Figure 11.16b. PROCESS IMPROVEMENT STRATEGIES: Total Quality Management 2

The Globe and Mail Report on Business of Tuesday, October 26, 1993, printed a four-page collection of articles on Total Quality Management (TQM), with the introduction:

> **The experience** of some executives with total quality management has been a corporate version of yogic flying: many platitudes, occasional flapping about, but little to show for the trip. Others, however, who have applied the principles carefully, report significant dividends.

The ten articles from this Report are reprinted in this Figure 11.16b

EM9344: The Globe and Mail, October 26, 1993, page B25

THE LONG VIEW / *Many firms embarking on TQM programs are doing so for the second time. But now they are more realistic.*

Breaking the information barrier

BY CAREY FRENCH
Special to The Globe and Mail

DAVID Beatty likes to say that "at 30,000 feet" he has a pretty good take on business at ground level.

That's not so much a reference to job-related travel as to the altitude at which he operates. It's a long look down from his job as president of Toronto-based **Weston Foods Co. Ltd**., with its 42 plants and annual sales of $1.8-billion.

Five years ago that view was too often clouded, but a commitment to breaking the information barrier between management and the shop floor has largely cleared the skies and yielded what Mr. Beatty describes as "significant" improvements in five of Weston's seven operating companies.

Outside observers say that's the kind of success that can be claimed by only 20 per cent of Canadian companies that have embraced the total quality management philosophy since the early 1980s.

The failure rate caused many chief executive officers to charge that they had been subjected to the corporate version of yogic flying: many platitudes, occasional flapping about, but little to show for the trip. TQM defenders responded by likening critics to fitness dilettantes who, while feeling good about the purchase of home rowing machines, expected to lose weight without breaking a sweat.

At Weston, where the bad odour sometimes associated with TQM is diffused by calling it something else (continuous improvement), the distance travelled and the perspiration appear tangible.

Absenteeism at cookie manufacturing plants in the United States has been halved, while time lost to accidents per 200,000 hours at the same operations has dropped to zero, said Mr. Beatty. Landfill and "down-the-drain" waste has been cut by up to 30 per cent a year and two plants – including the Canadian Readybake frozen dough operation – have received external recognition for progress.

Total quality management first appeared in the East, the brainchild of U.S. statistician Dr. W. Edwards Deming, who is credited with showing the Japanese how to transform a reputation for shoddy goods into one of cast-iron quality.

Japan is still the world leader, says international consultant and author William Conway, chairman and CEO of Conway Quality Inc. of Nashua, N.H.

He places the United States up to 10 years behind, with Canada slightly trailing its southern cousin. Northern management appears slightly "more resistant to change," he said. "But that's an opinion I can't prove."

Still further behind are the Europeans, led by the British, said Mr. Conway, who was interviewed at his Nashua home hours after returning from a TQM conference in Britain.

In France and Germany, resistance has been heavy. This is particularly true of auto makers such as Daimler-Benz AG and Bayerische Motoren Werke AG (BMW). "They thought they had the best quality in the world. But what they didn't want to face up to – until two or three years ago – was that they had four or five people for every one that Toyota had."

Both Germans and the Japanese car makers produced quality products but, until recently, only the latter had control over the quality of all aspects of the business.

Sectorally, the leaders in the TQM race in Canada are the automotive, photocopying and computer industries, said John Long, senior principal of management consultants Ernst and Young.

Many of the companies now embarking on such programs are doing so for the second or third time around, he said in an interview in Toronto. But this time the approach is more realistic.

North Americans made the mistake a decade ago of assuming that they could copy Japanese TQM culture – three decades in the making – and leapfrog ahead within two years, Mr. Long said. Now it is generally accepted that the route to TQM Nirvana has to be developed internally, eventually taking on a life of its own.

Weston Foods' Mr. Beatty says that at the

ARE YOU A LEADER?

Successful exponents of the inclusive style known as total quality management are sometimes "naturals," but the best practitioners have often had to struggle to abandon more comfortable "theirs is not to reason why" habits.

If you can answer the following 10 questions in the affirmative – or can learn to do so – you may fit the profile of a TQM leader. Are you:

1. Capable of making people want to do something you think is important, rather than being a mere dispenser of orders?
2. Are you able to view employees as "customers" and not serfs?
3. Can you give credit to your people when they succeed and take a "bullet" for them when they stumble?
4. Can you see what's "right" about fragile new ideas? (It doesn't take a genius to point out what's wrong.)
5. Can you make decisions based on facts and data rather than ego, opinion, authority or eloquence?
6. Are you a listener rather than a talker?
7. Are you able to find the "lessons" in mistakes, rather than dispensing retribution? Instead of asking "who screwed up," can you ask "what process went wrong?"
8. Are you able to be personally involved in TQM as a leader, instead of delegating?
9. Do you view education as a lifelong process?
10. Are you able to offer rewards to the team rather than the individual?

Source: Conway Quality Inc.

(*continued overleaf*)

core of his organization's success are 30 home-grown and highly detailed case studies – including a work-order system that requires management response to shop-generated quality improvement suggestons within 24 hours.

Management by fiat is out. Listening, acting and measuring is in.

And of the two-out-of-five companies reporting to him that have yet to buy the TQM philosophy?

Mr. Beatty won't identify them, but he says the problem is "the message couldn't get through. ..... There are too many layers between top and bottom."

Supervisors, who cut their teeth on "leave your brains at home and do what I say" management. have a tough time "empowering" underlings, he explained. And in the layers between senior executive managers and supervisors, people are fearful of being labelled as mere reprocessors of information coming from below.

That may have a dark message for some middle managers at Weston, but the reason for the appallingly high failure rate of such programs is often to be found higher up, according to most TQM devotees.

"Fundamentally shifting the stucture of an organization is certainly not going to occur so long as top management believes it can delegate quality to lower-level managers," says Ken Merbler, president of Proudfoot Canada, part of the London-based management consultancy, Proudfoot PLC. "You can't delegate quality or create an isolated department to look after quality."

