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It is with pleasure that I extend my warmest greetings to the staff and readers of **The Economic and Technology Development Journal of Canada**.

Over the years, this publication has sought to respond to the needs and demands of its readers by emphasizing the importance of innovative thinking in an ever-changing market. The staff at The Economic and Technology Development Journal of Canada have endeavoured to encourage both the public and the private sectors to share ideas and experiences, thereby assisting in the development of creative solutions to the challenges of the 21st century.

Please accept my best wishes for every success in the years ahead.

Jean Chiefiere

OTTAWA 1998

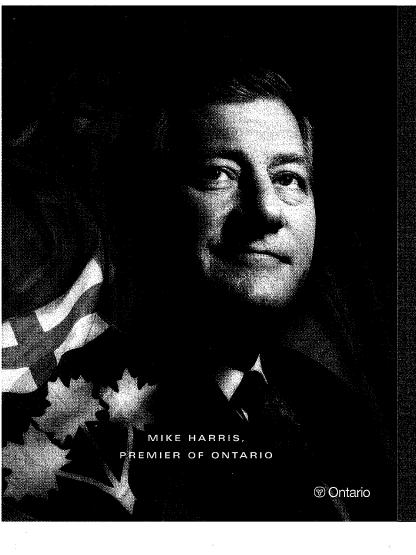




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the deficit, cutting taxes, and freezing power costs. • Finally, and of growing importance to progressive companies, is our enviable lifestyle. Ontario has many great cities: Fortune Magazine ranks Toronto among the best North American cities in which to live and work. And the U.N. named Canada the best country in the world for three years running. Let's talk about our future together. Call: 1 (416) 360-4647.



EDITOR'S MESSAGE

CONOMIC DEVELOPMENT organizations have been using the *The Economic & Technology Development Journal* to gather strategic intelligence on new models and approaches in order to deliver better economic development services to their clients.

The Journal is dedicated to disseminating the latest information and ideas, and to advocating critical discussion in our profession. It serves as a tool for the exchange of ideas among professionals, concerned citizens, politicians and academics whose objective is to stimulate economic prosperity for their community, region or country.

To meet this challenge, the *Journal* provides the reader with a selection of feature articles that discuss timely issues in the various sectors relating to economic development. These include the use of technologies to manage client relationships, the building of business alliances, and the use of marketing techniques.

Every business today competes in two worlds: the physical world of resources that managers can see and touch; and a virtual world of informa-



tion which is rapidly expanding to meet our diversified needs.

The use of information should provide EDPs with an important competitive advantage. We hope this *Journal* will assist development organizations in better servicing their clients.

I would like to thank the Journal's advisory board, the City of Vaughan, our sponsors and partners whose help has made this year's Journal a success.

Frank Miele January, 1998

The Journal thanks the following organizations for their assistance and support:



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COVER ART: *Maple Leaf* by John Eric Laford. The art of Laford, a Canadian painter and totem carver, combines the legends of native peoples and aspects of Western culture — in this painting, he incorporates images of the loon, beaver and maple leaf.



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fer 1916) 852-8507 Partisto 832-07.08 E-mail: milelef@dirvvio.gisan.cm.ua

Managing Editor
Total Hallas, M.A.

President Leander Communications E-mail: Jeander Gregorianer

Advertising Coordinator Sylvia Dickens, dip. [m]

Database Coordinator
Elizabeth Sanders

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For information on the
Postnomic Developers Council
of Ontario (EDCO), contact:
Hearter Currie, Ec. D.
Council Manager,
PO. Box 730,
Haveleek, Ontario KOL 175
Tel (705) 778-2740, Fax (705) 778-7971

Tel (705) 778-2740 Fax (205) 778-797 E-mail: edco@sympatico.ca

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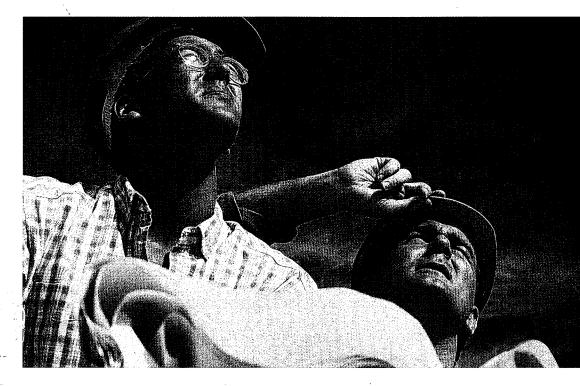
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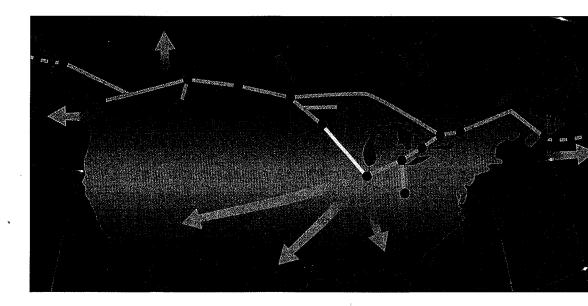
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Access & Innovation:

Telecommunications as an Enabler of Economic Development

BY André Tremblay

The telecommunications industry is one of the few "enabling" sectors of the Canadian economy. Its development holds great promise to generate economy-wide benefits and improve this country's overall competitiveness. This can best be accomplished through an industry structure founded on open networks. It is clear that government policy makers and regulators will play a key role in

creating the necessary policy environment, and even industry structure, for beneficial competition to flourish. Similarly, private industry must act upon the opportunities that emerge in a liberalized marketplace.

During 1997, Canadians witnessed and benefited from significant public policy developments and industrial growth. The private sector made, and continues to make, massive investments in new communications infrastructure. Previously unimaginable structural changes are being imple-

mented to take advantage of new competitive opportunities, both at home and abroad.

Clearly, there is much to look forward to: by unleashing competition in the telecommunications industry, one of the main drivers of our national economy, we will ensure continued innovation and the development of a Network Economy. These are key to our future success.

The growth potentia, moreover, is directly tied to a commitment by government and the private sector to maintain a leadership position in knowledge-based industries – in other words, to building an information highway which is fully interconnected and interoperable with the rest of the world.

Policy Developments

From the perspective of public policy, 1997 was a pivotal year. As a general rule, the quality of policy is improved if government carries out real consultation with stakeholders. This has been exemplified in the work of the Information Highway Advisory Council (IHAC), which completed its three-year mandate in September. IHAC's final report, "Preparing Canada for the Digital World," stresses access and innovation as cornerstones of a successful information highway policy, for Canada to succeed in the global, knowledge-based Network Economy.

Also in 1997, on May 1, the Canadian Radio-television and Telecommunications Commission (CRTC) issued a landmark series of decisions,



ANDRÉ TREMBLAY is President and CEO of Microcell Telecommunications Inc., Montreal, which launched Canada's first Personal Communications Services (PCS) network.

He holds senior positions in the Telesystems Group,
Microcell's largest shareholder. In addition to a Licence
in Accounting from Laval University, he has a Master's
Degree in Taxation from Sherbrooke University.

laying out the regulatory framework for a transition to a fully competitive communications marketplace. The framework is built upon the principles of technology-neutrality, open access and interoperability of networks. Successful implementation of the May 1st decisions will ensure Canadians receive the full benefits of competition in the local access marketplace.

New Access Technologies

Frances Cairneross in her recent work, "The Death of Distance," notes that competition in communications is not

- the licensing of new multipoint distribution systems (MMDS);
- and the removal of the historical prohibition on telephone companies from operating distribution systems in competition with cable television.

Canadian companies also had unparalleled success abroad. Building on expertise developed at home, global markets were open for Canadians not only as equipment manufacturers and suppliers, but also, increasingly, as network operators in distant markets. The development of new access technologies and blossoming export oppor-

consumer benefits arising from new competition: a greater choice of technology; more responsive service providers; commoditization of the transport function; interoperable technologies that offer consumers truly global service; and more customized content, through value-added and innovative products.

Competition and Innovation

In its final report, IHAC emphasized the importance of innovation to ensure the quality of Canada's information infrastructure:

INCREASED COMPETITION

Telecommunications is being transformed from

a supply-led to a demand-driven industry, with consumers able to choose

their preferred access technology.

only new, it is enormously important:

"Fifteen years ago, people had to rub along with one national monopoly telephone operator ... a handful of big broadcasters or even a single one, run by the state; a solitary cable company. In few other industries in the capitalist world has this level of monopoly been allowed and the spirit of competition so crushed."

She concludes that only competition will guarantee that consumers will truly benefit from the technology races now being run by the telephone, television and Internet.

In 1997, Canadian consumers saw the first signs of these benefits. There was the emergence of several new access technologies, including:

- extensive deployment of personal communications service (PCS) networks:
- the launch of two Canadian Directto-Home (DTH) satellite services;
- the trial roll-out of a local multipoint communications system (LMCS);

tunities are but two of the readily-identified benefits from the billions of dollars spent on network infrastructure. Beyond this, there is a farther reaching impact, and an inescapable conclusion: telecommunications is being transformed from a supply-led to a demanddriven industry.

The commercial imperative for any network operator in a competitive environment is to become the preferred access provider — a consumer's number one port of entry to satisfy his or her communications needs.

For example, one choice now available, personal communications services or PCS, is a new wireless technology that has been described by former U.S. Federal Communications Commission Chairman Reed Hundt as what will be "our 21st century telephone company."

Consumers will henceforth be able to choose their preferred access technology, and it is difficult to predict where all this will lead. What is more possible to predict are the numerous "Direct and indirect measures by government to support R&D by Canadian companies should give priority to research on improving the capacity, interconnection and interoperability of high-speed network and related applications."

IHAC is right, for two completely different reasons, to encourage further R&D in telecommunications.

The first is related to overall spending on research and development where, at 1.5 percent of Gross Domestic Product, Canada has ranked behind all G-7 countries except Italy. This low level of investment can have negative, longer term impacts on Canada's ability to compete in a global, knowledge-based economy.

The second reason IHAC "got it right" is in calling for further R&D specifically in telecoms — an area where Canada already excels.

By building on our strengths, it makes the chances for further success even greater. (In recent years, the telecommunications equipment sector accounted for the largest share of Canada's private R&D expenditures. Between 1989 and 1993, the telecommunications sector invested an average of \$765 million per year. This amount equals 14.5 percent of all private sector R&D. Another \$162 million was invested by the communications service sector in 1993, represents 2.9 percent of total R&D expenditures.)

To increase innovation and R&D, perhaps the single most important measure for policy makers and regulators is to encourage the liberalized de-

on the benefits of competition is one which encourages openness, interoperability and decentralization of networks.

We have to accommodate experimentation and innovation in order to allow for the phenomenon known as "globalization."

Products and services may be developed for a local or niche market, but open standards and network connectivity allow these instant access to global markets.

Through this, Canadians are able to participate fully in the instantaneous

Interoperability can threaten market share. As a result, the one entity who may not see value in openness is the dominant provider of any given product or service. And for that reason, public encouragement of competition is so important.

Conclusions

Despite all that has been accomplished over the past year, what is even more remarkable is that which is left to be done.

As a paradox, government and regu-

GLOBALIZATION

Products and services may be developed for local or

niche markets, but open standards and network connectivity allow instant

access to global markets.

velopment of the communications industry.

Competition in the local access market will beget further innovation. And, simply put, innovation is an important strategic variable in marketplace rivalry. As a result, a competitive industry is more conducive to innovation than a monopoly structure.

Kevin Kelly, in a recent article from Wired magazine, "New Rules for the New Economy", argues that wealth will not be gained by perfecting what is already known, but rather by imperfectly seizing upon unknown opportunities.

The ideal environment to cultivate the unknown comes by nurturing the supreme agility and nimbleness of networks. In other words, we need to encourage open networks and standards to offer testbeds and platforms upon which to build.

Open Access

Personally, I strongly believe the economic framework best suited to deliver

refinement, advancement and marketing of knowledge-based goods throughout the world.

In Kevin Kelly's parlance, this makes up a part of the Law of Plentitude, where "more gives more."

"In a Network Economy, value is derived from plentitude, just as a fax machine's value increases in ubiquity.

"Therefore, let them proliferate, ... What is valuable is the scattered relationships ... that become tangled up in the network itself.

"And the relationships rocket upward in value as the parts increase in number even slightly. Windows NT, fax machines, TCP/IP, GIF images, RealAudio - all born deep in the Network Economy - adhere to this logic. But so do metric wrenches, triple-A batteries, and other devices that rely on universal standards; the more common they are, the more it pays you to stick to that standard."

It is new entrants who are most likely to see value in opening their systems to third party development and experimentation. lator intervention is needed for competition to take hold.

Communications is not an industry like any other. Former monopolists and dominant industry players often control resources their competitors need, such as access to essential facilities.

The removal of regulatory barriers to entry does not equate to the existence of a healthy competitive market, *lais-sez-faire* competition law rules may not protect against abuses of market power.

The communications industry is not out of the woods yet, and continued policy maker support is required, lest we fall back into monopoly or near monopoly market conditions.

The additional efforts necessary to achieve a true Network Economy are worthwhile.

In the longer term, we will ensure Canadian competitiveness, while delivering an unimaginable array of new consumer goods and services, universal connectivity, and an economy that derives wealth and benefit from innovators of all sizes.



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Welcome to A WORLD WITHOUT WIRES

BY Len Katz

Telecommuters have been described as those who work from their home office, their satellite office or a fully-mobile office. In today's fast-paced, competitive industries, Canadians are beginning to redefine the term "telecommuting" to mean anywhere, anytime communications, for anyone. Canadians today need to be productive where they are, not only where they work. That means

they need business communications tools that provide them with the ability to stay in touch with home or the office, whether they're just across the city, or half way around the world.

In October 1997, a study by Rogers Cantel and COMPAS Inc. revealed that when traveling, a wireless phone is one of the two most frequently mentioned business tools respondents took with them on the road; the second was a portable computer or laptop.

The convergence of computer technology with the mobile flexibility of the wireless industry has created a powerful partnership for today's business people.

Wireless Communications

This convergence has been brought to life in a new all-in-one wireless communications device called PCS, or Personal Communications Services.

PCS offers users the benefits of an extraordinary suite of enhanced features and services designed to increase

productivity and efficiency, all on a digital network.

PCS is about having all the features that users want and need in one, easyto-use handset. It's a combination of services such as:

- Calling Line ID and Visual Call Waiting which enable users to control costs and manage incoming calls by displaying the number of the caller before users answer the phone.
- PCS Messaging which combines the benefits of alphanumeric paging with traditional voice services on the same handset. PCS Messaging enables users to receive numeric and text messages right on the display screen of the PCS phone.
- E-mail Messaging which provides a dedicated e-mail address for the PCS phone to enable text messages to be sent directly to the handset from any e-mail service with an Internet gateway.

And, the enabler of this suite of services is the extended battery life provided by digital transmission. Digital handsets have up to two to three times as much standby battery life as other wireless phones.

But the real excitement with Digital PCS is the opportunity it creates for customers and for the wireless industry. With its call management and cost control features, PCS has become an increasingly popular suite of services that is a vital part of the growing worldwide trend towards digital transmission.

Carriers in the United Kingdom and throughout much of Europe no longer activate new subscribers on analog lines; all new activations are digital.

Closer to home, AT&T Wireless Inc. launched its Digital PCS product in the United States in 1995 and the company has already signed up more than one million new subscribers.

In 1996, Rogers Cantel Inc. signed a long-term strategic alliance with AT&T which will provide Rogers Can-

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tel's customers with access to Digital PCS service throughout more than 90 percent of North America. This enormous coverage footprint is unprecedented in the wireless industry and provides customers with seamless access to all of their Digital PCS services almost anywhere they travel.

This is particularly important, given that statistics from Industry Canada show that over 60 million Canadians visit the United States each year and 45.5 million of those are same day visits. With these figures in mind, it's easy to see why it is so important to Canadians that they stay in touch no matter what side of the border they are on.

Worldwide Access

In the summer of 1996, Rogers Cantel launched a new 'smart card' service called Cantel WorldWide. This smart card is inserted into a GSM phone —

the mobile phone standard in use in European and other countries around the world — and instantly provides Canadians with access to their Cantel phone number and all their Cantel services.

Cantel WorldWide is available in more than 40 countries around the world and provides customers with an easy-to-use, affordable way to stay in touch while traveling abroad.

The latest developments in wireless technology now enable mobile workers to have wireless connections between their office e-mail systems and laptop or palmtop computers.

A wireless modem literally "plugs into" the modem slot to provide a secure means of sending and receiving e-mails while on the move.

The same technology is also making available a new generation of self-contained two-way pagers that both receive and send messages via the Internet to anywhere in the world.

The global village is getting smaller every day. Canadians are traveling to, and doing business in, virtually every country around the world. Accessibility means more than being easy to reach within North America — today's need to be accessible has further reaching boundaries then ever before.

