturer or a local machine shop, the goal was always to ensure that everyone received the same level of care and attention.

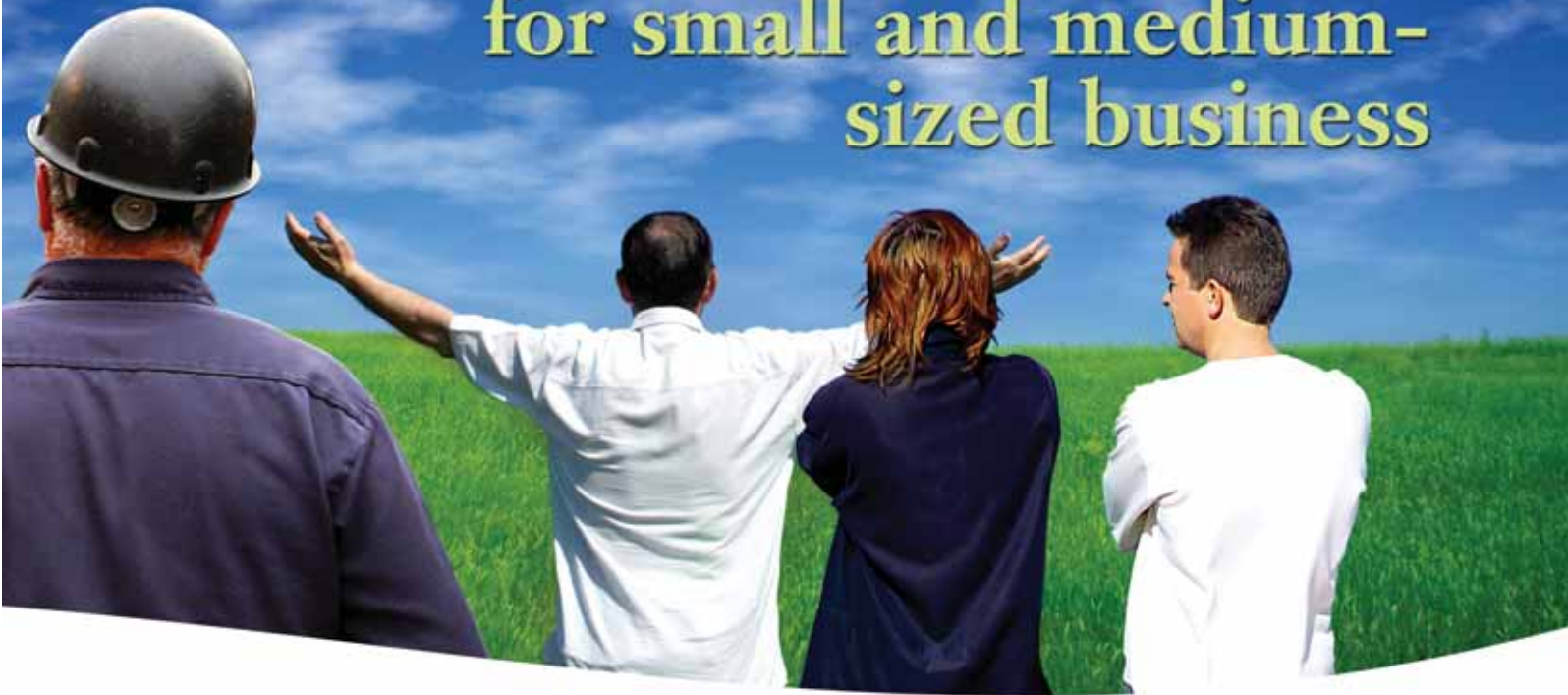
"We have never lost sight of the needs of our clients," said Ferdinand.

"When we expand the scope of our laboratories, it is because the clients need us to do so. Increasingly, they are looking for one-stop shopping solutions."