Other culprits include too much focus on the process of education, too little on implementation and an inability to hold TQM programs to account.

"One of the key ingredients is solid measurement," he said. "And it shouldn't take two years – you're looking for results within two months."

EM9345: The Globe and Mail, October 26, 1993, page B25

CASE STUDY / *Dairyworld moved quickly with TQM, deciding that it could only succeed with leaders trained to foster new ideas*

How one firm made it through the turmoil of a merger

BY WENDY STUECK
Special to The Globe and Mail
Vancouver

WHEN Dairyland Foods merged with two Alberta dairy cooperatives in July, 1992, the result was a food-processing powerhouse with nearly 3,000 employees and annual sales of close to $1-billion.

It also created a continuing challenge for the new Burnaby, B.C.-based company, which now operates as **Dairyworld Foods**: making sure a quality process that had been launched five years earlier did not stray off course.

Dairyland began working on its quality management in 1988, gradually introducing skills and awareness training for its employees, says Tom Low, Dairyworld's manager of training and development.

When Dairyland joined forces with its one-time rivals, that process had to accelerate. Before the merger, Dairyland had been facing increasing competition from cheaper U.S. goods. At the same time, it was watching competitors from Central Canada move into Alberta and British Columbia.

WHILE the merger made good strategic sense, it threatened to wreak havoc on management and training processes that were still being ironed out.

"In the past, this sort of change has taken place on an evolutionary basis," Mr. Low says. "But that won't keep up with the pace of change in our market. The merger was a revolutionary change – there was a lot of pain, which included some downsizing.

"We decided to become the company we wanted to be by managing change, not just letting it happen to us."

As soon as the merger was complete, Dairyworld extended quality awareness training into Alberta operations and took steps to ensure that training stayed on schedule in British Columbia. (The parties to the merger were Dairyland, the Northern Alberta Dairy Pool of Edmonton and Red Deer-based Central Alberta Dairy Pool.)

Downsizing, including the shut-down of some Alberta plants, made employees leery of new management ideas.

"We had to reinforce the concept that once the dust settles, there is a plan for this company. And regardless of where people are in the organization, they will know where they fit."

The process now underway at Dairyworld has nothing to do with quality products, which are a given in the industry, Mr. Low says. Instead, the process is geared toward giving Dairyworld an edge over its competitors through better customer service and increased efficiency.

All non-union managers take a six-day course on team development, with the company now running four sessions a year. Despite a much heightened focus on training, Dairyworld is not spending proportionately more money on staff programs than it used to, Mr. Low says.

"Some organizations are spending 3 or 4 per cent of their budgets on training. We are lower than that. Because if you just throw money at it, and put in a bunch of super programs, it's still a waste of money if you don't see results."

The payoff will come, says Mr. Low, when the new decision-making culture spreads throughout he organization.

"I would love to say I have a set of numbers, but rght now I don't. But if it shows up in customers who are willing to do business with us, we know we are winning on the bottom line."

Circuit Graphics Ltd. has also pursued quality for its customers' – and its own – sake. Based in Burnaby, the 80-employee company obtained its ISO 9002 certification in December, 1992, and is expecting its next compliance audit in January, 1994.

DEVELOPED in 1987 by the International Organization for Standardization, ISO is now a common benchmark around the world. To obtain certification, companies must pass an audit.

It took more than two years for Circuit Graphics to get its house in ISO-ready order, says quality assurance manager Megan Payne. By certification Circuit's customers can be assured of certain levels of things like process contols and training, without having to spend their own money on costly audits.

"And in the long run," says Ms. Payne, "this system enables us to make a higher-quality, lower-cost product."

Common wisdom has it that companies turn to total quality management as a last resort. But **Finning Ltd.**, a Vancouver-based equipment retailer, launched its quality process in 1990 after six consecutive

(*continued*)

Figure 11.16b. PROCESS IMPROVEMENT STRATEGIES: Total Quality Management (continued 1)

EM9345: (cont.) years of record revenue and profit.

Finning moved cautiously, spending two years studying quality management before it made any changes, says Ron Clark, general manager of branch operations. The company adopted what it calls a cascading philosophy of orientation and training, moving concepts through senior managers, middle ranks and then to front-line employees. It is currently working toward ISO certification.

WITH 3,600 employees, Finning took on a big job when it decided to change its corporate culture.

"We've turned the corner now, Mr. Clark says. "People are approaching customers differently than they were four years ago. We're at the point where TQM is an integral part of our business plan."

Getting there has not been easy, he adds. Material supplied by quality consultants had to be modified to suit Finning's needs, and theories had to be tested before employees were convinced.

"Quality principles are just one leg of the milking stool," agrees Mr. Low of Dairyworld. "You've got to have leaders who allow people to try new ideas. And then you've got to have a recognition system that says to those people, 'Yes, you've got it right.'

EM9346: The Globe and Mail, October 26, 1993, page B26

IN THEIR OWN VOICES / *Executives whose companies use the expression in promoting their business explain why to freelance reporter Edward Trapunski*

Quality is the magic word for corporate slogans

Special to The Globe and Mail

WHAT'S in a word?

When the word is "quality," there are as many definitions as there are corporate slogans that feature it.

A number of executives whose companies use the expression in promoting their business – and who embrace total quality management – enlarge on the concept.

JIM O'CONNOR

President and chief executive officer, Ford Motor Co. of Canada Ltd., Oakville, Ont.

Slogan: Where quality is Job 1.

"Quality is Job 1 is more than a slogan. It's one of our guiding principles as far as operating the company. Quality is trying to establish complete confidence in our products, something that you as the consumer can always rely upon, something that always meets or exceeds your expectations, and something that you tell your friends about. We are trying to achieve customer satisfaction. Customer satisfaction will hopefully lead to owner loyalty.