LEN KATZ is Senior Vice President, External Affairs, for Rogers Cantel Inc.

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Empowering Customers in the Digital Economy

BY Jim Tobin

Business gurus have said it and the experience of companies across North America confirms it: The expanding, relatively homogenous markets of the 1950s, 60s and 70s are giving way to a world of individual customers — customers who are technologically savvy, who know what they want, and how to get it at a price they are willing to pay. The technology revolution has been a driving

force behind this shift. Services like the Internet are bringing the world's business transactions, its entertainment and information exchange together into one online experience.

Instead of entrenching the mass market even further, this technology has given rise to constantly evolving niche markets, to communities of interest that transcend geography.

Online, customers can communicate

easily, quickly and economically, whether they are six miles or 6,000 miles away. Online, they can seek out the information, products and services they need easier and faster, 24 hours a day, seven days a week. Today, commerce over the Internet already amounts to several hundred million dollars; by 1999, it is expected to hit several billion dollars.

To put it another way, customers

now have electronic doors through which they've gained greater access to the world.

But that access is not complete. Nor does it reflect the fact that the new, powerful tools of technology are giving customers the ability to conduct transactions on their own terms. The balance of power has shifted from the seller to the buyer.



JAMES E. TOBIN is Senior Vice President of Bell Emergis, a division of Bell Canada. With more than ten years experience in the high technology and multimedia sector, he holds the additional responsibility of helping drive BCE's Communications Services companies' growth strategy.

Previously, he held management positions at Xerox, SPAR Aerospace, and McKinsey & Company, a strategy

consulting firm. He is a recognized speaker on IT-based renewal efforts.

Tobin is a graduate of Yale University and holds an MBA from Harvard Business School.

Integrated Solutions

To fulfill these needs, customers must have integrated solutions and powerful, intelligent networks that complement the power of the computers, televisions and telephones we use today. Customers also need "intelligent agents" to give them more control over their online communications. In fact, such agents will become an important part of the scenario, roaming the network searching for information, completing transactions, and negotiating with other intelligent agents.

To help lead these changes, Bell has

set up a new software division called Emergis. Launched earlier this year, Emergis is positioning itself as a catalyst for innovation in the Canadian information, communications and entertainment markets, developing software-based networking and interactive multimedia applications for telecommunications and electronic service providers, at home and abroad.

The company's goal is to develop a steady stream of breakthrough products and services that provide data/voice integration, reside in the telephone network, and are customer-controlled and self-evolving.

This is not the first time Bell has used the spin-off approach. In the late 1950s, it set up a company called Northern Electric — now Nortel — to make the most of an emerging opportunity in the world marketplace. Today, Nortel is a global giant in telecommunications equipment.

In the case of Emergis, the new organization centres on nine initiatives in areas such as electronic commerce and consumer Internet services. With 300 employees and more than \$30 million in revenues in its first year of operation, it expects to grow very fast — but without losing the agility and responsiveness of a small company.

In fact, Emergis is about working in new ways. It is about forming and nurturing new global partnerships, teaming up with world-class software and hardware players, and with leading entrepreneurs and researchers to deliver meaningful solutions that empower customers.

In the future, the network will behave like a computer operating system, enabling application-hosting and creation, and involving customers directly in the development process. For Canada, next-generation networks and applications will be the foundation to establish, attract and support companies that produce made-in-Canada intellectual property to serve world markets.

Many Canadian companies are al-

ready benefitting from this type of approach, including Nortel, Newbridge and Cognos.

Creative Teamwork

Emergis is positioning itself as a test zone where ideas can flow freely. And it will adopt a different organizational style, using modern technology to create a virtual laboratory where partners and co-developers from around the world can work together.

Where appropriate, Emergis will leverage the resources of Béll, Bell Mobility and others out into the application-developer community, to share opportunities and overcome challenges together. To succeed, the industry should pool its efforts, and use creative teamwork to turn the Canadian market into the world's most sophisticated test market for advanced network applications.

To potential partners, we believe Emergis has a lot to offer. The power of Bell's network infrastructure, and our understanding of customer connectivity, is coupled with the strong, international reputation that the BCE companies and Nortel have for innovation, network integration and network management.

In addition, Canada has the highestrated intelligent voice network in the world, and perhaps the most advanced Internet backbone. The national market boasts high penetrations of services such as cable television, wireless phones, Internet service and online banking. And Canadian customers have proven themselves to be early adopters of new technologies.

Although Emergis will benefit from Bell's infrastructure and its reputation for service, it has deliberately steered clear of traditional business models. Instead, it is more akin to a Silicon Valley startup.

Emergis recognizes that an innovative software company in today's convergent market demands particular skills and attitudes. For one thing, software-based innovations are usually smaller in scale. Project structures and timelines are less formal, and standards and approaches to alliances are more open. These differences, along with a more entrepreneurial talent base, tend to move software-based innovation rapidly forward.

The Emergis culture is built around these important, distinctive attributes, with the objective of promoting partnerships. The company wants to offer smaller players the opportunity to do business with larger players, without them having to fear they will be swallowed up in the process.

Electronic Commerce

In pursuing possible partnerships, Emergis has mapped out three main areas of development: applications for consumers, business and network providers.

Today's customers want communications services that are richer, more mobile and more convenient than ever before. To meet these demands, Emergis is developing new applications that use Internet protocol technologies to deliver voice, fax and other services traditionally associated with the telephone network.

In addition, we are pursuing electronic commerce opportunities to help business interact more efficiently and effectively with other businesses and with consumers.

At Emergis, we define E-commerce as a key component of electronic business in general — that is, a set of products and services which enables companies and consumers to transact business and share critical information in a time-sensitive manner using electronic networks, systems and applications.

The E-commerce solutions we are developing will be industry-specific and leading-edge. The ability to conduct commercial transactions online will help customers reduce their operating costs, save time and build a big-

ger presence in the markets of their choice. It will also spark a new dynamic — a continuous exchange of information products.

An agreement signed in September between Emergis and California-based Netscape Communications Corporation provides the cornerstone of our E-commerce activities. It also underscores Bell's commitment to bring customers the advanced communication tools that are essential to competing successfully in today's global market.

Together, Emergis and Netscape will find solutions for Canadian busi-

to wireless phones — work together seamlessly and provide them with the capabilities they need, when they need them.

Persona Management

Another area of endeavour for Emergis will be the intelligent software agents that allow customers to define the way they communicate. Examples include navigational tools for the information highway, interfaces for electronic commerce, privacy and copyright protection agents, and communications profile managers.

to interact with the consumer. There would be a standard protocol that would lead to a contract between buyer and seller. Unsolicited offers from businesses would be rejected unless the consumer allowed them.

The persona management concept recognizes that an individual may have a different persona at different times. For example, you may be at home acting as both a member of the household, as well as a teleworker representing your company.

This concept also allows for variables such as geographic independence, appliance independence,

PERSONALIZED COMMUNICATIONS

Customers will be able to create their own

personal electronic space, or electronic profile, to determine how they

interact with the rest of the cyberworld.

nesses who want to use the Internet to extend their reach and improve productivity. Emergis will integrate solutions provided by Actra, the Netscape subsidiary responsible for electronic commerce solutions.

As an integrator, Emergis will be responsible for connectivity, implementing the electronic commerce solution, integrating it with existing applications and fully deploying the solution throughout each client's trading partner community. Through Bell Canada, we are also acquiring the rights to adapt Actra's electronic commerce software to the needs of the Canadian marketplace.

In addition to these initiatives, Emergis will develop of suite of software products for managed networks. Network providers, whether they are BCE providers, other carriers around the world, or new suppliers like hydro companies, require advanced network capabilities. They must ensure that all their various types of communications equipment — from mainframes to PCs

Software agents are already available on the Internet that customers can program to search for the best price on many types of goods. These personal shopping agents will be very discriminating buyers, focusing not only on price, but on the priorities and preferences of the customers who program them.

All of this is leading to something Bell and Emergis call "persona management." In other words, customers will be able to create their own personal electronic space, or electronic profile, to determine how they interact with the rest of the cyberworld.

Imagine a future where people deal not with computer operating systems, but with personal operating systems that work to make their lives simpler, not more complex. They would be able to create different "persona," each with a specific profile featuring defined interfaces to communities of interest.

Persona management systems would have specific interfaces to allow outsiders, such as businesses for example, network independence, personal and geographic communities of interest, and context sensitivity.

Customers in Control

But the most important attribute of all is that customers are in complete control of their communications and network space.

For example, whether you are at home, at the office, or on the road between the two, your persona manager is at work, as long as you have access to a "networked" information appliance, such as a telephone, mobile phone or a PC or laptop. If you travel to another city and walk up to a nextgeneration payphone or kiosk, you can log on to your persona manager by inserting either a smart card or alerting it through a voice recognition agent. As long as you have access to a networked appliance, you can communicate with the same ease as from your home or office.

When your personal manager re-

ceives messages, it should be able to adapt communications according to the capabilities of the appliance you are using. If you're accessing a basic telephone, the incoming communications will use voice and perhaps a text display. The same transaction delivered to a multimedia PC will use voice, text and video.

When sending messages, you can access your voice mail, e-mail and video mail from different appliances without having to create unique profiles by appliance type.

After all, you're not the one who's changing.

Network independence means that your persona manager doesn't care what type of network you are using — whether wireless or wireline, for example — as long as the information is being transported reliably.

In addition, your persona manager is always on. In other words, you don't have to boot it up to get it going. You

simply use it when you want to and it makes resources available to you when you need them.

Persona managers will also be aware of the different types of communities we belong to — whether geographic or personal — and supply the appropriate linkages between them.

Finally, persona managers will involve technology adapting itself to the needs of the individual rather than the other way around.

For example, many of us use features like calling number and calling name identification. With a persona management system, you would be able to change the information sent to the person you are calling.

If you were calling a supplier, the supplier's phone display would show your name and the company you represent. If you're calling your daughter at home, from the same telephone, her phone would display "Mom/Dad calling."

New Opportunities

Opportunities abound for productive partnerships whose goal is to facilitate customer empowerment. There is great promise for everything from the development of agent systems, systems for payment and E-commerce, privacy protection and negotiation systems, to full-fledged persona management.

Overall, Emergis will be doing business in an entirely new way, a way we believe will help drive change and innovation in the marketplace.

By acting as a catalyst for exciting new applications, our ultimate objective is to give customers the tools they need to live and work, and to promote Canada's leadership in the global digital economy.

For more information, visit the Emergis web site at www.emergis.com



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Expanding Trade & Increasing Investment: Canada's International Business Strategy

BY Hon. Sergio Marchi

Fundamental changes are taking place in the global economy. International markets are becoming more open and more competitive. Technology is becoming increasingly pervasive and is defining the way we do business — as well as the pace at which we do it. Traditional economic structures and trading relationships are being replaced by new ones based on common interests and the need to

meet the test of the marketplace. To say that we live in a world of change may be trite, but it is true.

For government, it means finding new ways to cooperate with the private sector in order to meet the challenges of creating and maintaining jobs and producing wealth in a competitive global economy. For the private sector, it means becoming more aggressive in seeking out new markets and finding new ways to identify and take advantage of opportunities in the international marketplace.

These issues are especially critical for Canada. Our country is a trading nation. One in three Canadian jobs depends on trade. Forty percent of our gross domestic product is generated by export sales.

Last year, we did more than one quarter of a trillion dollars in export business. Each one billion dollar increase in exports sustains 11,000 Canadian jobs.

Obviously, our success in doing business internationally is of fundamental importance to the prosperity and well-being of our nation. Therefore, the Government of Canada has made jobs and growth a central objective of our international relations policy and has identified the Team Canada approach as a model to follow.

Team Canada

The Team Canada missions led by the Prime Minister over the last few years have been very successful in spearheading our export development efforts.

The partnership approach to business development provides a powerful illustration of what can be accomplished when governments and the private sector work together.

Since the first Team Canada mission in 1994, we have helped to open doors in export markets for more than 1,100 Canadian companies, many of them small businesses with little or no export marketing experience.

More than \$22 billion in new business has been written and an additional



SERGIO MARCHI is Canada's Minister for International Trade. First elected to the House of Commons in 1984, he has represented the Ontario riding of York West ever since.

Since the 1993 election of the Liberal government,
Marchi has served as the Minister of Citizenship and Immigration and Minister of the Environment. He currently sits on the Cabinet Committee for Economic Union.

\$5 billion of follow-up export sales have been generated.

The Team Canada approach is a successful model and we are using it for a broader strategy — Canada's International Business Strategy — which is being implemented, with the cooperation of other levels of government and the private sector, to coordinate and support Canada's international business development efforts.

International Business

Our International Business Strategy is based on a partnership approach to identify and pursue shared business objectives in international markets. It is an integral part of the federal government's international business development efforts.

The strategy is a vehicle through which Canadian companies, institutions and municipal economic development organizations can begin or expand their international business outreach programs.

International trade and investment promotion are the two principal objectives of the strategy that are of special interest to business and economic development planners. The following is a brief review of activities in both of these areas.

Trade Promotion

The three Team Canada missions led by the Prime Minister since 1994 have successfully generated new opportunities for Canadian exporters by bringing the resources of governments and the private sector together in a common cause.

The federal government provides resources in the form of logistical leadership, international market intelligence, and overseas contacts. Other levels of government provide business linkages, logistical planning and technical support. In turn, the private and institutional sectors provide products, services, expertise and en-

trepreneurship.

It is by combining these resources that we achieve our shared objectives.

Team Canada Inc.

In order to provide a focal point for the collaborative use of these combined resources, and to institutionalize the Team Canada approach, we have created Team Canada Inc as a business development network. Team Canada will facilitate the participation of all the partners involved in expanding our markets abroad, and will ensure that we maintain a results oriented focus for our joint activities.

The work of Team Canada Inc. is being guided by a private sector board, chaired by Lyton (Red) Wilson, Chairman of the Board and CEO of BCE Inc.

Promoting Exports of Small and Medium-Sized Businesses

Most new jobs are created by smaller businesses, yet only about 10 percent of Canada's small and medium-sized businesses (SMEs) are engaged in export trade.

Our experience has shown that, given the right impetus, small businesses can be successful exporters. For example, more than half the companies on the Team Canada mission to Southeast Asia were small and medium-sized companies. And in Korea, a very competitive market, more than two thirds of the deals made during the mission were signed by small businesses.

There is substantial potential for smaller Canadian companies to be successful in export markets, but it needs to be developed.

To help realize that potential, we have set up a special unit within the Department of Foreign Affairs and International Trade (DFAIT) to concentrate on the special needs of SMEs in the international arena.

The new unit, under the direction of Joanna Townsend, a well-known international trade consultant, will help to identify and meet the export promotion needs of Canada's small business com-

munity.

It will also address the special needs of other potential new exporters, such as women, aboriginals, and youth. Another part of their mandate is to work with Canada's multi-cultural business communities to build on their trade linkages throughout the world.

The SME unit will be an important point of contact for business and economic development organizations interested in promoting new opportunities for Canadian-based small businesses.

Export Trade Information

In today's global economy, timely access to reliable business information is critical for success.

We have collected a wealth of useful export-related information which is available through the Internet at the *ExportSource* web site (http://www.exportsource.gc.ca).

The site was developed to meet the needs of companies interested in learning how to export, companies that are new exporters, or established exporters who want to broaden their markets. It provides information on market research, export financing, export regulations and logistics, trade statistics, export contracts, and trade shows and missions.

ExportSource provides easy access to export information with linkages to other export related government programs at Industry Canada, Agriculture and Agri-food Canada and DFAIT. Accessible 24 hours a day, seven days a week, ExportSource is a virtual export information office.

Competitive Export Financing

Canada's Export Development Corporation (EDC) has been an important source of export credit financing for several years.

Last year, the EDC financed more than \$22 billion of export sales in world markets on behalf of Canadian companies. But in the changing international trading environment, there has been a growing need for new, more flexible export financing mechanisms, especially to improve access to credit for smaller exporters.

To meet this need, our government has been working with other Canadian financial institutions to establish new public-private sector partnerships to share business risks and to fill gaps in the financial market for Canadian exporters.

One example of such a partnership is the Northstar Trade Finance initiative set up between the Royal Bank, the attributed to foreign direct investment in Canada.

Canada, like many other countries, depends on international capital to finance a significant proportion of its economic development.

As international markets become more open and competition for new capital becomes more intense, the need to continue to attract investment into Canada becomes increasingly important.

It is as critical to our future prosperity and well being as the need to expand our export trade.

Fortunately, we have compelling

studied was less expensive than all U.S. cities studied.

The study is titled "The Competitive Alternative: A Comparison of Business Costs in Canada, Europe and the United States." It looked at the cost factors that companies consider when deciding to locate and operate in a given area and concluded that, overall, it costs 5.4 percent less to do business in Canada than in the United States.