At a mature 30 years, Ulrich Metrology is an ISO 17025 accredited facility with 25 employees and significantly expanded dimensional, torque, pressure and electrical calibration capabilities. With a strong commitment to investing in equipment, facilities and technical training, Ulrich continues to be a national leader in the commercial calibration field. ■

MANAGEMENT SYSTEMS

Big challenge, bigger rewards for small and medium- sized business



Picture the Grand Canyon. Put small and medium-sized businesses on one side and the standards community on the other. Now ask the two sides to discuss the benefits and costs of management system standards. The conversation would probably sound something like this:

“Hey over there, we think that your business could really benefit from certification to a management system standard. Why don’t you come on over here and give it a try.”

“Speak up! We can hardly hear you. Did you say certification? Sounds expensive! How will it help us? Wait, our customers want...can you call back? We’re too busy to talk right now.”

At least that’s the analogy environmental management system expert Lynn Johannson uses to describe the challenge of selling a management system approach to small and medium-sized businesses.

An ISO survey of more than 2,500 small and medium-sized businesses around the world in 2005 supports Johannson’s analogy. It also echoes the results of a survey by the Canadian Federation of Independent Business in 2000. Both revealed a low level awareness of management system standards by small business. Among

those who were familiar with the standards, many saw them as too complicated to meet their needs and too costly to implement.

A change for the better

A self-described ‘change navigator’, Johannson says the Canadian economy – which is made up primarily of small and medium-sized businesses – will benefit when more organizations can take advantage of the benefits of management systems standards.

“I think the role and value of standards is only going to increase.

International trade is not going to go away and most countries are dependent on the innovation and competitiveness of their small and medium enterprises,” says Johannson.

Johannson’s long list of credentials includes president of E2M, an Ontario-based management consultancy specializing in sustainability and co-founder of the ISO 14000 Registry (www.14000registry.com). The site hosts a growing library of simple, low-cost tools for small businesses. It is also the



gateway to the EnviroReady Report, an option to confirm an ISO 14001 system using accountants.

Johannson is a Canadian delegate to the ISO technical committee responsible for ISO 14000. She also sits on an ISO task group that recently released a list of recommendations aimed at making environmental management systems standards more relevant and accessible to small and medium-sized businesses.

Innovative approaches and alternatives to certification

There are two important steps that need to be taken to increase use of management system standards in Canada, says Johannson. The first is better communication between smaller businesses and the standards community about how a robust and credible management system can result in real bottom line benefits for small businesses using real small business examples.

“In Canada and in other countries the first problem is awareness. We really don’t have a marketing arm for standards... We aren’t going to make any real progress with small business until we take a true customer approach, and take the time to understand what they need,” says Johannson.

“Small business doesn’t have the luxury of time or the profit margins that some bigger companies have, so we have to present a clear path with simple steps for implementation.”

Johannson also stresses that unlike bigger organizations that have dedicated resources for planning, the small business approach is much more likely to be drafted on the back of a napkin and tested after a coffee break.

Secondly, to be useful for smaller businesses, the standards community must look at how it can package the standard so that companies can see how the elements of a management system will help them run their business better day-to-day and see immediate

improvements in cash flow, says Johannson.

Eco-Mapping is one example of a simple yet innovative approach that can show small businesses the benefits of understanding their environmental aspects and impacts, the things they have or do that cause inefficiencies and risk. Johannson explains that up to 80 per cent of a company’s environmental challenges are location-based. Armed with pen and paper, even a micro-enterprise can draw a map of a company’s shop floor and surrounding area to identify areas of business risk quickly.

In addition to promoting simple approaches to implementing a management system, the standards community and other supporters of management systems must recognize and promote the various options that exist when it comes to verifying conformity to the standard.

“As valuable as certification should be to a company, the cost is simply not something that the majority of our micro-enterprises and small businesses can afford,” says Johannson.

In addition to certification, other conformity assessment options recognized in ISO 14001 include:

- Self-declaration,

- Confirmation of your management system by a party that has an interest in your organization, such as a customer or industry association or,
- Confirmation of self-declaration by a party external to the organization.