"There are statistical definitions when you benchmark quality and you think of things gone wrong with the vehicle. But you also try to achieve quality with things gone right. Parts of the touch zone, things that people see and touch and feel every day, that they can say are things gone right with my car. So it's a combination of trying to reduce things gone wrong and increase things gone right.

"We've recently developed some operating standards both in sales and in service for our dealerships. We are even having the dealers measure us, which is a new trend. We always used to have the consumers measure our dealers; now we're having ourselves measured.

"All these things support total quality management. You have to spend a ton of time on training. Training is probably one of the most important keys. We'll average about 324 hours of training. We listen to our employees because the people closest to the problem are closest to the solution. That's total quality management by my definition. Just because the boss puts a plaque up on the wall doesn't make it total quality management. You have to walk the talk."

PETER BERESFORD

Vice-president and national director of marketing, McDonald's Restaurants of Canada Ltd., Toronto.

Slogan: Quality, service, cleanliness and value.

"When you look at quality in our business you have to look at all aspects. Quality refers to highest quality raw ingedients that we use to prepare our products. It's part of an extentive training program and operation system that ensures that we consistently deliver high-quality products as finished products to our customers.

"It deals with the selection process that we use to choose our fanchisees. It talks about selecting the best employees. It talks about the quality of our suppliers. So to me, the term quality permeates every aspect of our business. .....

"You have to establish yourselves as a customer-driven company in the minds of your customers. You have to meet certain levels of expectation. They know what to expect. They expect high-quality food in pleasant surroundings and we have created that level of expectation.

"The second point is the quality of the service, again a level of expectation. If you saw in a restaurant a young child who might have just purchased an ice cream cone and it dropped on the floor, our customers would expect McDonald's to replace that ice cream cone and make that young child smile. The level of expectation is the quality of service.

"We have introduced our own total quality management program that we call McDonald's Quality Management. It is basically a business management philosophy driven by a single-minded focus that's 100 per cent customer satisfaction."

MARK LUKOWSKI

Vice-president and general manager of Motorola Cellular Canada, a division of Motorola Canada Ltd., Toronto.

Slogan: Quality means the world to us.

"Our definiton of quality is to have the most reliable products for the end user, that work every time and work right every time. It really comes down to the commitment we have internally to make sure that we meet those high-quality standards.

"There are many corporate initatives. One of them is the Six Sgma initiative that we implemented within the Motorola Corp. to make sure that we have no more than three errors per million opportunities in the products and services that we provide. We measure ourselves on a continuing basis to see how well we achieve that quality rating.

"What do we do to actually get there? Is there one magic thing that we do? The way that we work at achieving this is doing many things right and trying to do everything we do right. It means that when we build the product we have all the components that meet the standards. It means that when we do all the testing we test the product in every type of situation.

"If we are processing an order, it means that we take all the

(*continued overleaf*)

order information correctly up front so that we minimize any errors in shipping or invoicing after. It means trying to do everything correctly the first time, but more importantly continually benchmarking yourself as you move along."

TOM WATSON

Vice-president and general manager, Xerox Consulting Group, a division of Xerox Canada Inc., Toronto.

Slogan: Leaderhip through quality.

"It is the central business strategy for the company. The meaning is to meet customer requirements as a strategy to achieve business results. It is a continuous improvement system.

"Perhaps if we talk about it on a work-team level or a work-group level as opposed to macro, it involves informing the people doing the work of all the requirements related to those activities. It's defining the boundaries for their activities, encouraging them to define their customers' requirements.

"What it should mean is that the performance of the end product, if not perfect, is as close to faultless as technology will allow. Most, if not all, of the imperfection that people can build in is avoided.

"Our business strategy is a total quality management strategy. All the extra words are just intended to emphasize the holistic nature of quality in the sense we are talking about it."

EM9347: The Globe and Mail, October 26, 1993, page B26

Bid for award can set new path

Special to The Globe and Mail

The ultimate recognition of quality in Canada is the Canadian Awards for Business Excellence Total Quality Award. The competition for the trophy is intense, and the judging process is rigorous, including a site visit by a team of examiners.

Although there is no cash component to the award, entrants claim that just applying is worthwhile, since it focuses the company's attention on its quality procedures. Winners get exclusive use of the CABE logo, which many view as a competitive advantage. The CABE Total Quality Award is growing in prestige toward that enjoyed by the U.S. Malcolm Baldrige National Quality Award. The other CABE categories are entrepreneurship, environment, industrial design, innovation, invention, marketing and small business.

There can be as many as three Total Quality winners each year. Last year, two companies emerged on top: the **General Motors of Canada Ltd.** Windsor trim plant and the **Texas Instruments Canada Ltd.** materials and controls group in Richmond Hill, Ont.

This year there are three finalists, with the winners to be announced on Nov. 30. **Ford Electronics Manufacturing Corp.** in Markham, Ont., the **IBM Canada Ltd.** Toronto maufacturing plant, and **NCR Canada Ltd.'s** imaging systems division, Waterloo, Ont., plant all earned finalist status.

This 10th anniversary is a transitional year for CABE. Its administration is being taken over by the National Quality Institute, an independent organization funded by government and industry to promote total quality practices. For its first 10 years, Industry and Science Canada managed the CABE program and will continue to oversee the exacting adjudication process.

One of the examiners is quality management consultant David Hutton. Applying for this award, he says, can get a company started on a total quality plan, then keep it going on a quality route.

EM9348: The Globe and Mail, October 26, 1993, page B27

LABOUR / *An expanded role in the decision-making process helps convert skeptics*

A question of survival

BY CAREY FRENCH
Special to The Globe and Mail

WHEN workers at the **MacMillan Bathurst Inc.** packaging plant in St. Thomas, Ont., were asked to join teams targeting waste and inefficiency, the first reaction was fear.