Analysis of Business Input Costs Including Taxation

The individual business cost factors studied by the researchers included:

BUSINESS INVESTMENT

C anada offers a highly-competitive advantage

to businesses in terms of key operating factor costs such as labour,

electricity and telecommunications.

Bank of Montreal and the Export Development Corporation to meet the special trade credit needs of small and medium-sized companies in Canada.

Northstar reflects the underlying theme of the trade promotion element of our International Business Strategy: to create the partnerships and provide the tools that will allow Canadian businesses to identify, and take advantage of opportunities in the rapidly changing, and expanding, international marketplace.

International Investment Promotion

The second element of the International Business Strategy which complements our trade promotion efforts is international investment promotion.

Much of the wealth and success that we enjoy in Canada today is due to the international investment that we attracted in the past.

Today, more than 1.3 million (or 1 in 10) Canadian jobs; more than 50 percent of total exports, and 75 percent of manufacturing exports, can be directly

evidence that shows that Canada is an attractive investment location.

Business Investment

A well-known international management consulting firm, KPMG, studied the environment for business investment in Canada, the U.S. and five leading European countries. The study compared costs of doing business in eight typical industry sectors in 42 cities in seven countries. The final report provides a wealth of useful data for business analysts and economic development planners.

The single most important conclusion is that Canada has the lowest cost of doing business and is the number one choice among the investment locations studied.

The study also found that Canada was the lowest-cost location in each of eight key manufacturing industries examined, and that 14 of 17 Canadian cities studied led the low-cost rankings. In addition, every Canadian city

land purchase; building construction; labour costs, including wages and other benefits; transportation and distribution; electricity, telecommunications; debt servicing; and income and other taxes.

When the combined impact of all these factors was analyzed, Canada was the clear winner.

Interestingly, the study showed that Canada has one of the lowest effective tax burdens, even lower than the United States. This finding sheds new light on a conventional view held by some that Canada is a high cost tax location.

In addition, attractive land and construction costs, combined with low interest rates result in Canada having the lowest initial investment costs among the seven countries.

An analysis of the key operating factor input costs such as labour, electricity, and telecommunications, also shows that Canada offers a competitive advantage to businesses when compared with other countries in the study.

Analysis by Industry Sector

The KPMG study looked at eight different industries: electronics, food processing, medical devices, metal fabrication, pharmaceuticals, plastics, software production and telecommunications equipment.

These industries represent a mix of traditional capital-intensive sectors such as metal fabrication, and skilled labour-intensive industries such as software production.

The researchers examined industrysensitive cost factors such as capital or labour intensity, as well as locationsensitive costs such as land and building costs or taxes.

By combining standard specifications for each industry with locationsensitive cost data for each jurisdiction, the analysis produced a set of financial statements to present typical business costs, from start-up through the first 10 years of operation.

For all eight industry sectors, Canada offered the lowest cost investment alternative among all countries studied. Canada is ranked first and Sweden is ranked second for all eight industries.

The size of the Canadian advantage varies by industry. For example, Canada's advantage over Sweden is less than 2.5 percent for all industries except software production where the availability of research and development tax credits gives Canada an advantage of more than five percent.

The Canadian Advantage

The KPMG study shows that lower startup costs mean that Canadian businesses can offer lower overall labour costs than the U.S. and most European locations. It also demonstrates that Canadian interest rates provide a significant advantage to operating costs. Our research and development incentives also give Canada a competitive advantage in the important area of technology development and knowledge intensive industries.

Overall, the study clearly proves that Canada offers the most cost competitive location from which to serve the NAFTA market.

As an example, the study presents a sample case to illustrate that, compared to the U.S., business costs in Canada are about \$1 million a year lower for an average firm of about 100 employees on revenues of \$10 million.

Taken together, the findings of the KPMG study challenge many of the international assumptions about the costs of doing business in different countries.

A careful analysis of the comparative costs clearly points to Canada as a preferred location for overseas investors.

The Economic Outlook

The specific cost advantages detailed in the KPMG study become even more significant when viewed against the positive investment climate in Canada.

The United Nations has said that because of our quality of life, Canada is the best country in the world in which to live. The KPMG study adds to the strength of our international reputation by showing why Canada should also be a preferred investment location, too.

These findings reinforce the many positive forecasts made by international analysts about the strength of Canada's economy.

The International Monetary Fund, for example, has predicted that Canada would lead the industrial world in economic growth this year and next. Many private forecasters are also recommending Canada as a leading investment target.

Over the last five years we have reestablished a sense of international confidence in the Canadian economy. When our government came into office in 1993 there was a sense that the economy was adrift.

Successive annual deficits, high interest rates and a weak economic per-

formance had undermined investor confidence in Canada. In 1993 the federal deficit exceeded \$42 billion dollars and there was no clear plan for recovery.

At that time, the Prime Minister pledged that our every action as a government would be aimed at rebuilding our economic vitality. We set about to get government right, to get the deficit under control and to re-establish confidence in Canada.

We succeeded — and the rebuilding program has worked.

Between October 1993 and the end of 1997, close to 1,000,000 new jobs were created by the Canadian economy.

Our inflation rate is below two percent and our interest rates are at historic lows.

Rigorous deficit reduction targets have been set and met. In fact, recent targets have been surpassed and many analysts are forecasting a budget surplus for Canada in 1998. Our economic and job creation growth rates are now among the highest in the industrial world.

Looking Ahead

The facts are in — the Canadian economy is in great shape. Now that the stage is set, Canadian companies are better able to take on the challenge of the global marketplace. We must get out there and tell the world a story — a story of excellence in Canadian capability, and of Canada as an ideal investment site.

There is a new spirit of cooperation evident between government and the private sector in Canada. And there is a renewed sense of optimism in the future, both inside and outside this country.

Our success has been earned by working together as governments, as businesses, and as individuals. And that is how we will continue to succeed as we look to the new millennium.

MARKET ONTARIO:

A Progress Report

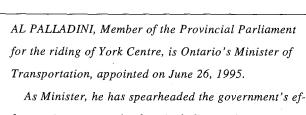
BY Hon. Al Palladini

On November 18, 1996, the Ministry of Economic Development, Trade and Tourism unveiled the "Market Ontario" program, designed to attract fresh inflows of foreign direct investment. As the launch year draws to a close, the Economic Developers Council of Ontario (EDCO) asked the Minister responsible, the Honourable Al Palladini, to talk about the initiative.

EDCO: This government has reviewed costs on a number of programs — in the interest of fiscal responsibility — yet is devoting additional resources to promoting investment. What makes this program such a priority?

A.P.: You are right to note our focus on fiscal responsibility, which is key to improving our business climate. For

example, we will balance the budget by the year 2000; we cut personal income tax by 30 percent; eliminated the Employer Health Tax; abolished the \$50 annual corporate filing fee; removed many regulatory barriers to business; froze Workers Compensation premiums, and hydro rates for five years; and established a Red Tape Review Commission.



forts to improve road safety, including such measures as automatic 90-day suspensions for drinking and driving, and heavier fines for truck safety offences.

Prior to his election as an MPP, he founded a large

automobile dealership in Woodbridge, Ont. He is the past chairman of the York-Finch General Hospital Foundation and a former director of the York University Scholarship Alliance Board. These are some of the steps we have taken that are making us more attractive as a place to do business — and one of the messages we're delivering through "Market Ontario."

But this program is important beyond that. Our government is committed to creating jobs, and foreign direct investment is critical to this process. It ensures that our industries profit from the latest technologies, and we remain a player in the global marketplace — and the jobs we're creating are jobs with a future.

Now, when we reviewed the hard numbers, we saw that Ontario's share of foreign direct investment was half what it was a decade ago, and the experts told us we weren't even "on the radar screen." That is what is driving this initiative.

EDCO: What's the most exciting development to this point?

A.P.: We said at the outset that this program was all about partnership, be-

cause our best spokespersons — and most credible sales agents, if you will — are the leaders of the major multinationals currently doing business here.

And I should tell you that the business community was willing and eager to be of assistance.

Sixty-four leading corporations offered film footage/web access for the creation of our flagship video and first TV spot.

Some 300 leading companies were represented at the program launch last November, held simultaneously in four major international business centres

A.P.: I think it's helpful to first understand the scope of this initiative.

We are most active in our four key global markets: the U.S., the U.K., Japan and Germany. We are using a total of 40 different leading business and industry publications, and to date, our ads have been seen by 15 million readers.

Our TV spot, either on CNN or aboard seven leading international airlines, has been seen by four times that number.

Nine different investment missions have been fielded, as we take our message to the world. of dollars are at stake, and the process can easily take a couple of years. But, beyond the support of our business partners, we are getting some very positive signals from the market.

There was an upsurge in enquiries when our TV advertising was on air, suggesting that it is in fact making an impact.

And independent research on our magazine advertising has established that it is outperforming the rest of the competitive jurisdictions tested on all the most important measures.

The Conference Board reports that business confidence has never been

INVESTMENT CLIMATE

B usiness confidence has never been higher with

Ontario currently leading the country in attracting new investment,

and there are extremely promising prospects.

and four different cities in the province.

Over 600 senior business executives have volunteered to become "Business Ambassadors," who will work to advance interest in Ontario around the world. Close to 100 Business Ambassadors have already taken part in investment missions, or attended trade shows, meeting with their industry counterparts in our key target markets.

The CEOs of a dozen leading multinational corporations have come forward to lend their names to our cause, and make the case for Ontario in our business press campaign. They represent the most important investment sectors.

By one estimate, the value of these corporate contributions is several million dollars. By any measure, it is clearly a vote of confidence in the program and its stated goals.

EDCO: You've talked about an 'integrated' program. What does that mean?

Half a dozen incoming journalist programs and business familiarization tours have been completed, as we invite the world here to check us out first hand.

We have produced new support materials. We are upgrading our website. We are about to embark on an ambitious program of direct marketing.

In short, a great deal of activity is now either under way or in the works. When I speak of an "integrated" program, I mean that all these parts connect — all share a common look and theme.

More importantly, they complement and reinforce each other, and should lead our prospects from an intitial favourable impression, through a positive first contact, and on to a final sale.

EDCO: And can we say at this point the program is working?

A.P.: Site-location decisions are not made overnight. Hundreds of millions

higher — and Ontario is currently leading the country in attracting new investment.

Over a quarter of a million new jobs have been created in the last two years. And I do not mind telling you that we are in discussion with a couple of extremely promising prospects, and have locked up half a dozen joint venture agreements.

EDCO: In other words, it is a success?

A.P.: I'm firmly convinced that we're off to a strong start. Business is on side, and in a big way. A host of new materials have been successfully delivered to market, and our own business people have carried the banner abroad. And we're actively recruiting new partners who share our belief that "The Future's Right Here."

If any of your readers would like to know more, just call 1-800-819-8701. Let's make something happen! ■

Exploring New Trade Opportunities For ITALY and CANADA

BY Ambassador Andrea Negrotto Cambiaso

Centuries after the arrival in Canada of Giovanni Caboto, Italy and Canada continue to celebrate a special relationship. In part, it is based on the vibrant presence of so many Italians who have become a part of this society without denying their roots — in a way that has not been done in the many other countries which have opened their doors to the Italian diaspora. Italy's presence as a feature

country at the Canadian National Exhibition in 1977, while not purely and exclusively commercial, was extremely successful in terms of the exposure it gave Italy, in all its economic, commercial, tourism, technological and cultural aspects, as well as highlighting those organizations that most represent the Italian-Canadian community.

But it was also successful in attracting the attention of a good number of Italian business concerns to Canada.

The Italian exhibitors left Toronto intent on pursuing their contacts through a more concrete and a broader presence in this market.

There have been several special opportunities that have strengthened relations between our two countries, not only politically — where they are indeed excellent as witnessed this year by a series of bilateral visits, first among them the visit of the President of the Republic of Italy in June of 1997 — but economically as well.

Italy and Canada are countries naturally inclined to trade. Both have a robust industrial fabric of small and medium-sized businesses directed to export and eager for greater internationalization.

Record Trade Levels

In 1995, trade between Italy and Canada reached its highest level in history, with Italian exports at 3.271 million dollars and Canadian exports to Italy at 1.777 million, putting Italy in third place, ahead of France, among European countries. And these numbers no longer refer only to traditional products — raw materials from Canada and consumer goods from Italy. Italian machine tools and Canadian aircraft are among the sophisticated technological products that represent a significant part of our trade.

Nonetheless, this relationship remains somewhat occasional, susceptible to slowdowns or regression, as in 1996 when it registered a 20 percent



HIS EXCELLENCY ANDREA NEGROTTO CAMBIASO has been Ambassor of Italy to Canada since 1994.

Born in Rome, and a graduate of Law from the University of Rome, he has held numerous senior posts in Italy's foreign service, including Chief of Cabinet for Minister of Foreign Affairs (1992); Ambassador to Malta (1983); First Economic Counsellor to the Italian Embassy in Paris (1977); and Permanent Representative

of Italy to the European Community in Brussels (1964).

reduction. There is a potential here that is under-utilized. The reality is that Italy's principal market remains the European Union, and Canada has NAFTA.

For this reason I am convinced that Italy and Canada must force themselves to consolidate their economic and commercial relations through new instruments, involving direct investment in both directions, the creation of joint-ventures, industrial cooperation, the involvement of financial institutions, and cooperation in third market penetration.

There are already encouraging signs

covers aerospace, defence, energy, and transportation. Given that it is already present in Canada, with Elsag-Bailey in Mississauga, it is interested in expanding its partnerships specifically in this country.

Small Business Cooperation

There is potential for cooperation not only through large groups but directly between small and medium businesses.

At the last national CIBPA meeting in Sudbury, a dialogue was initiated with Italy on what we call the North East Italian model, or the "industrial North American or European markets, or perhaps more realistically, acting together in the Asian or South American markets?

To do this, however, we must abandon traditional paths and seek new opportunities.

The Commercial Office of the Embassy, the Italian Trade Commission in Toronto and the Chamber of Commerce will assist Canadian companies that are interested in starting or expanding business contacts in Italy.

We have to offer a quality without rival in both consumer goods and manufacturing machinery. You have to

INTERNATIONAL MARKETS

The Canadian Government approved the requests

to grant branch status to foreign banks to meet the interests of small and

medium-sized business.

of interest, which in some cases have already materialized.

I would like to mention just a few: the first and most potentially important concerns Augusta of the Finnmeccanica Group, which supplies Search & Rescue helicopters to the Canadian Army; helicopters which are particularly suited to the Canadian reality and are offered today at conditions much more advantageous than in the past.

The project's industrial benefits, which far outweigh the value of the contract will, if the bid is successful, have a positive effect on a great number of large and small to medium Canadian companies. And this is by no means a closed package. The Italo-British aeronautical group is continuing its search for Canadian partners in several sectors of sub-supply for all its products, because it is convinced this market offers the highest capability and competitivity in the world.

Finnmeccanica, with sales of roughly nine billion Canadian dollars,

district" model. It is based on the multiplying effects of the interaction between businesses and sub-suppliers, based on a relationship that goes beyond the client—supplier rapport to a sort of osmosis born of shared experience and a fabric of proven relations.

I am certain that this model can offer great opportunities to the Italian-Canadian business community, both within the community as well as within the framework of the gradual interweaving of similar relationships between both shores of the Atlantic.

Exploring New Markets

If today's means of communication can shorten physical distance, why should it not be possible, by taking advantage of the cultural homogeneity of our two entrepreneurial classes, to imagine "transatlantic" districts in which, for example, the automotive sub-supply sector could cooperate organically, opening doors for each other in the

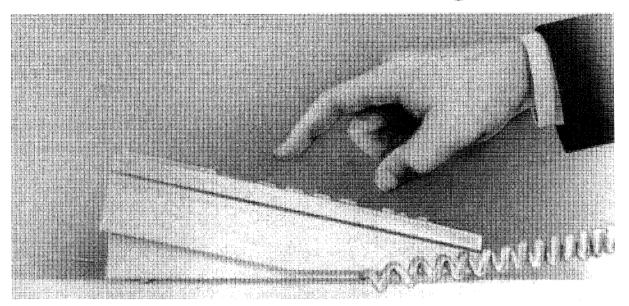
offer your strength in the most competitive business environment in the world. Together we share a personal approach to business networking which no one else possesses. Why should it not be possible to combine these competitive edges to our mutual benefit?

Financial Support

There is a role that financial institutions can play in facilitating and consolidating these relations, and hopefully interested companies will avail themselves fully of the growing liberalization of financial services.

It was precisely to meet the interests of small and medium-sized business that the Canadian Government approved the requests to grant branch status to foreign banks, enabling them to operate more effectively in the promotion of the internationalization of markets. This is particularly important for the Banca Commerciale Italiana,

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which is well-integrated in Canadian communities.