This option is based on the EnviroReady Report.

The conformity assessment option a business seeks will reflect market requirements, says Johannson.

“Certification should bring value, but it is not the end goal. Having a robust and credible management system that improves your productivity and competitiveness, that’s your end goal,” says Johannson.

“We need to learn how to communicate this a bit differently. Instead of selling ‘certified systems’, we need to get them in the door by marketing the standard in a way that makes sense to small business, and meets their needs. We have fewer than a thousand companies involved in ISO 14001, but there are 1.2 million legally constituted employer businesses in Canada. What a great opportunity. Let’s get going.” ■

ISO Task Group recommendations:

- Development of new standards to allow organizations to implement an environmental management system in stages
- Development of a free handbook to help small and medium-sized business implement ISO 14001 – similar to ISO 9001 Guide for Small Businesses,
- Promotion of all the options available to small and medium-sized businesses for conformity assessment,
- Broadened communication – using simplified language and terminology – about the bottom line benefits of environmental management system standards
- Guidance for small and medium-sized businesses on the use of management system consultants
- Increased involvement of small and medium-sized businesses in standards development
- Promotion of the concept of integrated (quality and environmental) management systems

In Perspective



Judy Reynolds, Senior Manager, Consulting at the Business Development Bank of Canada (BDC) talks to CONSENSUS magazine about some of the opportunities and challenges of implementing a management system for small and medium-sized businesses.

Consensus: Based on your experience as an ISO management systems consultant, what are some of barriers to small and medium-sized businesses using management systems standards?

JR: There are a number of factors. Number one is cost. That's always a factor with the small businesses, whatever the standard is. Their focus is really on growing their business, and survival in some cases. They lack the understanding of just how implementing a management system will actually help them grow and become more efficient, thereby more profitable. The cost of implementing a system should be viewed as an investment.

Consensus: There are considerably more small and medium-sized businesses certified to ISO 9001 than ISO 14001, why do you think that is?

JR: Small businesses can relate a little better to ISO 9001 than ISO 14001. With ISO 14001 they say, "Well, I don't really do a lot that impacts on the environment, so I won't worry about it." The question a small business is always going to ask when it comes to considering standards is, "Where is my bottom-line benefit on this?"

Consensus: Could you describe what you do to help a client implement a standard such as ISO 9001?

JR: My job as a consultant is to help companies develop a system that suits their business environment. We usually start with a gap analysis to see what a company has informally or formally, and what is already in place that will meet the intent of the standard. From there, we put a work plan together to say this is what still needs to be done. Once the client realizes that they don't have to have this huge four-inch binder of documentation, that a quality management system can be simple while meeting all the requirements of the standard, suddenly it changes their whole focus. It's really great when I see them turn that corner, then we can start talking about their business, their own objectives. Then they're on board; they're seeing the value there.

Consensus: BDC has identified succession planning as one of the most significant issues facing Canadian small and medium-sized businesses. What role do you think management system standards like ISO 9001 have to play in addressing this serious challenge?

JR: Many small and medium-sized businesses are reluctant to address succession planning. Most entrepreneurs see themselves as invincible, and believe they have plenty of time. They don't consider what will happen to their business when they want to retire. ISO 9001 provides a structure for the continuity of the business. Particularly in a family-run business, where the second generation may not have the same skill level as the first generation, the standard can provide the structure they need to manage that business.

Consensus: What advice would you give to a small business looking for a consultant?

JR: It's important to ensure that the person you are working with has consulted on implementation of a management system before and has the necessary training. A good consultant needs to go beyond simply regurgitating the standard to figuring out how to make it relevant and simple to use for the company. ■

Business Development Bank of Canada (BDC) is Canada's largest single source of ISO consulting. It has helped over 3,000 companies apply management system standards to its businesses. www.bdc.ca



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