The total quality management program, a weapon in the fight to keep the aging corrugated packaging plant alive in a market threatened by environmental pressures and declining prices, was first viewed as a strategy "to get us to eliminate our own jobs," says press operator Frank Buczkowski, secretary-teasurer of Local 1500 of the International Woodworkers of America, Canada. "We didn't jump into this with open arms. We sat back and said: 'Let's see what they've got to offer.'"

In the two years since the program was installed, the barriers of suspicion have crumbled and productivity has improved. But up to 10 hourly rated and two supervisory jobs have gone out the door.

"If a company goes the TQM path seriously, there's going to be a lot of jobs that disappear," concedes consultant John Petrie, director of Toronto-based Conway Quality Canada. "That doesn't necessarily mean people, but if the work disappears ....."

And it's not always the inefficient, the lazy or the incompetent who are targeted. Sometimes a job can be made redundant by detection of errors before they occur – the keystone of TQM. What happens to the worker in "the department that catches screwups? Why should he get involved in TQM?"

That's a question, when not answered up front, that has contributed to the failure of many TQM programs. Unions have labelled such strategies – with some justification – as "feel-good" pegs upon which to hang the downsizing hat.

"It was seen as catch-all for all the ills and measures to deal with excess capacity," says Beverley Paquette, a Toronto-based partner with management consultants Ernst and Young. "But TQM should not be something labour should be scared of. It does give greater participation: a greater chance to see where a company is going."

Where the total quality philosophy is applied properly, between 5 and 10 per cent of players typically embrace the concept with open arms, while a similar portion of both management and labour "won't do it no matter what," said Conway's Mr. Petrie. How to bring the remaining "wind checkers" on side means spelling out the alternatives. Nowadays, the alternatives to TQM are likely to mean "bringing in the slash-and-burn consulting firms, who are going to go through the place with a meat axe."

David Shaw, production manager at the MacMillan Bathurst plant in St. Thomas, didn't dance around the choices when he

(*continued*)

Figure 11.16b. PROCESS IMPROVEMENT STRATEGIES: Total Quality Management (continued 2)

EM9348: (cont.) asked unionized workers to buy into TQM. He didn't have to. Lacking the size and equipment of many of its compettors, the plant was – and is – vulnerable in a provincial industry that may be able to sustain only 16 of 21 such operations.

Mr. Shaw says he hasn't won over all of the skeptics. "Forty to 50 per cent are actively participating in teams, 5 to 10 per cent are actively against it; the rest are on the sidelines." But two years ago "only about 10 per cent were on side."

Productivity has improved by 13.5 per cent since then, specialty lines have been introduced and, were it not for a price drop of 10 per cent and declining volume, the plant would have been in the black by 1992, instead of reporting substantial loss.

A good slice of the improvement came from giving shop floor teams real muscle to devise and implement change.

"We know better how to fix the product than a paper pusher," said the union local's Mr. Buczkowski. Management "gave us the tools and a budget to work with ..... I can't remember anything Dave [Shaw] turned down."

One improvement included providing tools for machine operators to perform simple repairs and maintenance, the press operator said.

"The way the economy is going – if you don't have these quality progams in the plant, then yours is the plant, or the industry, that isn't going to survive.

EM9349: The Globe and Mail, October 26, 1993, page B27

How the experts tend their own shop

A shift to management quality at Andersen meant full-scale reorganization

BY CARLIE ORESKOVITCH
Special to The Globe and Mail

How does a company that specializes in telling others how to run their affairs go about keeping its own house in order?

In the case of Andersen Consulting, the international firm of management and technology consultants, the answer is a formal program of total quality management. The organization has more than 26,000 people in 151 offices in 47 countries. In Canada, more than 700 professionals operate out of offices in nine cities.

One element of Andersen's TQM program involves a client report card – and Andersen is pleased with its marks.

Robert Duelks, managing partner, services, is in charge of quality initiatives in Andersen Consulting Canada's Toronto office. He says getting a formal evaluation has not changed the way the company traditionally addresses issues.

"One thing Andersen is very good at is listening to clients and addressing their concerns," Mr. Duelks says. "This survey assures us that we're listening to all clients and enabling and encouraging every client to give their input."

The current quality management program replaces a "quality assurance" system that had been in place for about 18 years. The old system involved assessing quality at various checkpoints that had been established in consultation with clients, and meant bringing in another partner armed with an extensive set of checklists every three months. The problem is that, "assurance implies checking rather than managing," Mr. Duelks says.

Four years ago Andersen decided that deeply embedded quality factors would be better than a periodic checklist, and came up with a comprehensive two-part quality management system, one part focused internally and the other on the client.

This company-wide shift to management quality entailed a reorganization from the top down, from the creation of a chief quality officer at world headquarters down to local management groups where the detailed work is carried out by quality councils.

"The purpose of the quality council team is to look at the processes in the office and the way the processes support the primary mission in the life cycle of the project," Mr. Duelks says. These councils, which meet about every six weeks, share best practices and successfull changes, an inventory is made and others are encouraged to adopt the principles involved.

The other part of this quality goal is the external review, a standard survey that asks clients to note their satisfaction and evaluate certain items of importance such as how well they felt the company consultation team scored on factors such as timeliness – how quickly we were able to respond and deal with a problem or situation and implement a solution, and the ease of accessibility of getting questions answered."

Mr. Duelks notes that clients may be more frank in their assessments when faced with a confidential survey, and will provide a "comprehensive view of what our clients have been thinking about us."

The survey involves 28 questions, which clients rank on a five unit scale. Andersen sevices received an average of 4.7 in the latest results.

This was only the second year using the survey, but Mr. Duelks says that there was a significant improvement over the first year figures because of the changes that had been implemented.

He notes that asking such questions closes the loop in their service, and has the function of showing whether they have been successful or not, whether changes were beneficial. "If it was easier for us but not better for the clients, then it has not been successful," Mr. Duelks says.