I encourage you to explore all the opportunities available: visit trade shows in Italy; encourage your Italian partners to take part in trade shows in Canada; ask for information and provide information; be an active part of a network between two of the strongest exporting economies in the world.

The Global Economy

Opportunities for small and mediumsized companies cannot be seen in isolation from macroeconomic perDespite this, the Italian balance of goods and services in 1996 registered a surplus of 90,000 billion lire, that is 70 billion Canadian dollars.

Finally, the deficit will be reduced by more than 3.5 percentage points in 1997 alone. It is no coincidence that Italy has become a destination for important foreign investment portfolios, which reached 122,000 billion lire in 1996, compared to 55,000 billion in Italian investments abroad.

Of course, it cannot be denied that these efforts are being made in difficult circumstances, particularly because of the scourge of unemployment, now stabrought Caboto to the shores of Canada 500 years ago, with that typically Italian desire to seek out new peoples and new lands, must drive the generations of today to know and recognize the roots of their fathers and grandfathers.

The "Action Plan" recently signed by the European Union and Canada contains a chapter entitled "Fostering Links." It discusses the need to strengthen cooperation in the area of education and culture, of science and technology. It is aimed above all at encouraging direct contacts at all levels, with particular attention to the business community and youth.

FOSTERING LINKS

There is an international effort to strengthen cooperation

in the areas of education and culture, as well as science

and technology.

spectives and the global economy. In the 1950s, Italy embarked on the great adventure of European integration, driven by the vision of bringing together, beginning with the freedom of trade, those peoples of Europe who had fought each other fiercely just a few years earlier. Today, Italy is preparing for the challenge of European Monetary Union, working toward the improvement of its economy's fundamentals.

The speed and scope of this improvement is extremely impressive. In the space of one year the inflation rate dropped from six percent to 1.5 percent, a level not seen since the 1960s; the interest rate differential between German and Italian ten-year securities has dropped more than five percentage points, and is now reduced to less than one percent; the lira has been reaccepted into the European Monetary System at a rate of 990 lire/DM, with a revaluation equivalent to 25 percent, from a low of 1250 in 1995.

tionary at 12 percent, extremely serious in the South and practically nonexistent in the North. But here too we are exploring new roads while a new model of industrial relations has been consolidated, making it possible, in recent years, to contain salary growth and to better withstand the impact of globalization. This has been achieved without dismantling important and positive social acheivements, but rather by eliminating some excesses and privileges of the Welfare State, thereby guaranteeing full social protection to all citizens, which is one of the few goals reached in this century in the human sphere.

People and Culture

In the end — beyond politics, economics and trade as abstract phenomena — there will always be people, with their own ideas, their own needs, their own drives to know and explore.

The same drive and curiosity that

It is here that the Canadian Italian Business and Professional Association and the youth of both countries have an irreplaceable role to play: The association for the concrete representation of the forces that contribute to shaping global society, in which borders and distances disappear; the younger generation as an expression of a future that must become the living link between decreasingly separate cultures.

Why not join forces to create a "Giovanni Caboto" scholarship program, aimed at providing young Canadians with the opportunity to acquire that edge that the knowledge of the Italian language can represent in their careers in business, politics, or in the cultural sphere.

I believe that a program such as this would be an important and lasting legacy of this "Anno Cabotiano," and it would provide a positive affirmation that it is desirable to continue to expand the economic, cultural, and human ties between our two countries.

strategic alliances in Asia Pacific

BY Stephen Li

Asia Pacific Region, an area comprised of a number of countries at varying stages of economic development. These range from the industrial and prosperous nations of Japan, Australia and New Zealand to the impoverished nations of India, Pakistan and Bangladesh. In between are rapidly

industrialized regions and nations such as Hong Kong, Singapore, South Korea and Taiwan, often referred to as the Small Asian Dragons. The rest of Asia includes Thailand, Malaysia, Indonesia, the Philippines, Vietnam and Burma. Significantly, the Asia-Pacific region is identified by Global 1000 companies as the top target for strategic investments.

Asia has achieved rapid economic

growth over the past 15 years or so despite the collapse of some Southeast Asian economies in the early 1970s. The industrial nations of East Asia will continue to achieve dynamic growth and present significant opportunities. Japan is expected to return to a pattern of expansion following a sharp deceleration between 1992 and 1995 associated with overpriced asset values and restructuring of the country's financial

sector. The heavily-populated nations of India and Pakistan will enjoy respectable GDP increase as they aggressively attempt to industrialize, but growth will not be sufficient to lift them out of Third World status at any time during the foreseeable future.

China by contrast, will enjoy robust growth and achieve significant industrialization in response to the introduction of market incentives over the past five to seven years. Prospects in the remainder of the region are mixed with the germinating market economies of Indonesia, Malaysia and Thailand holding very good prospect.



STEPHEN Y. S. LI is a partner of Quorum Funding Corporation, a Toronto-based private fund management company incorporated in 1985 with two branch offices in Vancouver and Calgary. The company also manages an Asian operation headquartered in Singapore with offices in Hong Kong, Taipei, Seoul and Tokyo.

Li joined Quorum in 1988 having moved from Hong Kong where he held a senior management position with

the Hong Kong government. He is a graduate of Hong Kong Polytechnic University with a Diploma in Management Studies; a member of the British Institute of Management; and a Board of Governors member of Mount Sinai Hospital, Toronto.

Political Stability

About half the people in the Asia-Pacific region are able to elect their government leaders in generally free and fair elections. The people of South Asia number about the same as those in China and have democratic parliamentary institutions to represent them. China is the single most populous

country in the region and is among the most politically repressive. Both the democracies and the autocracies of the region have the potential to be politically unstable during the next few years. Low-intensity religious and ethnic strife is bound to continue throughout the South Asia subcontinent. This

placed business.

The ASEAN countries are likely to remain stable despite the latent threat in the Philippines and Indonesia. Japan, Hong Kong, Singapore and Taiwan will also remain socially stable for the rest of the decade. North Korea is still a major concern. A unification of

region is hungry for new technologies to enhance their productivity and consumer products to better their standards of living.

Strategic Alliances

In recent years, virtually every business leader has considered the possibility of forging an alliance of some kind. Every day brings announcements of more than joint ventures, cooperative agreements or minority equity swaps between companies — even among some that were previously head-on competitors.

The principal objective, is almost always to get access — to new technologies, to manufacturing capacity, to markets and distribution, and to service capabilities.

Alliance generally requires the partners to contribute some of their managerial or technical expertise to the partnership. This transfer of knowledge can be a valuable source of innovative ideas as it requires the partners to prepare a detailed explanation of operations with which they are very familiar and probably have not examined objectively for some time. Ideas for improvement tend to be stifled by habits that no one questions. Alliances typically involve applying knowledge under different conditions, such as a new market, or with a new workforce or new material input. Knowledge is put to the test and this can generate valuable ideas. Alliance can also help in understanding the market conditions in the partner's market and respond to them by applying local knowledge and practice, which in turn enhance market acceptance and competitiveness.

With the rapid economic growth in the Asia-Pacific Region, numerous North American companies, big and small get into this emerging market through direct investment and strategic alliance with local partners. Such strategic alliance is not only a response to the need for economies of scale but often a reaction to competition and

GROSS DOMESTIC PRODUCT

by Sub-Region, 1996-99 (\$ Billion)

Sub-Region	1996	1997	1998	1999
Australia & New Zealand	471.7	505.8	520.2	481.2
ASEAN*	660.3	734.7	829.8	895.4
Greater China	1,046.4	1,136.2	1,250.9	1,383.0
South Asia	385.0	425.9	467.9	514.1
Japan	5,7772.9	6,228.5	6,679.0	7,159.9
South Korea	494.5	571.6	650.3	725.0
Total Asia-Pacific	8,780.8	9,602.7	10,398.1	11,158.6

SOURCE Economist Intelligence Unit Country Forecasts

NOTES

ASEAN (the Association of Southeast Asian Nations) includes Indonesia, Malaysia, the Phillipines, Singapore, and Thailand.
Greater China includes China, Hong Kong and Taiwan.
South Asia includes India, Pakistan and Sri Lanka.

has been a feature of life for many decades and is likely to present a major threat either to regional security or to growth in the subcontinent. It will, of course, continue to impede the pace of economic reform and to tarnish the image of this subregion in the eyes of foreign investors.

There are doubts over China's political stability. However, analysts contend the break-up of the country is highly unlikely during the next five years. Policy inertia would leave the structural weaknesses in the economy, in particular the need to overhaul lossmaking state enterprises, locking the economy into a constant "stop-go" cycle of inflationary growth followed by draconian clampdowns on credit. If Hong Kong's role as an international financial and shipping centre is threatened, there are few places in Asia other than Tokyo ready to take up the dis-

Korea, if it ever happens, would put tremendous pressure on South Korea both socially and economically.

Rapid Growth

The Asia-Pacific region will be the most rapidly growing part of the world over the next 10 years, expanding by an annual average of 6.4 percent. The commitment of nearly every government in the region to economic liberalization, privatization and the streaming of top-heavy bureaucracy will remain strong.

Governments that spend billions of dollars on infrastructure projects in these emerging markets provide huge opportunities for foreign investors. Foreign partners and investors can also take advantage of the abundant supply of competitive labour in this region.

With the growth in economies, this

elimination of cross-border risks. A joint-venture with a foreign partner can take advantage of their local market knowledge to react to changing needs. Another way to do it is to create a network of local distributors who can carry your products and advise you of the market conditions and needs.

There are also numerous professional legal, accountants and consultants firms of international standing who are readily available for advice on international businesses. Multi-national financial institutions also provide assistance not only in financial

ment services, including insurance, financing and guarantees to support exporters and their global customers. EDC can insure virtually any type of export, including electronic and technological equipment, raw materials and commodities. Their insurance services protect receivables against losses caused by commercial or political events.

• The Business Development Bank of Canada (BDC). It provides specialized funding for small and mediumsized enterprises that are commercially viable. EDC can pro-

institutions and trade offices provide information and analysis on country risk rating.

Foreign exchange is important in doing international business. Exchange rate fluctuations caused by various economic, political and sometimes speculative reasons create uncertainty in currency value which can impact or even eliminate narrow profit margins. There are some bank mechanisms available, such as forward foreign exchange contracts, which can eliminate most foreign exchange risk.

Global trade provides many opportu-

PRODUCT ACCEPTANCE

Deal with those Asia-Pacific countries that best accept

your products or technologies in order to form a solid market base before

moving into other jurisdictions.

transactions but credit information on local trading partners.

The role of government support programs for Canadian companies seeking to capitalize on foreign sale opportunities is changing- as government face the challenge of their own, often difficult, fiscal situation. It has become imperative that government and financial institutions work together to help Canadian companies find success in foreign markets. While the federal departments of Foreign Affairs and International Trade play a central role in supporting Canadian companies in export trade, there are also a number of crown organizations which make important contributions. They are:

- The Canadian Commercial Corporation (CCC). It provides exporters with valuable help when selling to a foreign government or international organization. CCC will act as prime contractor and guarantor for the Sale of Canadian goods and services to the foreign customers.
- The Export Development Corporation (EDC). It provides risk manage-

vide term loans, venture loans and venture capital, plus a wide range of export planning, counselling and training services.

- Program for Export Market Development (PEMD). It provides grants for export marketing development such as trade missions and trade shows held overseas.
- · Canadian Trade Commissioners.

Risks of Doing Business

All cross-border trade and business carry risks at one level or another. These risks can be categorized as "macro" or large-scale risks and "micro" or company-level or product risks.

Marco risks are grouped into "country risk," "foreign exchange risk" and "fraud."

Country Risk can be defined as political or economic events impeding a payment obligation. This category includes foreign exchange control, labour strikes or government instability. Therefore, it is vital to understand the local business practice and political system. Most international financial

nities for exciting and profitable business ventures. Unfortunately, along with these opportunities, come some carefully developed fraud schemes. Fraud can take the form of misrepresentation in documents and contracts, a counterparty not delivering goods as agreed, insurance fraud, cargo theft or outright piracy. It is difficult to identify all the methods used to defraud individuals and businesses, but one should watch out for some of the common fraud schemes such as prime bank note or standby letter of credit frauds, bogus securities, illegitimate shell banks, counterfeiting of currency, credit cards, stocks and bonds.

One should reduce his risk by obtaining trade and credit information reports from his bankers or government trade offices. Do not hesitate to consult your counsel to discuss the deal that has been presented. They can assist you to determine the authenticity of the transaction and will maintain confidentiality.

Micro risks include product, payment, remoteness, market information and cultural differences.

In doing cross-border business, it is vital to understand the foreign market, whether the product is acceptable or adaptable to local needs. Due to the remoteness of the market, payment and market information are often problematic. Understanding the business practice and working closely with your joint-venture partners can reduce some of these risks. Doing business in the Asia-Pacific region means dealing with over a dozen of countries with different cultures. Start with a few countries that best accept your products or technologies in order to form a solid market base before moving into other jurisdictions. Very often customization of your products is necessary to meet the local needs.

Researching the Market

It is absolutely important to do your homework. There are numerous international market research firms and business consultants who can provide valuable advice and market data on market conditions, local business practice, government rules and regulations, taxation, and credit information on business partners.

Suitcase selling is no longer applicable to sustain long term growth. It is vital to establish your presence in the market you are in by setting up a representative office or a joint-venture with local partners.

It is always advisable to have at least one of your own representatives in the management team of the joint venture. In setting up a joint venture, make sure the joint-venture agreement is carefully structured to include a sell and buy-out rights between the parties.

It is not surprising that joint-ventures do not have long life expectancies. The trouble starts when the market begins to grow. Suddenly, new capital must be committed and the venture is re-evaluated by the two parties.

One party walks away with capital gains, the other with ownership of the venture.

Due to the recent rapid growth in most Asian economies, it becomes rather costly to set up operations in this region. One should be mindful of the cost and always leverage on strategic allies and their infrastructure and networks. Rent and management compensation packages in the industrialized countries like Japan, Hong Kong and Singapore are rather high. Qualified and competent management expertise is available in this region and one should recruit a local management team in order to reduce high expatriate costs.

In other to be successful in doing business in the Asia-Pacific, one should take a longer term view and be patient in developing a good relationship and network. Sufficient financial planning should be made to nurture a new joint venture.

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TRADE MISSIONS:

Business or Boondoggle?

BY Peter Constantinou

Since time immemorial, political figures and governments have made trips to foreign lands to improve relations and expand trade opportunities. This model has changed little over time, except that private and public sector organizations have "institutionalized" this type of activity. The concept of a trade mission has now been enshrined as an essential format for increasing business or

trade. As well, it has the potential for leveraging other political or social effects.

The federal government has lead the charge with an expanded version of this activity — Team Canada. With the Prime Minister and representation of most of the premiers, the Canadian trade mission travels the globe trying to expand opportunities for business.

Local, regional and provincial governments have all adopted international trade activities, usually with

trade missions as fundamental components of their strategies. This is in addition to the activities of all of the chambers of commerce and boards of trade, not to mention the consulting firms that consider this a significant core component of their international financial institution work.

The activity is not without its detractors. Many dismiss trade missions as junkets or "perks of the job," where thousands of dollars are spent on luxury travel and accommodation and

where little business is done.

Given the increased acceptance by organizations and governments of the trade mission as prime vehicle for trade expansion, and the fiscal restraints faced by most public and private sector organizations, it is important to ensure that this activity has not been perpetuated only because that is what has always been done.

Are trade missions about business or about publicly-funded, high-style holidays for our public servants? Certainly, it is worthwhile to re-examine the value of trade missions as components of trade expansion strategies.

PETER P. CONSTANTINOU is Senior International Trade Advisor with the Green Industry Office at the Ontario Ministry of Environment and Energy. He has lead numerous business missions, most recently to China and Hong Kong.

Constantinou has a B.A. and M.A. in Public Policy and Administration from York and McMaster universities respectively and is part of the faculty at York and

Ryerson where he teaches policy analysis and program evaluation.

The Role of Government

In many parts of the world, government controls, or is at least very active, in certain parts of the economy. In some cases, government merely regulates foreign investment and activities; in others it actually operates crown corporations or state enterprises. In such instances, private companies often en-

counter difficulties in accessing key individuals or decision-makers. In some instances, government-to-government contact in traditionally lessopen economies is the only way to do business.

In such countries, heads of businesses or corporations report to political leaders or government officials. As a result, political approval or direction is usually required.

Trade missions, particularly large ones like Team Canada, bring a great deal of attention to the capabilities and interests of companies and countries. Team Canada missions to-date have nology, it may be difficult to convince others to adopt your technology. This normally means companies will lose valuable time in attaining market share while other companies or countries develop similar technologies.

Moreover, as is often the case in the environment industry, some of the best technologies come from individual inventors or small firms which do not have the wherewithal to sustain an active presence in international markets on their own.

Trade missions facilitate access to decision-makers or potential partners that would not normally occur otherexposure and advantage. Often, doing business in certain countries means getting through political barriers which can include tariffs, duties, intellectual property provisions, etc.

Government can bring opportunities to countries, and exert pressures to ensure that companies are treated fairly. While this does not necessarily mean preferential treatment, often it can mean improved access to markets or better positioning for contracts.

Having the attention of high-level political leaders can often set the tone for positive business relations. Governments, either directly or through

INTERNATIONAL PRESENCE

Government endorsement can be tremendously

important as it establishes credibility and trust with potential

business partners.

been heavily covered by local and international media. Media coverage brings Canadian companies to the minds of decision-makers.

Government Endorsements

Endorsement of a government is tremendously important as it establishes credibility and trust with potential business partners, in particular with countries where business is not done by price alone, but more on established relationships.

In this regard, areas of new technologies where scientific results are new and less understood, government endorsement is fundamental. The question whether a technology is operational and approved in your country is always an issue.

Endorsement is of particular importance in the area of environmental technologies. If a company's air pollution control device is not approved in the host country or if the government is not associated with the company and tech-

wise. Such activities also accelerate the learning process for companies starting to conduct business internationally. Most effective is the accompanying support services that governments offer in the areas of commercialization, business plan development and marketing activities.

The Canadian Advantage

What is often most frustrating is hearing from international organizations about the way Canadians tend to do business. Canadians are generally not as aggressive as other business people. What they tend to forget is that Canadians have a special place in the world — we do not have much political baggage. Canadian companies can work in the Middle East without worries about flags being burned or terrorist attacks, as is so often the case with American firms.

Assistance from government economic development professionals and trade missions is necessary in building their embassies, can access key contacts easier than companies. This is one area where government can really add value and deliver.

Doing business in other countries often involves relationship building and endorsement by government — nothing does this like visiting with a prime minister.

In order to do business in certain countries, foreigners must establish themselves and build a real presence. More that just setting up shop and being there, an association with the government always adds credibility. In some countries, this is absolutely necessary. What distinguishes one company from another may be sheer persistence and government support.

Effective Trade Missions

Missions can be extremely effective and successful or they can be a complete waste of time and money. But how can effective activities be ensured? Even the best-organized mission can turn out to be a waste of money.

Here are "Ten Ways" to ensure an effective and successful trade mission:

1. You must do your homework.

It is extremely important to do a thorough job of market intelligence. There are numerous sources. In fact, for some countries there is too much information and your job must be to assess the value of material. Contact the Department of Foreign Affairs, as the embassy continually feeds information from "on the ground" back to Ottawa. As well, there is a tremendous amount of information on the Internet.

It is important to get all of the details of "who is who" in other countries and the way in which decisions are being made, so you are not only meeting with the right people, you are also able to focus the meetings. Determine early on what you wish to accomplish with each meeting. And make sure all the participants understand the cultural norms of the country you are visiting and that they adhere to all the usual protocols.

All your documentation should be translated into the relevant language—also ensure that your business cards are translated correctly!

2. Efforts must be targeted.

Once you understand what opportunities exist out there, try to determine where your efforts would have the greatest impact.

Try to time your mission strategically. Have the mission coincide with a major trade show or conference where more of the key people will be around or available, or the exposure to additional potential partners may be greater.

Always try to find out who else has already broken the ice in that country. If Team Canada was there six months ago, another mission from Canada would be timely.

It is important to have a presence and visit on a regular basis. Such a mission would be the perfect follow-up to a Team Canada visit. Because the world is so big, and in certain countries like China you could spend all your time trying to break open new markets, focus and continually build on whatever "in" or advantage you have.

Keep "hitting the same nail on the head" so that you will eventually make inroads. Otherwise you will make many contacts, but never develop an ongoing relationship with any of them.

3. Preparation is key.

It is important to do as much business from home as possible so your meetings are not just introductions, but more substantive business. Your time in the country is extremely valuable and it must be maximized. You probably should spend as much as four or five times as much effort planning your agenda and preparing your documentation than you actually spend visiting the country.

4. Partnerships are powerful.

Work hard to determine who you can work with, both at home and in foreign markets. One simple way of doing this is to spread the word about your interests

In cases where you do not wish to reveal proprietary information, or give away any market secrets, have confidential discussions with embassy representatives and others. Remember, there are numerous business counsels who help companies find each other.

Quite often you are able to come to agreements with people to share expenses, thereby doubling your resources and efforts. When planning your mission, make sure to contact all of the relevant players — other governments and other companies — and get as much information as you can to maximize your efforts while you are there.

Do not underestimate the valuable role of the government economic development professional as a great source of market intelligence and as a partner when trying to access information or key individuals in other countries.

5. Cost recovery and value-added.

It has often been argued that trade missions are a joke with business people attending because they are freebies or because government pays for everything. There was a time when companies did get most of their expenses paid, but not anymore.

Every mission I have organized has been arranged so that companies paid their own way: flight, accommodation, transportation costs, etc.

In some cases, it makes logistical sense that the government organize and pay for certain activities or events, but they should be on a cost-recovery basis

Whether companies go or not will be a real indication of whether they place any value on such activities when they have to pay for them. This allows the government to do what it does best — arrange meetings or activities and approach and encourage certain key contacts.

This is the elusive "value-added" role of government and it is best that government sticks to it, as no one does business better than business. Often, company representatives will know more about doing business in foreign markets than anyone else.

6. Commitment, resources and time.

Developing business internationally is not cheap: you must have a real commitment to be in a particular market for the long haul. If you are not committed and supporting that activity fully, then any resources you do allocate are indeed wasted.

As one very wise and experienced player in the international market once said: "If you want to play, you have to pay."

7. Activities that matter.

Trade missions have earned a reputation for fluff, and if you are to successfully attract the right people and make the right connections, you will have to battle this reputation which will proceed you.

Organizers must do everything in their power to ensure a proper balance in the program between political talks and business, and private time and sight-seeing.

There must be some private time built into the program. After travelling thousands of miles, people will have jet-lag and will require time to recuperate

Keep in mind, trade missions are not vacations. They are usually packed with meetings from morning to night, including all meal times.

In fact, in some countries, food and drink are a big part of the ceremony. Be respectful of customs and rituals. Work hard at developing the right program and setting the right tone — you do not want to show up at your next meeting or destination with the reputation of being rowdy drinkers or hooligans!

8. Business relations.

In many countries, no business is done until a certain relationship exists. Build time into your business and marketing plans to build such relationships. This means a repeated presence and effort.

Be attentive to local customs and manners, and be sure to be seen making an effort to embrace those customs. A certain amount of hospitality should be part of your itinerary, including small gifts, dinners, and social events, etc.

9. Trade is a two-way street.

The days of having someone buy something out of a briefcase are gone: now international trade involves more than just a purchase order.

Most typically, business discussions will focus on joint venture agreements to manufacture in that particular market, with the company building, operating and eventually transferring the facility over to the international partner.

The key to building goodwill in this regard is to include workshops on technology transfers or training opportunities/exchanges in your program. Build into your negotiations an opportunity to make the host country feel involved and see the benefits of the relationship, instead of just buying a product or service. These things are now expected in most cases, and one way to distinguish your efforts from a competitor is to address this expectation up front.

10. Follow-up.

You can lead a horse to water, but you can't make him drink. Follow-up is consistently the biggest stumbling-block for most companies. That is to say, most people who are out of the office for a couple of weeks, return home only to find a pile of paper on their desks. By the time they recover six weeks have passed and they are working on the next project; as a result, they do not spend the time necessary to properly follow up every real lead they may have received. In such cases, the trade mission can be considered a waste of time.

Great effort goes into developing a marketing plan, identifying opportunities and potential partners, arranging meetings, and discussing ideas. When they do not act on any of the discussions, or "strike when the iron is hot," people begin to wonder about their interest, commitment, and ability to deliver.

Conducting business internationally always takes time, and results often do not manifest themselves for 12 to 24 months. You should still be communicating and visiting regularly. Unless you are prepared to spend time and money regularly, do not bother with the international market.

Measuring Success

Measuring success in any government program is difficult — how do you show results to your political masters or the public when you are developing

relations and goodwill? Business people know that developing business internationally takes time and requires a significant investment before seeing any benefits.

Any evaluation of this sort of activity must contain a number of components:

- General good will. Investing in positive relations between companies produces valuable results on many levels, not just trade relations.
- Contracts. Are Canadian companies winning more business internationally? Are the overall trade figures for that nation improving?
- Technology transfer and exchange.
 A significant component are the benefits flowing both ways?

Business missions are a combination of various components. The mission should educate business people about doing business in foreign countries. It should also educate our politicians and decision makers: the world is bigger than their jurisdiction or constituency, and with their jobs often comes some responsibilities for the greater good.

In the case of environmental technologies companies, it behooves government to help other jurisdictions in meeting their environmental challenges, since we often share the same problems. And if Canada has technologies that can go a long way towards solving those challenges, then it is a win-win situation.

The question will be asked if any real contracts were signed, as opposed to memoranda of understanding or letters of intent.

While this is important and is one of the few more tangible indicators, it cannot be the only measure of success.

Contributing to better relations, trade or otherwise — such as the sharing of values and expanding our understanding of each other — is also essential.

Trade and Investment in Canada's Agri-food Sector

BY Gordon McGregor

The future growth of Canada's multi-billion agri-food sector must come from substantially increased exports as the domestic market, while still very important as a base, no longer provides sufficient demand. The needed growth in exports must involve significant growth in value-added crops, processed products and food services. This has clear implications for regional

economic development and investment, particularly if an export goal of \$40 billion by 2005 is accepted by the industry.

Eight priority markets, from a national perspective, have been identified as providing most of the expected growth in exports: the United States, Japan, the European Union, China/Hong Kong, South Korea, Taiwan, Mexico and Brazil.

These markets accounted for almost 85 percent of the value of Canadian agri-food exports over the past four years.

Five countries within these markets (U.S., Japan, U.K., France and Germany) account for over half of total global investment flows and nearly 90 percent of Foreign Direct Investment stock in Canada.

Canada's Potential

The eight priority markets accounted for an average \$13.9 billion in agrifood exports over the last four years and are targeted to increase to \$28 billion by the year 2005, almost double the four-year average. At the same time, high-value exports (intermediate and consumer-oriented products) are targeted to account for 77 percent of the total, versus 66 percent over the 1993-96 period.

Bulk commodities accounted for about \$5 billion on average in agrifood exports over the past four years. While substantial potential for commodity exports exists, supply constraints will limit Canada's growth in export volumes. Commodity exports are therefore expected to grow modestly in value over the coming period

to around \$7.3 billion in 2005.

Cumulatively, Canada's share of agri-food imports to these eight markets is about five percent (including intra-EU trade). This compares with the three percent share of world agrifood trade that Canada has captured in the past few years.

Canada's overall market share in each of these markets is targeted to rise. This reflects our ability to capture some of the expected growth in overall agri-food imports into these markets over the coming period. However, it is anticipated that actual growth in any market will differ from these targets, as export success in one market may draw firms and limited Canadian product supply from other markets which otherwise would be their destination.

The Context of Change

Free Trade with the U.S., the implementation of NAFTA and the WTO, globalization and slow but steady

 $GORDON\ McGREGOR\ is\ Executive\ Coordinator,\ Marketing\ Industry\ Services$

Branch, at Agriculture Canada, Ottawa.

moves towards fewer technical barriers to trade have greatly stimulated the growth of the export-oriented agrifood industries.

With few tariff barriers in place, international trade is increasingly influenced by requirements to meet product quality standards, stringent health and safety regulations and national labeling requirements.

These pressures are imposed by governments and by leading global companies determined to ensure food products meet health and safety requirements and to protect corporate brand reputations. Together these

U.S. and Asia.

Some major world trends that influence the growth options for the Canadian industry include:

- International trade in value-added products is outpacing traditional trade in commodities;
- Continued growth of importance of global companies and global brands;
- Pressure to deliver shareholder value, which implies continued rationalization of MNEs;
- Global marketing and global brands
 options for smaller companies
 such as private label, co-packing,

trends.

These changes involve investments in automation and informatics technologies as well as newer, better and larger facilities to take advantage of economies of scale.

Companies faced with significant changes may choose to relocate their facilities, often preferring to acquire or build plants in smaller towns on the peripheries of major cities. Location decisions are influenced by the growing realization that north-south trade rather than east-west trade will increasingly dominate the North American market.

GROWTH OPPORTUNITIES

The Canadian agri-food industry can add

considerable value to its total output as it moves up from commodities

to more valuable products.

forces drive investments in new facilities and production technologies capable of providing safe, high-quality products at competitive prices.

Opportunities and Challenges

Canada is considered by many observers as one of the few countries in the world where agricultural production can be expanded significantly in the opening decades of the next century.

The Canadian industry can also add considerable value to its total output as it moves up from commodities to more valuable products. This trend is clearly emerging in western Canada as a result of elimination of subsidies to the grain transportation system. It is now simply too expensive to ship certain bulk grains. There also is considerable investment in food processing in the west as industry responds to new opportunities particularly for exporting to the

marketing alliances;

- Growing importance of health and safety as well as quality standards based on the use of objective technologies such as HACCP and ISO 9000;
- Need for enhanced management of supply chain by industry (identity preserved products, segregation genetically modified products, etc.);
- Pressures to increase regulatory harmonization worldwide;
- Effect of the growing acceptance of distribution management technologies and management systems such as Electronic Data Interchange, Efficient Consumer Response, and Just-In-Time logistics.

While these trends influence the evolution of the industry in many specific ways, taken together, they tend to force change as producers and agribusiness companies react to the market pressures driven primarily by these

Growth Targets

In 1993 industry and government in Canada set a target for growing agrifood exports to \$20 billion by the year 2000. In fact, this goal was essentially reached by the end of 1996.

Various industry groups are now trying to set a new goal, perhaps the doubling of exports by the year 2005. Such efforts to set export growth targets require a clear understanding of just what industry sub-sectors have the potential to contribute significantly to reaching such an ambitious target and which do not.

It is obvious that such a goal can no longer be reached simply by producing more commodities. Reaching such a target requires a major increase in Canada's ability to manufacture value-added food products. This ability depends on whether or not business conditions in Canada favour investment beyond the levels and strategic focus that have characterized the in-

dustry in recent years. In this regard, there is a need to achieve a better public understanding of the investment implications of doubling the sector's exports and of the role played by governments in bringing about a favourable business climate.

Much has been done already to cultivate a business climate that is more conducive to strategic investment in the agri-food sector. The key business indicators say that Canada is the preferred place in which to invest right now; and these positive indicators are based on significant structural change, change that is going to last.

level relationships with major international investors.

The agri-food sector is considered to be a priority sector for promotional efforts in large part due to its potential to grow through major increases in its volume and its value of exports.

Investment promotion activities are not conducted in isolation. Partnership building with the provinces, traditionally very active in investment attraction activities, is increasingly important.

The federal and provincial governments are currently working to develop clear and complementary roles for their ages, links to supplier networks and product development companies providing technologies, ingredients, packaging and marketing services are of crucial importance. Such networks are usually found in or close to major urban centres and are increasingly important to the rapid growth of firms whose business is based on differentiating their products in the highly competitive branded food and beverage industry.

The investments needed to drive the expected expansion of the industry will undoubtedly arise in large part from within the industry. However, there is

FUTURE INVESTMENT

Trade liberalization in agricultural products

is expected to lead to increased interest in financing the growth

of agri-food companies.

Canada's great performance is not just a flash in the pan. Having made significant progress on this front, the Government of Canada is increasingly active in the promotion of specific opportunities to investors at home and abroad.

Promoting Canada

The role of governments in promoting Canada as a destination for investment in all sectors is changing rapidly as awareness of the tight coupling between trade and investment grows. Current federal efforts are focusing through generic image-raising activities, the provision of national bench marking information such as the recent KPMG report entitled *The Competitive Alternative: A Comparison of Business Costs in Canada, Europe and the United States*, increased liaison with major site selection companies and a renewed emphasis on developing high

activities on behalf of the agri-food sector.

Future Expansion

This cooperative approach is driven in part by a growing recognition that the future expansion of the agri-food sector will be very important to rural development in particular.

Canada's rural areas are a natural site option for agri-food companies considering new facilities, particularly if proximity to raw materials is a major locational factor. The current investment wave in hog barns and pork processing facilities in western Canada is an excellent example of the revitalization of an industry and of rural communities.

Of course, expansion of the sector is not simply linked to the availability of raw materials. In the high value-added industries, generally those producing branded packages foods and beverincreased interest in the sector from investors in Asia, a development which is linked to the growing importance of Asian countries as markets for the output of the industry.

Trade liberalization in agricultural products is also expected to lead to increased interest in financing the growth of agri-food companies through public share offerings as companies grow through expansions and, more frequently, through acquisitions.