EM9350: The Globe and Mail, October 26, 1993, page B28

CMA's Compete to Win lures firms

Devotees report that benefits of the program show on the bottom line

BY NATTALIA LEA
Special to The Globe and Mail

The Canadian Manufacturers Association aims high with its continuous improvement system – Compete to Win.

Improved employee morale, increased profitability and productivity, and more effective communication between managers and front-line staff are some of its goals.

More than 100 companies have signed up so far for all or part of

(*continued overleaf*)

the flexible training program, which is undergoing continuous improvement itself, and can be adapted to any size organization in any sector. Devotees range from multinationals like Dow Chemical Canada Inc. to smaller businesses like Mustang Engineered Technical Apparel Corp. of Richmond, B.C.

Since April, 1991, Compete to Win has grown from three key components to eight, ranging from vision and leadership to team development and day-to-day improvement.

Survival in today's increasingly competitive global economy was a reason **Lennox Industries (Canada) Ltd.** of Toronto signed up two years ago.

"Employees are the major asset to the company, and they're part of the solution," said Patricia Maguire, director of human resources and quality at the company. "The question is, how do you bring people alive to their full potential? ..... How do you stop them from parking their brains in the lot every morning at nine and picking them up after five?"

Consumers Glass, a division of **Consumers Packaging Inc.** of Toronto and mattress manufacturer **Simmons Canada Inc.** of Mississauga, give Compete to Win a measure of credit for improvement in their bottom lines.

After three consecutive years of losses, Consumers Glass reported profits for the first two quarters of 1993. President Jim Bacon said: "Compete to Win has absolutely been a strong factor in improving the bottom line." At the end of the third quarter this year, Consumers Glass was showing a profit of 13 cents a share, compared with a loss of 74 cents a share a year ago.

And two years into Compete to Win, Simmons reported reducing finished goods inventory by 50 per cent, space requirements by 38 per cent and order-cycle time by 90 per cent.

Simmons president Patrick Thody said Compete to Win has resulted in improvement in a great many areas of the company's operation. "The challenge was to get middle managers and supervisors to accept the change. Traditionally, we tell people what to do, now we ask them for their input and that's threatening. ..... It's taking a lot longer than we thought ..... and created a lot more demands on management because employees expect results when you ask them to get involved."

Compete to Win is administered for the CMA by Toronto-based Gilmore & Associates Learning Systems Inc.

EM9351: The Globe and Mail, October 26, 1993, page B28

TWO SOLITUDES / *Suppliers and customers are often at odds when it comes to consumer surveys*

Satisfaction can prove elusive

BY CAREY FRENCH
Special to The Globe and Mail

SUPPLIERS and customers too often speak different languages when it comes to measuring consumer satisfaction, two Toronto management consultants warn.

Ken Merbler, president of Proudfoot Canada, a unit of **Proudfoot PLC Co.**, says a retail industry survey conducted in the United States by his company identified a "definite gap" between the perception of "quality delivered" and "quality received."

The survey of 51 top executives of discount and department stores with annual sales of $10-million or more found that most respondents believed quality of service in their stores had improved markedly in the previous year.

"However, most of the more than 1,000 customers interviewed .... say the quality of service hasn't changed at all," the consultant said. Only 20 per cent of consumer respondents noticed any upgade in the level of service.

Mr. Merbler said a separate poll by the Angus Reid Group in Canada also spotlighted a communications gap between consumers and retailers.

In the survey of more than 1,500 Canadians, "91 per cent said it is very crucial for companies to build trust among employees and customers in these tough economic times. Yet most Canadians believe there hasn't been much progress in this area."

Only 28 per cent of those surveyed described companies as more believable than in the past. Another 21 per cent thought the business message to be less credible.

Customer satisfaction consultant Michael Hepworth, head of Hepworth & Associates Inc., said suppliers are being led astray by their own surveys that ask the wrong questions, often in the wrong way.

Thus, robot telephone-answering systems – the source of much loathing among frustrated callers – might take on a friendlier face if users were asked to rate, on a scale, the importance of being answered within three rings.

'Either people measure too frequently and can't react to the data quickly enough, or they measure only once a year, which is too infrequent to keep people's feet to the fire.'

"Importance scales provide you with absolute importance rather than relative importance," Mr. Hepworth said.

"If you talked to the customer, you'd find [a speedy response to a phone call] is not terribly important. They [might] say it's more important that the first person who picks up the phone is able to solve their problem."

While most companies have abandoned the "we know what our customers want" philosophy, "the statement is implicit in the way they design satisfaction questionnaires without first getting input from customers," Mr. Hepworth said. This leads to questions that focus strictly on the hard issues, like delivery and accuracy, rather than on the soft, or intangible, issues.

This might lead an airline to believe that its customers are more concerned with punctuality than clean washrooms. Customers rarely jump ship because of a late takeoff or arrival, he said.

"On international flights, dirty washrooms [occur] less frequently [than delays]. And yet they cause more damage" in terms of consumer dissatisfaction.

Another trap may be the frequency with which surveys are launched, Mr. Hepworth said.

"Either people measure too frequently and can't react to the data quickly enough, or they measure only once a year, which is too infrequent to keep people's feet to the fire."

(*continued*)

Figure 11.16b. PROCESS IMPROVEMENT STRATEGIES: Total Quality Management (continued 3)

EM9352: The Globe and Mail, October 26, 1993, page B28

Surveys help not-for-profit groups

Organizations find the very act of doing a study can improve client relations

BY GREG TOPOLSKI
Special to The Globe and Mail

Mr. Topolski is an Ottawa consultant.

Not-for-profit organizations are making greater use of customer service surveys to help them reach their markets.

And many of them are finding that such surveys are the easiest way to launch total quality management initiatives. When done well, they can yield more than just statistics – they can create a co-operative link between the organization and its clients.

The very act of doing the survey can improve customer satisfaction.