The Canadian industry has recently witnessed a series of major deals involving dairy and meat companies which are driven by the need to attract capital from major investment funds.

This heightened interest in the sector is likely to continue if export led growth maintains its recent performance. The implications for economic development are exciting and well worth a second look.

Succeeding in a KNOWLEDGE-BASED ECONOMY

BY Hon. Maurizio Bevilacqua

For some time now Canadians have been witnessing a fundamental change in their economy — where the growing use of knowledge, ideas and innovation are increasingly becoming the principal engines of economic growth and job creation. Today, economic success is based not so much on raw natural resources as it is on excellence in human resources. Ideas and entrepreneurship are, more

than ever, the key to better incomes and a higher quality of life. This is true not only for high-tech industries and jobs — everyone, from mechanic to trucker to salesperson, must learn new skills and better ways of doing business if they want to succeed.

While these changes are opening up vast new opportunities, many Canadians are worried that forces over which they have no control might well leave them or their children behind.

Government has a role to play in helping Canadians succeed in the

knowledge-based global economy — a responsibility to help as many Canadians as possible join the economic mainstream, and an obligation to reach out to those left behind. Government must ensure that its citizens not only survive in an evolving economy, but that they are also equipped to succeed.

While advances in knowledge have always been important in generating economic growth, the relative importance of new ideas has increased steadily in recent years and is reshaping the economy and society. Raw materials are still valuable, but new ideas about how to use those materials can be even more valuable — and can be shared faster and more widely today than in the past.

Many Canadian industries are leaders in the development and adoption of technology, and not just in the high-tech sector. For example, new methods of managing inventories, and new technologies to implement those ideas, are changing the way retailers operate, and the skills needed by sales personnel. Canada's resource industries are being transformed by such advances in knowledge as the use of satellite-generated images in resource exploration and development.

Biotechnology is being used in the agricultural sector to enhance product quality, and to improve crop yields and disease resistance.

Canada's overall innovation performance has improved substantially in recent years. Businesses have increased their spending on R&D by an estimated 80 percent since the end of



MAURIZIO BEVILACQUA, MP Vaughan-King-Aurora, is serving his third term as a Member of Parliament. He is Chair of the House of Commons Standing Committee on Finance. This position follows a two-year appointment as Parliamentary Secretary to the Minister of Human Resources Development, a two-year term as Chair of The Standing Committee on Human Resources Development.

opment and Chair of the Ministerial Task Force on Youth.

the 1980s. The share of manufacturers using advanced technology has risen from under 60 percent in 1989 to almost three-quarters recently.

Despite this progress, there is concern that advancements in knowledge and new technology could mean fewer jobs, particularly for those who lack the required skills. While new technology does tend to reduce the number of workers needed to produce specific products, there is overwhelming evidence that advances in knowledge ultimately result in a net increase in jobs. This is because new technologies lead to new products and services, a higher quality of existing products, and lower production costs, all of which stimulate economic growth and job creation.

The benefits of a growing commitment to technology are already evident. A recent Conference Board of Canada study entitled *Jobs in the Knowledge-Based Economy* found that firms having purchased and used information technology outperformed others over the past decade, both in terms of output growth and job creation (*see chart*).

stimulating job creation, advances in knowledge also lead to higher real incomes through increased productivity.

Globalization

The growing importance of knowledge has been accompanied by globalization or the increasing integration of the world's economies brought on by such factors as faster and better communications and transportation, and a worldwide liberalization of trade and investment policies. While this has made competition more intense, it has dramatically increased the potential customer base for Canada's goods and services, making the application of new ideas even more rewarding. It has also allowed Canadian producers to specialize in what they do best, while giving Canadian firms and consumers access to new and better-quality products and services at lower prices.

Economic activity is increasingly becoming less tied to geography and natural resource endowments and more tied to human resource endowments. This has led to a growing world dethat a skilled workforce was the most important influence on the decision of where to locate.

New Leadership Role

The market alone will not provide the infrastructure necessary to make the forces of change work for us rather than against us. And the market does not care for those left behind. Filling those gaps is one of the central challenges facing government.

The core national economic priority must be to build an enduring foundation for employment in today's as well as tomorrow's economy.

How can government accomplish this task in an era of limited resources? The answer is to work more effectively by focusing on key priorities. Governments can no longer be all things to all people. Working effectively means recognizing that "going it alone" is rarely a good policy. That is why the federal, provincial and territorial governments have been developing a more collaborative approach to strengthening Canada's social union.

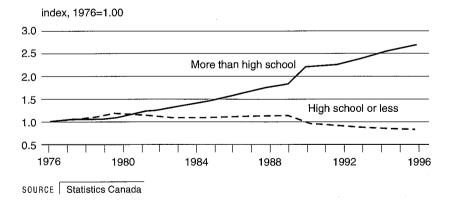
Building on this teamwork approach, partnerships between the federal and provincial governments have been broadened to include the private sector in ventures such as the "Canada Foundation for Innovation."

Providing effective, focused government is essential to creating opportunities and building security for Canadians, but it is not enough. The federal government must also provide leadership in four areas that are key to Canada's prosperity in the global knowledge-based economy.

I. A Sound Economic Framework. A sound economic framework is an essential ingredient for sustained prosperity. A healthy economy is key to encouraging business investment and major consumer purchases. This requires sound fiscal management and low and stable inflation. Strong business investment ultimately stimulates

EMPLOYMENT GROWTH

by Education Attainment, 1976-1996



A study by Industry Canada entitled Employment Performance in the Knowledge-Based Economy also found that employment growth in Canada is increasingly related to the use and production of knowledge. As well as

mand for skilled workers who are increasingly important to attracting new investment and production. A recent study by the Conference Board of Canada on the high-technology industry and its corporate perspective found

growth of the productive capacity of the economy and the adoption of new technologies embodied in capital goods. Tax laws and regulations, which affect the investment and spending decisions of businesses, workers and consumers, can also have a major effect on the health of the economy. The government must therefore ensure that it maintains a fair and efficient tax system to raise its revenues — a system that reflects taxpayers' ability to pay, ensures that taxes are collected in a manner conducive to creating jobs and growth, and that taxes owing are indeed paid.

The federal government's approach to improving Canada's tax system will continue to be guided by two principles. First, the government will provide targeted tax relief to deal with the most pressing social and economic stresses. Second, as the fiscal dividend grows, the tax burden will be reduced in ways that not only ensure fairness, but yield significant benefits in improving jobs and growth.

2. Promoting Knowledge and Innovation. Building a strong economy based on knowledge requires the active participation of individuals, businesses and governments. Businesses are motivated to develop and apply knowledge through investment in R&D. However, the returns from advancements in knowledge not only accrue to the businesses that make the investment, but can also spill over to the rest of the economy— for example, through better quality products and services at lower prices — thereby benefiting society as a whole.

Hence the government has a leadership role to play in promoting knowledge and innovation in several ways.

■ First, laws and regulations can have a profound influence on the generation and use of knowledge. For example, intellectual property laws strike a balance between encouraging the development of new ideas and promoting

their diffusion throughout the economy. This works particularly well for encouraging late-stage R&D.

- Second, federal government programs are needed to encourage early stages of research when openness and collaboration are essential to progress and patent protection may not be possible. The federal government currently spends over \$5 billion annually on science and technology-related activities. Many programs are run in cooperation with the private sector, such as in the area of space technology development. About 21 per cent of all R&D in Canada is funded by the federal government (including transfers to businesses and universities to finance basic and applied research). The Scientific Research and Experimental Development (SR&ED) investment tax credit providing assistance of \$1.3 billion annually — is also an important intitiative that encourages research in Canada.
- Third, world-class research facilities have become key to attracting investment in areas of high-growth potential and to training and retaining highly-skilled research personnel in Canada. The federal government's endowment of \$800 million for the Canada Foundation for Innovation in partnership with the private sector, provincial governments and universities is helping modernize research facilities at Canadian post-secondary education institutions and research hospitals in the areas of science and engineering, health and the environment.
- Finally, the federal government has a role to play in supporting the generation and diffusion of knowledge throughout Canada's diverse industries and regions. In particular, Canada's small and medium-size businesses can benefit by improving their access to leading-edge technology, financing, and markets.

The growing importance of the Internet prompted the government to develop programs to assist communities, schools, libraries and businesses to

connect to the information highway. For example, the SchoolNet program is providing young Canadians with vital access to, and training and experience in new information technologies. Making Canada the most connected nation in the world will provide Canadians with new opportunities for learning, interacting, transacting business and developing their economic and social potential. Improved access to international markets is also key to the development of knowledge by encouraging Canadian firms to specialize in what they do best. It also encourages the use of new and better-quality inputs at lower prices to take advantage of new market opportunities. The federal government's primary role in this area is to ensure that a fair set of rules governs economic relations with all of Canada's trading partners. To that end, fortrade agreements are very important in safeguarding the interests of smaller open economies like Canada's. In particular, the federal government is continuing to pursue multilateral and bilateral trade agreements such as the negotiations that resulted in the creation of the World Trade Organization (WTO) to oversee and guide the expansion of world trade. The government is also supporting the private sector in securing and expanding Canada's access to world markets for its products and services, through an aggressive international trade promotion strategy led by the Team Canada trade missions.

3. Life Long Learning. The changes that are taking place in the economy are altering the way Canadians work and the skills they need to find and keep a job. Although this has been a fact of life for more than a century, the fortunes of workers depend increasingly on the skills they already possess or are prepared to acquire. Most importantly, education and training are the best tools to reduce income inequality, by giving people the skills needed to seize the opportunities available in a strong,

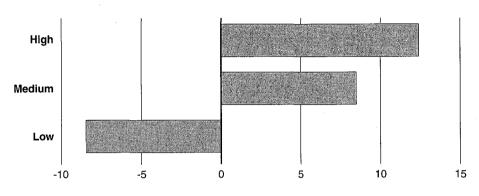
modern economy. In this way, education and training provide both a solid foundation for a strong economy, and a society that is fairer and more inclusive.

The premium that the knowledgebased economy has placed on skills is reflected in Canada's employment statistics. Over the past two decades, job its recently expanded Youth Employment Strategy, it promotes work experience for young Canadians in partnership with aboriginal communities, the private sector, and community organizations. The government is also working with the provinces, the private sector and communities to develop a new mentorship program, and to intro-

in life through a new partnership with the provinces to create a National Child Benefit System. The government will preserve, protect and improve the health care system and ensure that it meets the needs of the future. And it is acting to secure the retirement income system so that the seniors of tomorrow will have adequate income when they retire, while assuring today's seniors that their pensions will be protected.

EMPLOYMENT GROWTH

by Information Technology Intensity, 1966-1995



SOURCE Statistics Canada; The Conference Board of Canada

growth has been faster for those with higher skills (see chart).

With the number of jobs for persons with less than high school education shrinking rapidly, their unemployment rate is now double that of persons with a university degree. Moreover, given the relatively weak demand for low-skilled workers, their employment earnings are falling behind those of more educated and skilled workers, risking a polarization of incomes that could damage the social fabric.

The rising importance of education and skills is only partly due to the creation of new "high-skill" jobs in hightech industries. There has also been a steady increase in skill requirements in all sectors of the economy and in most types of jobs — from machinists to warehouse workers, from farmers to loggers.

For young people, the federal government is helping them make the transition to a career-oriented job. Through

duce a new community-based program for those young Canadians who are most at risk of unemployment because of their lack of skills and low education. Internship programs will be expanded and aboriginal youth centres will be created to help off- reserve aboriginal young people who are unemployed.

4. Building a Strong Society. Canada's future prosperity depends as much on our valued education, health and social programs as it does on our economic policies. These programs not only reflect Canada's values, they are an economic necessity because they provide Canadians with the sense of security that allows them to participate in the economy with confidence. Having confidence in these programs is more important than ever in an era of profound economic change. The federal government is taking action to help Canadian families give their children a good start

Helping Canada To Succeed

As we move towards the 21st century, the growing importance of knowledge offers all Canadians great challenges and great opportunities. Modern communications have caused distance to lose much of its economic meaning, and skills are becoming the most important raw materials of all. This transformation can be the source of a widespread increase in living standards if individuals, businesses and governments make the right choices.

That is why the federal government is committed to providing leadership in helping Canada succeed as a knowledge-based economy and society. The government understands that a country with a rich natural resource base can be truly successful only if it also develops a rich base of knowledgeable and skilled workers. Yet, a country with a rich base of knowledgeable and skilled workers will succeed only if its economy creates the opportunities needed to develop and apply those skills in an innovative workplace. And, these opportunities will only be fully seized if Canadians have the security needed to confidently make the necessary adjustments.

This means ensuring that Canada's valued education, health and social programs are there for those who need them. The federal government is determined to build a society of skills, innovation and security, where each element reinforces the other, creating and sustaining jobs and raising the Canadian standard of living.

Sustaining the Dynamic Growth of TECHNOLOGY-DEPENDENT COMMUNITIES

BY Peter Leach

There has been substantial evolution of the mechanisms and practices which encourage the formation of technology-intensive industrial clusters and innumerable conferences on this subject. Less well-covered is the evaluation of the factors necessary to sustain the dynamic growth of such clusters which, by this stage, have often become complete communities. This paper will review the

determining factors which are instrumental in enabling growth continuance. Circumstances that can lead to a growth stall can be any one or any combination of these factors and, if a number of factors become minor inhibitors, their cumulative impact may result in stalling.

The factors this paper will cover are: Human Resources, Quality of Life, Networking Infrastructure, Communications Infrastructure, Community Ownership, Real Estate, and finally, the 'Community Plan.'

For the purpose of brevity, some conventional acronyms will be used — one created here is "T-dC" for "Technology-dependent Community."

Human Resources

It is clear that the supply of the 'intellectual capacity' to sustain continual innovation and to broaden the knowledge base is absolutely paramount to success. The supply of highly-trained, intra- and entrepreneurial, talented people and the availability of the technician, manufacturing and marketing personnel are key in sustaining the growth dynamic.

Without a very aggressive strategy, the local colleges and universities have extreme difficulty in adjusting their systems, courses, student intake, funding and facilities to meet the explosive growth of T-dC's. This is the result of the rapidity of change in the needs of industry as new technologies and new knowledge constantly make previous knowledge obsolete, and of the funding mechanisms which are usually controlled outside the community (on a national and/or regional basis).

Further, the leadership in the educational infrastructure is rarely selected by, or aligned with, the cluster leaders. Education sometimes works at cross purposes with the educational needs of the industry which form the cluster, even though education leaders con-



PETER LEACH is President and CEO of Communications and Information Technology Ontario (CITO), a new organization formed by the merger of the Information Technology Research Centre and the Telecommunications Research Institute of Ontario.

He is currently President of TRIO, which funds industrially-oriented pre-competitive research at seven Ontario universities. Previously, he held senior

management positions with Bell Northern Research, most recently as Director of Technology Acquisition.

stantly try to respond to the 'technology of the day.'

This concern is even greater within primary and secondary educational systems. The general curricula structures permit students to opt out of key subjects before they really understand the broad spectrum of jobs, even in the arts, that now require a knowledge of mathematics, science and engineering.

The connection between the system and the cluster industries is also very difficult due to the time delay between any adjustment in the system and the needs perceived by industry. A further complicating factor is the influence of a long-term solution, but it is critically dependent on a perception (and the reality) of a high quality of life, substantial spousal job opportunities and a top salary and benefits.

It also may require changes to immigration frameworks, salary scale and benefit realignments and other novel methods to attract the best.

A further opportunity that is only now starting to become technically possible is through tele-work. Having access to national and international expert teams working as collaborating partners within a single project is an immensely powerful concept. It is

dependent on the quality of life that is perceived and experienced.

The industry thrives in an environment of high energy people of diverse interests, backgrounds and extra-curricular social activity. With a relatively young core in its workforce, key quality of life needs include:

1. The quality and convenience of kindergarten and schooling.

With a majority of employees having young families, a key decision factor on where to locate is the existence of an excellent pre-school and educational system.

EDUCATED WORKFORCE

A key response to the inability of the educational

infrastructure to generate well-qualified people includes well-known

supply enhancement strategies such as recruitment.

Boards of Education and Parent/Teacher Associations.

With the time demands of technology-based industries, the involvement of knowledgeable people in changing the curriculum and re-orienting the teachers is usually very limited. The entire system appears essentially disconnected from the drive of the community.

Thus, the primary generator of the educated population on which the success of the community depends is not usually driven by the needs of the industrial organizations on which the success will be built.

A key response to the inability of the educational infrastructure to generate the right numbers of well-qualified people includes some well-known supply enhancement strategies. In smaller T-dC's, the first response is to recruit from other cities.