To the Student Federation of the University of Ottawa (annual budget $5.5-million), a survey delivered employee support and savings. The federation's survey of students regarding a campus retail outlet was "a real eye-opener," says Mike Aucoin, vice-president of finance. The student federation placed computers loaded with an on-screen questionnaire in high-traffic areas around campus. Students entered their answers directly into the data bank. Having customer satisfaction data and comments made it easier for Mr. Aucoin to gain support for needed changes.

The approach helped in other areas, too. "By getting our employees into it and focusing on what the students really wanted, we were able to halve the budget for our orientation week this year [saving $130,000]," he said. "And student satisfaction more than doubled."

Canada's Export Development Corp., a Crown corporation with more than $9.5-billion in annual business volume, tracks its success rate through a customer satisfaction index. The corporation's accountants like the CSI because it gives them a number to crunch at the end of the year.

"We only track things that we can do better – turnaround time, reliability, service, quality, etc." says Agatha Ronald, the project manager who designs and runs the system. "We want to help Canadian companies compete better in the global market," she says. EDC has found satisfaction measurements "very useful." Last year, business volume per employee at EDC increased 39 per cent to $18.6-million.

Political parties and organizations such as the United Nations Association of Canada, Amnesty International and Friends of Canadian Broadcasting use mail surveys for gathering informaion and more. By asking their supporters for their views and showing them that their opinion is wanted, they are more likely to send a donation back with the survey.

Surveys can also be a way of educating clients about what you can do for them. The Carleton County-Law Association is starting its total quality management initiative with a new survey that has been designed to educate Ottawa-area lawyers about CCLA services, and at the same time find out how lawyers feel about the association.

"We found you can do a lot with a 10-minute survey if you design it properly," says Karen MacLaurin, executive director of the CCLA.

QUESTIONS, QUESTIONS

Tips for doing a customer survey:

- Determine what the objectives of the survey are. What do you want to find out and who will you survey?
- Design the survey so that it is easy to fill out and won't take more than 10 minutes to complete.
- Start with simple questions to ease the respondent into the questionnaire.
- Where appropriate, stick to yes/no questions.
- Design your more important questions so that respondents can easily check off boxes using a five-point scale for rating: poor/satisfactory/good/very good/excellent.
- Break it down into no more than seven logical sections.
- Allow space for comments and prompt people to comment with a leading question.
- Remember to ask basic questions that determine who the respondent is and how often he or she purchases from your organization.
- Make it easy for people to return the questionnaire by including a self-addressed envelope or a fax number.
- Include a covering letter that explains the objective of the survey, ensures confidentiality (if appropriate) and encourages customers to respond. To increase the response rate, offer a prize, such as being entered into a draw for a free membership.
- Don't get caught up in the statistics; it's more important to know if it's 20 or 80 per cent who are satisfied than whether the survey is accurate to plus or minus 5 per cent.
- Pretest the questionnaire with a small group of representative respondents.

EM9354: The Globe and Mail, October 26, 1993, page B28

Environmental controls make some companies turn green

Cleaning up operating practices does not threaten endangered profits

BY ANNE KERR
Special to The Globe and Mail

It has become a motherhood issue for smart companies to care about Mother Nature. Curbing pollution can cut costs and avoid pricey lawsuits and regulatory battles. It's also good public relations.

But some companies still turn green at the thought of environmental controls.

They're afraid such measures could jimmy their works and threaten already endangered profits. Only one-quarter of Canadian businesses have adopted significant pollution prevention programs, according to Randy Billing, a partner in environmental services at Ernst & Young of Toronto. He advises companies on what's known as TQEM – total quality environmental management. TQEM not only cleans up operating practices, Mr. Billing maintains, but the bottom line.

(*continued overleaf*)

"The basis of this is that it improves your competitive position," he said. "You can bring costs down by reducing defects and waste. It's a preventive approach to problems rather than dealing with them at the end of the pipeline."

One convert to eco-economics is **Quaker Oats Co. of Canada Ltd.** in Peterborough, Ont. The company's largest plant, which makes all of its breakfast cereals and oat products, produced about 4.5 million kilograms of waste in 1986, just before controls were put in place.

This fiscal year, the waste dropped to 450,000 kilograms. In the past seven years, Quaker has saved $395,000 in landfill costs. Another $780,000 has been preserved by simply cutting down on spills, using less material in startup and selling surplus cardboard and plastic to recyclers. Edible waste goes to animal feed companies.

Quaker is now considered a leader in environmental practices in Canada, although it didn't intend to be.

"We knew we were losing money on our lines and that's what made us look at what we were doing. It didn't start out as environmentally driven," said Alan Wilson, manager of engineering and environmental at Quaker Canada.

Virtually all of the money that has been saved has been poured into improving other problems. A new cooling system that recycles used water rather than spilling it back into the Trent River, for intance, cost $1 million.

Expenses like that can scare off even the environmentally committed. Mr. Billing concedes that a comprehensive overhaul doesn't come cheap. The kind of system he provides can cost "in the hundreds of thousands."

That's one reason why the Canadian Manufacturers Association advocates that companies go slowly when introducing controls. The other is that a less demanding system is more likely to succeed and lead to other advances.

"You don't go to a golf pro to bring you down to 68 if you're shooting 110. What you've got to do is go from 110 to 90," said Bent Larsen, vice-president of CMA member services.

Some companies, notably in the United States, where quality management is more pervasive, have found that it hasn't worked. The CMA itself weathered one experiment with a system that, instead of solving its problems, created bigger ones. Now, along with outside consultants, it trains Canadian companies in the International Standards Organization (ISO) 9000 system, which is less intensive than TQEM.

Competing camps aside, in order to succeed, any environmental program must have unflinching support and involvement from top management. Employees then have to be trained and motivated. Environmental audits must be carried out.

Noranda Inc. of Toronto has found that it's not an easy process. "Success varies plant to plant. It depends on how much the plant manager believes in the quality approach," said Frank Frantisak, senior vice-president of environment.

He says Noranda is mining good results by encouraging those on the shop floor to take initiative. "There was a case where a maintenance person came across a seepage of mine water that could have been a problem. He took immediate action and pumped it back in because he didn't have to go to his boss."

Other examples have greater impact. Noranda's large copper smelter in Rouyn, Que., has reduced its emission of sulphur dioxide by 70 per cent more than the 50 per cent required by law and will have it down to 90 per cent by the end of the decade, Mr. Frantisak maintains.

Not surprisingly, resource companies like Noranda tend to be the most advanced in TQEM. It isn't true to say that's mainly to keep the regulators at bay, Mr. Frantisak contends, although it can mean that "you can anticipate some of these issues and be ahead of the game."

Two provinces – Ontario and Manitoba – are planning laws to force more stringent waste reduction. And corporate customers, especially in Europe, are demanding more accountability – that pulp and paper companies, for instance, practise sustainable forest management.

There are some companies that "only do what they have to do to stay out of jail," said Dennis Durrant, special adviser in environmental protection at Environment Canada in Ottawa. Others may avoid a formal environmental program, fearing that it will draw heat to problems that otherwise wouldn't be visible.

Not only is that unethical, it's short-sighted, Mr. Durrant points out. "You can pay now as you go and manage it, or wait until it's a requirement and pay millions."

Besides, although Ottawa doesn't exactly turn a blind eye, he said, companies that are making an effort to improve are "getting a more objective ear" when things go wrong.

The articles reprinted in this Figure 11.16b are notable for the variety of businesses they cover; they also raise *many* issues of statistical interest. The seven questions below and on the facing page 11.105 address only *some* of these issues. For convenience, the article reference numbers, the page they start on and their titles, are listed at the right.

1 Referring to the second and third paragraphs of the right-hand column of the article EM9349 on page 11.101, discuss critically the statements:

- *... clients may be more frank in their assessments when faced with a confidential survey, and will provide a "comprehensive view of what our clients have been thinking about us."*
- *The survey involves 28 questions, which clients rank on a five unit scale. Andersen sevices received an average of 4.7 in the latest results.*

2 Discuss critically, from a *statistical* perspective, the statement near the top of the right-hand column on page 11.102 in the article EM9351: *"Importance scales provide you with absolute importance rather than relative importance."*

(*continued*)

Figure 11.16b. PROCESS IMPROVEMENT STRATEGIES: Total Quality Management (continued 4)

3 Discuss critically the second-last statement in the 'Questions' box of the article EM9352 near the centre right of page 11.103: *Don't get caught up in the statistics; it's more important to know if it's 20 or 80 per cent who are satisfied than whether the survey is accurate to plus or minus 5 per cent.*

4 In the fourth paragraph of the article EM9352 on page 11.103, the description of the University of Ottawa's Student Federation survey states that: *The student federation placed computers loaded with an on-screen questionnaire in high-traffic areas around campus. Students entered their answers directly into the data bank.* List the *advantage(s)* (in what you consider to be order of *de*creasing importance) of this method of administering a survey questionnaire.

- List the *dis*advantage(s) of this method of questionnaire administration, again in order of decreasing importance.
- Indicate briefly the type(s) of situations in which this method of questionnaire administration is feasible; also, give two examples of situations where it is *not* feasible.

5 Discuss critically the statement, in the second-last paragraph of the left-hand column of the article EM9352 on page 11.103: *We only track things that we can do better – turnaround time, reliability, service, quality, etc.* in light of Mr. Hepworth's expression of concern, in the fifth-last paragraph of the right-hand column of the article EM9351 on page 11.102: *This leads to questions that focus strictly on the hard issues, like delivery and accuracy, rather than on the soft, or intangible, issues.*

6 Outline the important *statistical* issue(s) raised by the last sentence, in the right-hand column on page 11.103, of the article EM9352: *We found you can do a lot with a 10-minute survey if you design it properly.*

7 The fifth paragraph near the middle of the right-hand column on page 11.104, of the article EM9354, states that: *Noranda's large copper smelter in Rouyn, Que., has reduced its emission of sulphur dioxide by 70 per cent more than the 50 per cent required by law and will have it down to 90 per cent by the end of the decade.* Rewrite this statement so that the meanings of the numerical values it contains are clear.

- In general, what is the *clearest* way of describing numerically the magnitude of a *change*? Compare and contrast your answer with what has been done in the statement quoted above from the article EM9354.

In addition to specific mtters raised in the seven questions above, articles reprinted in this Figure 11.16b are notable for statements that involve one of two matters:

- introducing a quality program is given as the reason for implementing something that might reasonably be expected to have already been in place; OR:
- the improvement achieved under the quality program was so striking as to suggest that there was previously poor supervision of the processes involved.

Examples of such statements, unflattering to the prior operations of a company, are:

* *Absenteeism ... has been halved, while time lost to accidents per 200,000 hours ... has dropped to zero,... Landfill and "down-the-drain" waste has been cut by up to 30 per cent a year ...* [EM9344, page 11.97, left-hand column]
* [Daimler-Benz and BMW] *"... had four or five people for every one that Toyota had."* [EM9344, page 11.97, middle column]
* *Despite a much heightened focus on training, Dairyworld is not spending proportionately more money on staff programs than it used to,....* [EM9345, page 11.98, middle column]
* *"We've recently developed some operating standards both in sales and in service for our dealerships. ..."* [EM9346, page 11.99, left-hand column]
* *"... TQM ... does give ... a greater chance to see where a company is going."* [EM9348, page 11.100, right-hand column]
* *A good slice of the improvement came from giving shop floor teams real muscle to devise and implement change.* [EM9348, page 11.101, middle column]
* *One element of Andersen's TQM program involves a client report card ...* [EM9349, page 11.101, left-hand column]
* *Improved employee morale, increased profitability and productivity, and more effective communication between managers and front-line staff are some of [Compete to Win's] goals.* [EM9350, page 11.101, right-hand column]
* *... two years into Compete to Win, Simmons reported reducing finished goods inventory by 50 per cent, space requirements by 38 per cent and order-cycle time by 90 per cent.* [EM9350, page 11.102, right-hand column]
* *... a separate poll by the Angus Reid Group in Canada also spotlighted a communications gap between consumers and retailers.* [EM9351, page 11.102, left-hand column]
* *"By getting our employees into it and focusing on what the students really wanted, we were able to halve the budget for our orientation week this year [saving $130,000] ... And student satisfaction more than doubled."* [EM9352, page 11.103, left-hand column]
* *Last year, business volume per employee at EDC increased 39 per cent to $18.6-million.* [EM9352, page 11.103, left-hand column]
* *It has become a motherhood issue for smart companies to care about Mother Nature.* [EM9354, page 11.103, left-hand column]