While such raiding escalates salaries, it rarely provides the sustainable high quality and quantity. However, international recruitment may provide

much easier to develop such teams from within their own current environments. It is also substantially cheaper, faster and less costly. It provides the capability to re-orient research teams and to reconstitute them far more dynamically than before. This is also more flexible as it allows top contributors to work with more than one company simultaneously, subject of course, to confidentiality and conflict of interest situations.

In the future, sustaining the dynamic growth of a T-dC will clearly use all such mechanisms as well as forming the key links between industry, schools, colleges and universities to quickly realign the priorities and curricula which will provide an adequate accessible talent pool. It is clear that failure to do so will stall cluster development.

Quality Of Life

A key issue to attracting and retaining high quality, high technology people is As most employees tend to be more highly educated than the general population, their expectations of the educational system are also higher. The capacity of this high quality education system must be able to respond to the growth it will experience and must not lose its quality standards.

2. The quality and accessibility of postsecondary education.

A primary factor in the continuing growth of any T-dC is the existence in the community of high quality technical colleges and universities. Students are attracted from all over the world to recognized top quality universities and colleges and, with a dynamic industrial environment, many stay for stimulating jobs within the T-dC.

Furthermore, as the community expands, the growth of supporting businesses attracts experienced business managers whose families are likely to attend local tertiary educational institutes, especially if these are top calibre.

3. Healthcare Infrastructure.

Whether or not the T-dC is focused on healthcare as an industrial sector, healthcare infrastructure and quality is a factor in establishing a quality of life. However, a majority of the people that enter technology businesses only see the need for a quality of service. Once a prescribed quality level is achieved, healthcare is unlikely to be a differentiating factor. If it is substandard, however, it may be a substantial inhibitor.

4. Quality and breadth of participating sports.

High energy people tend to be person-

prerequisite. The infrastructure which allows top-class entertainment, as well as individual participation at many levels, becomes critical as the employment in the industry grows and the need to attract people from other places expands.

6. Quality environment.

A pleasing environment in and around the T-dC is again a substantial quality of life factor. There is a substantial conflict here, however. In a stable urban environment, the maintenance of a clean, safe environment is relatively manageable, but in a high growth comexchange of knowledge across corporations within the same campus environment.

Networking

Networking takes various forms and has a number of key attributes which are essential to sustaining the momentum of T-dC development.

1) The first form is inter-personal networking which brings people together and allows the exchange of ideas and opportunities. In a momentum sustaining condition, such networking should

DYNAMIC GROWTH

n a knowledge-based economy where information is

the principal determinant of success, the communications infrastructure

is a critical element.

ally active in their private lives. A living environment which supports a lifestyle image of health and well being through sport, and which provides the breadth of sporting activities to satisfy the needs of enthusiastic sportsmen, is very important.

Silicon Valley promoted this most successfully as has Sofia Antipolis in the South of France. Almost all T-dC's promote either a total healthy lifestyle environment or a subset appeal (an aspirant sailor is not going to locate in Colorado but neither is a skiing enthusiast going to locate in Boca Raton). The T-dC must make maximum use of its sporting facilities to appeal to the broadest range of quality lifestyles.

5. Quality of arts and entertainment. In keeping with a highly educated community, access to and potential participation in quality arts and entertainment is important.

As the T-dC grows, the arts and entertainment industries must grow in lockstep, with "high quality" being a

munity, the constant building of industrial space and the expansion of the residential community leads to constant disruption and loss of natural amenities that are nearby. A constant and conscious policy to minimize development induced environmental disruption is a further factor in the prevention of stalling due to quality of life concerns.

7. Campus nature of the work environment.

When highly educated, motivated people work, the quality and dynamics of the work environment are extremely important if maximum creativity is to be achieved.

Studies have indicated that work environments and personnel interaction is a major contributor to the most productive innovators.

As all of the technology-based industries are dependent on leading knowledge, a campus type environment permits the most possible interaction and permits the inter-disciplinary be both formal (cluster managed) and informal.

The formal processes normally bring people together to share experiences and expound on models which yield both success and failure.

Invariably, these formal networking events are created from informal networking and launched because of an unaddressed community need. However, if a key community supported organization exists, the establishment of formal networking is clearly enhanced.

Informal networking is difficult to plan, but, frequently, bar/restaurants are the trigger points for many of the greatest commercial ideas.

2) The second form of networking is the outreach provided by top quality, internationally-recognized universities.

Such institutions provide a window on the world of research and bring to the community knowledge of potentially transformational ideas essential to maintaining the growth momentum.

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- 3) Networking amongst the key business leaders and between business and community leaders is a vital factor in cluster development. Not only does it allow realignment of shorter term plans to the longer term vision, but hurdles the bureaucracy that will often inhibit residential, industrial, sports, arts infrastructure development and environmental protection. Furthermore, business leaders must influence decisions at all political levels to minimize decision delay time.
- 4) The particular networking, which is created by inter-linked corporations (following the Japanese 'Kiretsu' model), provides a key element of success in some T-dC's.

Not only do core companies have the ability for retaining a focus on core businesses, but the spin-offs added substantial value to the original parent. Such "Kiretsu's" are frequently a major contributor to sustained growth as they permit rapid corporate growth and internationalization of young companies.

Communications

In a knowledge-based economy where information is the principal determinant of success, communications infrastructure is a critical element in the sustenance of dynamic growth. Communication, whether it be telecommunications, electronic services or transportation, provides the essential 'connectivity' to link companies to their markets, to investors and to competitors.

Control and timeliness of information flows are the lifeblood of T-dC's. If the infrastructure does not keep pace with the cluster growth, then a stall can be assured.

Telecommunications bandwidth, low latency connectivity, innovative services and low cost are some of the requirements of successful knowledge-based industries. One service which is a key in the next phase of T-dC's is the

provision of secure and reliable e-commerce with a low operational cost. While such capabilities must extend well outside the T-dC, the community itself must have a high service level.

Physical access to bring in distributors and to permit efficient movement of goods and personnel are essential and must continue to expand as growth continues. T-dC's are clearly dependent on services which will permit the easiest and low-cost access to target markets. High quality airports, road and rail infrastructures provide this access, and for heavier goods, sea port access can be a strategic advantage.

The final element in 'communications infrastructure' is the local transportation which allows people to work flexibly and at a time that proves convenient to their customers. Technology intensive business tends to operate almost 24 hours a day, and service functions for globally trading organizations must be a 24-hour activity. The transportation systems must be able to respond.

Community Ownership

A key factor in the successful T-dC's is the degree to which the people take 'ownership' of the entire community, from the welcome extended to people arriving from other places, to cleanliness and security, to sustaining a community concern for well-managed land development.

Within the community, there needs to be a shared, broadly appreciated and respected vision and an aspiration of how the community should develop and be developed. Furthermore, there needs to be a shared determination to achieve it. Such a vision usually occurs between the community social and business leaders and it must become the vision espoused by the political leaders. Coalescing such vision in a high growth T-dC can be a substantial challenge, but if the political vision, the industrial vision and the societal vision are mis-aligned, the community

itself will fragment and the momentum of growth will again stall.

The sharing of knowledge expertise within the T-dC is also most important, as it is the continuous flow and counter-flow of information that allows early responses to new opportunities and threats. This is most important at the senior levels where substantial resources can be quickly re-assigned and new directions established.

The best ideas are frequently not created by the most highly educated. The interaction across social grouping is essential if the most competitive products and services are to be created and effectively marketed.

The community must ensure that social barriers are not created which prevent the key communication of ideas between groups.

Ownership is also exemplified in the attitude of the whole community towards security and inter-dependence. Corporations can clearly not achieve their goals independently and it is easiest to form the early partnerships within the T-dC. It is necessary for the community to share this concept.

Real Estate

One of the elements that is most difficult to manage is real estate development. There are essentially two key components — the workplace development and the residential development.

T-dCs require constant knowledge refreshment, and if the access to lifelong learning is not adequately supported, the ability of the T-dC to remain in a leadership position will falter. Communities in which there is a close connection between the work, residential and learning environments that are integrated into a strong community plan, appear to outperform others. In fact, the separation of these entities may actually be an anathema to a T-dC.

From a business viewpoint, the close cooperation between all elements of a business — research, manufacturing,

administration, sales and marketing — is essential. This close cooperation does not necessarily require co-location, but to get the right personal dynamics, there needs to be minimal inhibitors to both real and 'virtual' meeting.

The construction of environments which permit inter-corporate knowledge sharing, "Kiretsu" development, and strategic partnering are extremely important.

Further, ensuring corporate vertical and lateral communications requires innovative real estate and community infrastructure planning.

To permit ideas to give rise to start up companies, assistance in the form of incubator facilities is now becoming recognized as a further attribute to the ongoing dynamic growth of T-dC's. Such facilities remove the often onerous tasks of facility management for young companies. Without incubators,

it can be hard for ideas to move from the home or university to a more efficient business environment. Just as the value of incubators are being recognized, the electronic world of Internet and broadband communications allows information companies to bypass the incubator stage. However, most T-dCs include 'manufacturing' operations which continue to need incubator environments.

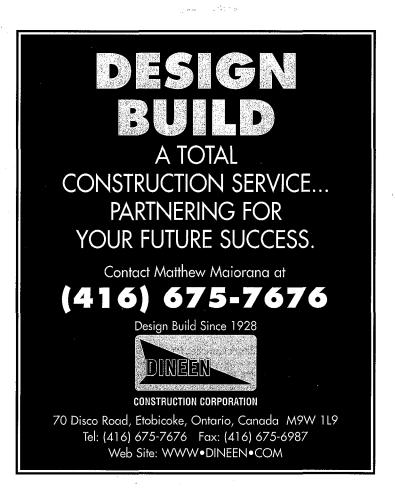
Once a corporation begins to grow rapidly, facility development must not be restricted. While large companies operate effectively over many sites and many continents, a majority of small high growth companies remain in a single T-dC. Space for expansion is a critical factor.

One attribute of real estate development, which is historically either under national jurisdiction or private sector development, is the telecommunications infrastructure. As this must have a higher than average service quality, mechanisms are necessary to ensure that the advanced telecommunications infrastructure is developed in line with the remainder of the business and residential build-out.

Turning now to the residential side, there must be a residential development plan that permits well rewarded employees and entrepreneurs a residential upgrade path within the same overall community area.

If there is excessive separation, then every move requires a social realignment and results in the development of divisions between social groups. In a T-dC, which is already well established, sustaining such a residential development plan which also allows for business expansion is a major challenge.

In areas planned for new development the mix of business, education and the full range of residential hous-



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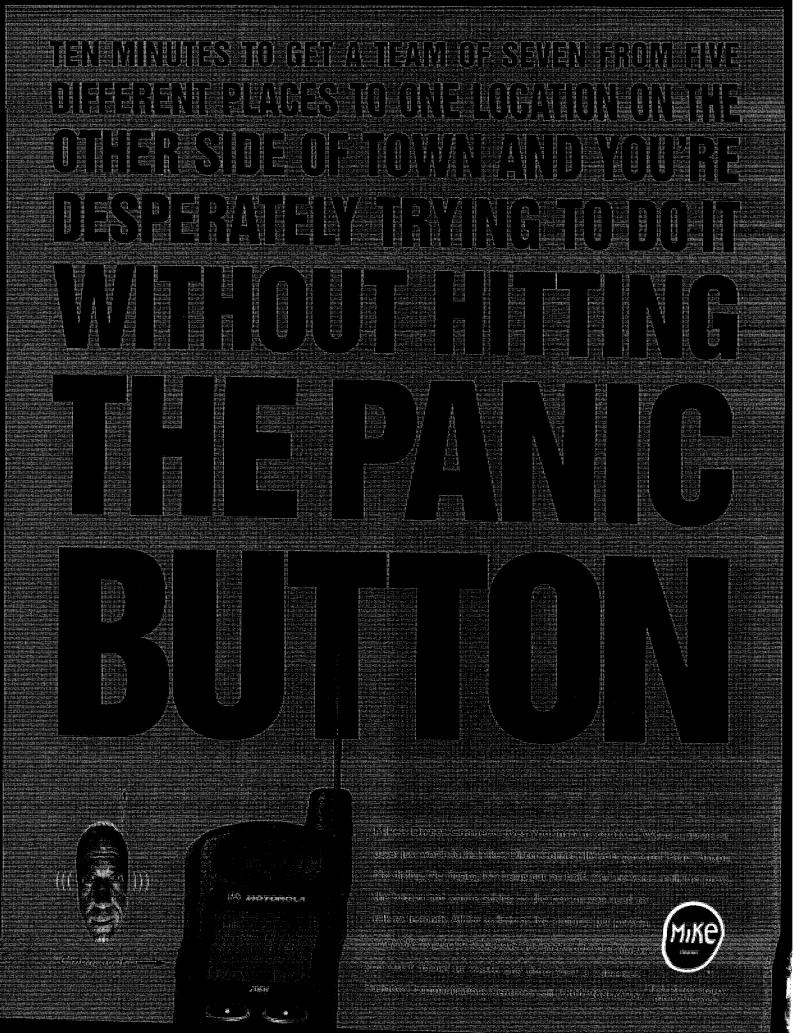
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ing types must be planned as an integrated whole. Conceptually, segmented development corridors provide the optimal solution to continuous expansion with business and core shopping alternating on either side of a transport corridor.

Residential development extends out from either side, again with education and incubation facilities, parks, sporting facilities and entertainment centres interspersed along the edges of the business and shopping core areas.

As with the business, telecommunications infrastructure must now be integrally planned to provide services such as interactive distance learning, entertainment and tele-work capacity to residences.

The Community Plan

With the complexity of all the attributes necessary to ensure the maximum

possibility of sustained high growth of a T-dC, an integrated plan must be created in the community that meets the community vision.

In consequence, it must be developed under the leadership of respected business, academic and community leaders.

There must be a common determination to stick to the plan, except when it is clear that this will inhibit a major opportunity which will be clearly an advantage the community as a whole. Modifications should only be made to improve the plan, not to merely change it in response to spike inputs or for political expediency.

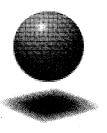
The plan can only work if the community buys into it, making constant community consultation and communication essential. The community must know of the successes achieved as this will strengthen the resolve to continue with the plan.

Conclusion

This paper is intended to review a broad range of attributes, which may impact the ability of T-dC to sustain its growth dynamic. As stated in the introduction, the degree to which some of the factors may be inadequately addressed in the plan can have non-linear impacts on the growth dynamic.

Minor weakness in a number of factors may stall growth, whereas ignoring one factor may have no deleterious effect. In other circumstances, this same omission may give rise to a stall or reversal. However, the lack of understanding of factors, which trigger stalls, prevents any prescriptive formula necessary for success.

This material is given more as a descriptive guide to the various factors rather than a prescription for success. The better the factors are addressed, the more certain is the continued dynamic growth of the community.



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BUSINESS IMMIGRATION

Opportunities for Local Economic Development

BY John Tracogna

Historically, the Canadian immigration program has been the responsibility of the federal government, and has reflected a 'top down' approach in the way the immigration program has been administered and managed. In the fall of 1994, the federal government's Department of Citizenship and Immigration released its new strategy entitled: "Into the 21st Century: A Strategy for

Immigration and Citizenship." This announcement marks a shift to an emphasis on immigrants expected to contribute to the economy. Over 50 percent of all new immigrants will be from the "economic category," which consists of two sub-categories: "skilled workers" and "business immigrants."

New immigrants have been attracted to Canada for a number of reasons in-

cluding: universal medical care, sound educational system, multi-cultural environment, business and investment opportunities, higher quality of life, political stability and access to the U.S. market (Marger and Hoffman, 1994).

The primary focus of federal and provincial immigration strategies is to attract new entrepreneurs and investors to various Canadian cities and towns, yet the current federal and provincial policies and programs have very little or no direct involvement at the local or municipal level.

Local communities and, in particular, economic development officers in particular have a direct interest in creating their own (bottom-up approach) strategies for attracting and assisting new business immigrants. The current federal policies do not meet the needs of either new business immigrants or local communities.

A successful local strategic economic plan that targets new business immigrants, both entrepreneurs and investors, will create new opportunities to generate wealth (job creation, capital investment, entrepreneurial pool) in the community that might otherwise be untapped or not fully developed.

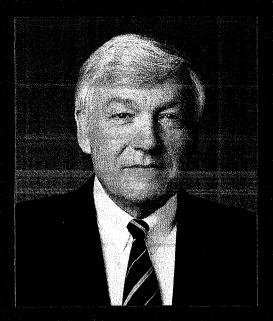
As a stronger emphasis is placed on new immigrants who are highly educated, trained, experienced, entrepreneurial, and who have substantial net worth; the opportunity and challenge will be for local communities and Economic Development Officers



JOHN TRACOGNA is the Acting Director for the Economic Development Centre, North York. Previously, he was the Business Development Officer for the City of Brampton.