(*continued overleaf*)

∗ *... the waste dropped to 450,000 kilograms.... Quaker has saved $395,000 in landfill costs. ... $780,000 has been preserved by simply cutting down on spills, using less material in startup and selling surplus cardboard and plastic to recyclers. Edible waste goes to animal feed companies.* [EM9354, page 11.104, left-hand column]

∗ *Noranda's large copper smelter ... has reduced its emission of sulphur dioxide by 70 per cent more than the 50 per cent required by law and will have it down to 90 per cent by the end of the decade,* [EM9354, page 11.104, right-hand column – see also Question 7 overleaf near the middle of page 11.105]

∗ *... some companies ... "only do what they have to do to stay out of jail,"* [EM9354, page 11.104, right-hand column]

As with the article EM9211 in Figure 11.16a, *some* articles reprinted in this Figure 11.16b also show recognition that quality improvement from adopting TQM in a company is a slow, arduous process that does not quickly produce tangible results; impatience for quick pay-back makes it *"... incredibly difficult to get positive results."* [EM9211, page 11.94, left-hand column]

∗ *"The challenge was to get middle managers and supervisors to accept the change. Traditionally, we tell people what to do, now we ask them for their input and that's threatening. ..... It's taking a lot longer than we thought ..... and created a lot more demands on management because employees expect results when you ask them to get involved."*
[EM9350, page 11.102, right-hand column]

∗ [Weston's is the] *kind of success that can be claimed by only 20 per cent of Canadian companies that have embraced the total quality management philosophy since the early 1980s.* [EM9344, page 11.97, left-hand column]

∗ *... many firms still believe that putting a quality program in place is a swift and sure way to reverse their fortunes.*
[EM9211, page 11.94, middle column]

∗ *"One of the key ingredients is solid measurement, ... And it shouldn't take two years – you're looking for results within two months."* [EM9344, page 11.98, right-hand column]

The final article, EM9516 reprinted below, in this Figure 11.16b is included because it deals with TQM at the University of Waterloo and also because it provides useful information about how the project was carried out. The article is reprinted for teaching purposes at the University of Waterloo with the permission of the Institute for Improvement in Quality and Productivity (IIQP), University of Waterloo, which holds the copyright.

EM9516: IIQP Newsletter, Spring, 1995, page 7

Total Quality Housing Project at UW

by Gail Clarke, Business Manager

In August 1994, the Housing Department at the University of Waterloo commenced a Total Quality Management (TQM) project. Our objective was to look at all aspects of our activity through a systematic analysis of our Business and Student Life operations. Through this process we introduced our Managers and Supervisors to the eight key elements of Total Quality: planning, management leadership, continuous improvement, employee involvement, customer focus, statistical thinking, process model, and measurement and control

Commencing in September, the Managers and Supervisors met with Dennis Beecroft, Managing Director, Institute for Improvement in Quality and Productivity, a University Research Centre, and Dr. Gary Waller who is a faculty member in the Department of Psychology. The team building workshop included formal training on the importance of service quality, the costs of poor quality, definition of quality, project identification and team selection. These workshops involved discussions on our customers, services we provide and where we feel we should improve. This initial group numbered twelve Managers and Supervisors. It included the Director, Business Manager, Residence Managers, Residence Superintendents, Residence Life Manager and Supervisors.

The group split into two teams to develop a list of problems that a team could consider. Developing this list was quite a challenge for us. With the assistance of our facilitators, we came to realize that often what we tended to focus on were symptoms. We needed to be more concise! We also found ourselves prematurely attempting to solve these "symptomatic" problems. We used a Priority Ranking Matrix to rank the problems each team identified. The matrix consolidated the two independent lists.

We compared each problem with all the others on the two lists so that the most desirable one was selected. Using this process we chose a problem that fell within the area of Staff Relations and in particular, "scheduling." It focused on our cleaning services staff of which there are sixty-five across four residences.

From this group we created a Process Improvement Team to study the problem. The team's composition was Residence Superintendent, three Housekeepers and one Janitor. The scope of the project included two of the five residences at Waterloo. The Managers defined the project goal, scope and issues to consider. We learned that it is very important to establish solution constraints for the team. For this project these included no changes to staff levels, solution budget fixed at $0 and solution includes only Housekeepers, Janitors and immediate Supervisors.

The team met weekly with a Facilitator. The team established their own rules regarding conduct and attendance. Agendas were provided at each meeting and minutes documented progress. The Managers met with the Team every fourth week for an update on progress. These meetings did not include a debate on recommended solutions. Instead, we were there to hear about the Team's progress and plan of action and act as a resource. We offered any advice, if asked. The team had employed surveys to accumulate information from our customers who ranked various physical areas within the residences according to customer importance. In addition the team split into two groups in order to map the present process of scheduling.

The final report was handed in on March 31, 1995. The team had the additional responsibility to implement all recommendations included in its report. Service quality includes all aspects of what we do in the department. The introduction of quality improvement as a process provides us with the opportunity to examine our current processes; how we deal with our customers; and examine opportunities for innovation and experimentation with a tolerance for risk taking and an acceptance of failure. We will not know the outcome of our first project until the spring at the earliest.