Tracogna holds degrees in Urban and Regional Planning and a Masters of Local Economic Development, both from the University of Waterloo. He is a certified economic developer (Ec.D.) and a member of the Eco-

nomic Developers Association of Canada (EDAC) and the Economic Developers Council of Ontario (EDCO).



Lynton (Red) Wilson

The Honourable Sergio Marchi, Minister for International Trade, is pleased to announce the appointment of Mr. Lynton (Red) Wilson, a prominent Canadian business leader, as Chair of the Team Canada Inc Advisory Board.

An Officer of the Order of Canada, Mr. Wilson is the author of the 1994 International Business Development Report, which recommended the reinforcement of linkages between Canadian trade development and trade policy.

The former President, CEO and Chairman of the Board of Redpath Industries Limited, Red Wilson's illustrious career spans three decades. Joining BCE Inc. in 1990, Mr. Wilson has held the title of Chairman of the Board and CEO of BCE Inc. since May 1996.

The 20-member Team Canada Inc Advisory Board will provide advice on trade policy and market access questions as well as issues related to trade and investment promotion. The Board will also guide the evolution and implementation of international business development programs and services for Canadian exporters.

Ultimately, the Team Canada Advisory Board will enhance existing services in Canada's trade promotion network. The Board will meet at least twice annually; the first meeting is expected to be held early in 1998.



Team Canada Inc • Équipe Canada inc

The Team Canada partnership concept has operated successfully for several years. Building on this success, the federal government has initiated Team Canada Inc to enhance international business development services to exporters from coast to coast.

Announced during the 1997 Annual Meeting of the Alliance of Manufacturers & Exporters Canada, Team Canada Inc includes three core federal departments: Agriculture and Agri-food Canada, the Department of Foreign Affairs and International Trade and Industry Canada. Eventually it will involve other international business development stakeholders such as provincial and other federal government departments, municipalities and business associations.

The initiative builds on the Team Canada concept in a number of ways:

- by engaging the private sector through the Team Canada Inc Advisory Board;
- by increasing by 30 per cent the number of trade commissioners working in foreign markets;
- by establishing a new unit at the Department of Foreign Affairs and International Trade to focus on the export needs of small and medium-sized enterprises;
- by providing quick and easy access to all Team Canada Inc trade services through a wide-ranging export information Web site (http://exportsource.gc.ca) and a toll-free telephone number (1-888-811-1119) that connects callers to business service centres across the country;
- by strengthening management and co-ordination of federal trade promotion activities across government departments; and
- by expanding networks and forging new partnerships with the provinces and the private sector.

The Team Canada Inc initiative demonstrates the close partnership between government and the private sector to help Canadian companies succeed in the international marketplace.



(EDOs) to develop strategies that compliment Federal/Provincial mandates in order to cater to the needs of the new business immigrants.

Entrepreneurship plays a key role in establishing and expanding new and existing business ventures within a local community. Local economic development activities need to be broadened to include entrepreneurial support programs that cater to new business immigrants.

Unlike many domestic entrepreneurs entering a business venture for the first time, new business immigrants into Canada have been pre-qualified by immigration officials, and bring with them a wealth of knowledge, talent and proven business experience. However, these new business immigrant entrepreneurs also face a number of challenges, and therefore need to be better informed and prepared for the Canadian business culture.

Under the "business entrepreneur" category, minimum criteria mustibe met in order to qualify as a Canadian business immigrant:

• Entrepreneurs (in Ontario) must demonstrate their ability to establish a business based on previous business ownership or management;

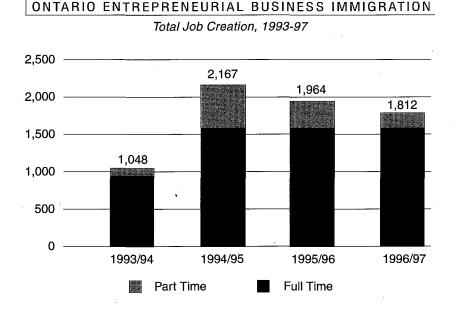
- take an active role in the management of the business in which they invest:
- · create/maintain a minimum of one job for a Canadian resident;
- demonstrate significant economic benefit (to Ontario), no specific minimum amount required; and
- the business venture should be started within two years of arrival.

In addition, new business immigrant entrepreneurs should possess strong language skills (English French) and the ability to integrate into the Canadian business community and rapidly changing labour market.

The role of the EDO in developing a local framework for new business immigrants has yet to be defined and developed. The literature, (Razin, 1993, Pyong, 1993, Waldinger, McEvoy, Aldrich, 1990, Light, Bhachu, 1993) identifies the importance of local social, cultural, institutional and economic infrastructure to develop formal and informal networks and partnerships which are critical to successful ethnic entrepreneurship.

Economic Impacts

Currently, Asian countries account for



SOURCE | Ministry of Economic Development Trade & Tourism

four out of five top sources of landed business immigrants into Canada. The top three source countries for landed business immigrant entrepreneurs to Canada between 1992-94 were Hong Kong 43 percent, Taiwan 9.4 percent, and South Korea at 8.8 percent.

According to 1992-94 program statistics from the Canadian Business Immigration Branch, the Immigrant Entrepreneur Program alone attracted 4,265 entrepreneurs whose investments were estimated at \$582.4 million. During this same time period there were an estimated 14,512 fulltime and 5,154 part-time jobs created by those businesses throughout Canada. The provinces of British Columbia, Ontario and Quebec accounted close to 90 percent of the total investment dollars. In Ontario alone during the period 1993-97, there were an estimated 7,000 new full and part-time jobs created with close to \$330 million dollars of new investment.

Local Implications

Ethnic or immigrant entrepreneurs tend to behave differently than indigenous entrepreneurs for a variety of social, cultural and economic reasons. Consequently, they depend upon ethnic enclaves and information networks to get their start.

Initially, immigrant entrepreneurs face difficulties in accessing and uninformation, derstanding: training and skills, labour and competition. This is further complicated by language barriers and the need to satisfy terms and conditions established by the Federal Immigration Program within a two year period.

Through the use of informal and formal networks, many of the impediments for the establishment of new business ventures are minimized. In their paper, Boissevan, et al, Blaschke, Grotenburg, Joseph, Light, Sway, Waldinger, and Werbner (1990) describe business strategies that immigrant entrepreneurs utilize effectively.

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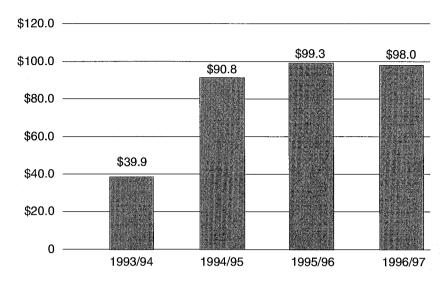
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ONTARIO ENTREPRENEURIAL BUSINESS IMMIGRATION

Investment in Total Dollars (\$ million), 1993-97



SOURCE Ministry of Economic Development Trade & Tourism

The ability of an ethnic community to provide an effective range of services and information deemed essential to the success of a business venture depends, in part, on the size of the community (population) and the length of time it has been established. Prior to starting any business, immigrant entrepreneurs need to do their own market research. This entails obtaining vital information on real estate availability, zoning regulations, suppliers, pricing, products, market trends, financial matters, legal advice and labour needs to mention a few. Large networks with a range of assorted linkages are an essential part of the assets for successful entrepreneurs, who spend considerable time building their networks. Alumni associations, churches, business associations and local ethnic newspapers are examples of networks that, in the case of Koreans in Los Angeles, are developed and utilized to collect, exchange, and disseminate information on business conditions and techniques. Kinship and friendship within ethnic groups create supporting linkages that lead to confidence, trust and reliable information. The need to develop both networks and networking skills is presented as a prerequisite to acquiring

resources (Carvalho and Smith, 1992).

Immigrant entrepreneurship presents unique opportunities for local economic development offices to respond to a growing area of new investment (jobs and capital) for a community. Traditional economic efforts centering around the 'firm' have expanded to include entrepreneurship (ethnic and domestic) as a new mandate of economic development within communities.

Some of the greatest barriers that face new business immigrants once they enter Canada is the actual smooth integration into local communities and business environment. Local strategic planning can assist in the process of integration by developing action plans that are of value to both the business immigrant (entrepreneur and investor), and meet overall community goals and objectives. Current federal policies only provide the necessary legal framework to enter Canada. Individual provincial business programs such as those offered in Ontario, offer limited value in certain areas for new business immigrants. The greatest potential for value-added business relationships and subsequent direct economic benefits takes place at the local level. It is at the

local level that business immigrants feel they have control of their business ventures. Local communities can also effectively establish closer, and more direct ties with business immigrants. There are a number of elements that immigrant entrepreneurs will look for from a local community. The EDO can play a very instrumental role in identifying and prioritizing available local resources on behalf of immigrant entrepreneurs. The first and most important task of the EDO is to gain the trust of the immigrant entrepreneur and build a long-term business relationship. Business immigrants will look towards the EDO as a person they can contact for up-to-date, accurate and reliable local information and business contacts.

Through the exercise of identifying local strengths, weaknesses, opportunities and threats, local economic development offices can begin the process of targeting various ethnic entrepreneurs abroad and within their community. This would entail some initial detailed research into the existing ethnic population base as well as the leveraging of existing social-cultural networks. EDO's can play a vital role in developing strategic plans that proactively target the limited and competitive pool of global immigrant entrepreneurs into the local community. Communities that recognize trepreneurship (including ethnic entrepreneurship) and develop strategies to capture and foster its presence, will possess a distinctive and competitive advantage over other regions and localities.

Immigrant Entrepreneurship

Immigrant entrepreneurs who enter Canada for the first time have been pre-qualified and bring with them financial resources, entrepreneurial skills and proven business experience from their place of origin. Immigrant entrepreneurs, once in Canada, are initially preoccupied with a number of

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personal, business and family concerns. The family concern on the one hand involves finding appropriate housing, schooling for children, and familiarizing themselves with various community resources. From a business perspective ethnic immigrant entrepreneurs begin to feel the pressure of idenappropriate tifying business opportunities in order to satisfy the terms and conditions of immigration. Immigrant entrepreneurs are eager to learn and absorb as much information as possible, in order to move forward and make rational business investment decisions. A considerable amount of time and resources can be saved by developing and coordinating a local framework that caters to the specific needs of these entrepreneurs. A local framework will invite and encourage immigrant entrepreneurs to fully participate in the local economic efforts of the community.

Immigrant entrepreneurs arrive in

Canada with a sound understanding of developing a life-long commitment to learning, and they also possess the general principles of entrepreneurship. Ethnic entrepreneurs also arrive in Canada with proven management and/or ownership experience from a prior business venture from their place of origin. The initial major obstacle they must overcome is their lack of practical Canadian business experience. They must be able to build networking skills and have immediate access and an understanding of local social, cultural and economic resources.

EDO As A Facilitator

The Economic Development Officer plays a central and pivotal role in identifying and fostering immigrant entrepreneurship at the community level. The EDO must be able to recognize and act upon the changing social, cultural

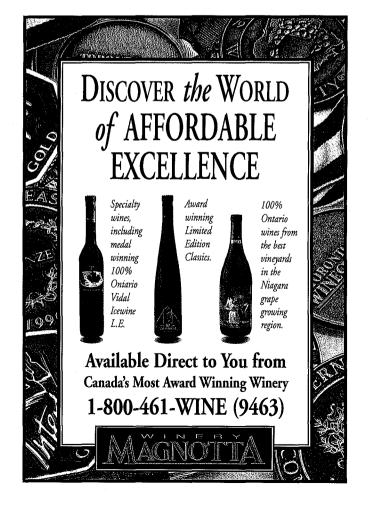
and economic landscape that immigrant entrepreneurship is creating. A failure to do so, results in opportunities lost, friction between existing business owners and newcomers, and the misallocation of limited resources.

A local framework for immigrant entrepreneurship requires EDO's to fully comprehend the scale and nature of the various ethnic entrepreneurs within their own community.

Strategic economic planning can assist the local ethnic community by including them in the process of economic development. It is through the process of strategic planning that ethnic entrepreneurship can obtain formal recognition, effective strategies, allocation of resources, and local support for entrepreneurship in general can be embraced.

In order to initiate this process, EDO's require up-to-date and accurate local information on demographics (ethnic origin), business estab-





lishments and investment patterns, identification of informal and formal networks (ie. churches, cultural centres, schools, associations, newspapers, ethnic business owners, etc.), and identify any on-going community participation by ethnic groups. The EDO should obtain, on a regular basis, statistics monitoring immigration trends from both the federal and provincial governments for their local area.

By proactively identifying and meeting with ethnic community leaders and various local associations, the EDO can create focus group discussions to further assess the needs of immigrant entrepreneurs.

The main challenge for the EDO is to gain the trust and respect from immigrant entrepreneurs, and build business relationships especially from within their informal networks. This will allow immigrant entrepreneurs to make larger contributions to the process of local economic development.

The local framework for ethnic entrepreneurship should include unique support programs that can be developed in partnership with informal and formal ethnic networks.

This framework should include:

- 1. A voluntary or mandatory oneweek business immigrant program/course which is endorsed by federal and/or provincial agencies. The program can be offered by local communities and tailored to local economic conditions. The program should reflect the needs of immigrant entrepreneurs identified through the process of strategic economic planning;
- 2. A survey and focus group meetings with local ethnic entrepreneurs to determine types of business services required;
- 3. Create partnerships with community-based networks (informal and formal) to include business advisory

groups; and

4. Incorporate ethnic entrepreneurship in programs, services and marketing efforts carried out by local economic development offices.

The following chart represents a 'generic immigrant' business program that can be modified to suit local needs. In partnership with local ethnic business associations, banks, private and public sector agencies and businesses, the EDO can establish a framework for immigrant entrepreneurial development.

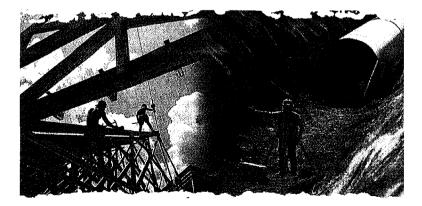
In order for any business program to succeed, a number of key principles must be included:

- 1. Select experienced and knowledgeable instructors who can converse in both Korean (or segment involved) and English preferably;
- 2. Identify appropriate case studies of business examples;

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- 3. Present a detailed list of local business opportunities covering a number of business sectors;
- 4. Ensure support for the program by immigrant entrepreneurs and the community at large;
- 5. Make programs flexible, and tailored to specific ethnic needs (might include translation of publications and speaking materials); and
- 6. Create a local monitoring system of the program and business investments undertaken.

The EDO must play a strong role in facilitating the establishment of the business program as well as its continued success. There are several advantages for a local economic development program to conduct ethnic seminars, programs and initiatives.

First, it establishes strong linkages with immigrant entrepreneurs and it also focuses their attention on your community.

Second, an ongoing relationship with immigrant entrepreneurs will allow for a smoother integration into the Canadian business culture.

Third, it permits EDO's to develop and implement unique entrepreneur programs that meet the needs of the broader business community and effectively utilize the skills that immigrant entrepreneurs have to offer.

Conclusions

The Federal Business Immigration Program has been highly successful in attracting immigrant entrepreneurs into Canada. However, municipalities in general have not focused their efforts to-date on immigrant entrepreneurship to any significant amount. It is at the local or municipal level that the value-added services can be established and provided to immigrant entrepreneurs.

Local economic development efforts that design and implement immigrant entrepreneurship strategies will be able to establish a distinct competitive advantage over most other communities; while at the same time strengthening the local economic base.

EDOs can play a central role in fos-

tering local immigrant entrepreneurship through the process of strategic economic planning and the development of immigrant entrepreneurship programs.

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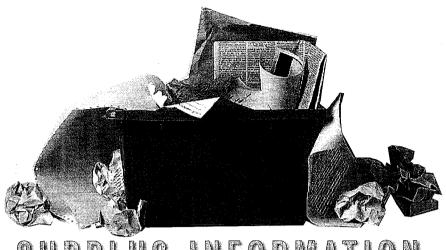
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PROGRAM OUTLINE								
Date	Monday	Tuesday	Wednesday	Thursday	Friday			
9:00 am	Registration	Taxation	Import/Export	Information Technology	Site visit to 3 businesses 1. Manufacturing Operation 2. Wholesale Distribution 3. Retail			
9:30 am	Opening remarks VIPs							
10:00 - 11:00 am	Doing Business in Ontario	Business Start-up	Business Plans	Revenue Canada GST & PST				
11:00 - 12:00 pm	Doing Business in North York	Financing	Marketing Plans					
12:00 - 1:00 pm	WORKING LUNCH	WORKING LUNCH	WORKING LUNCH	WORKING LUNCH	WORKING LUNCH			
1:00 - 2:00 pm	Business Opportunites - Case Studies 1. Korean	Government Regulations	Developing Business Networks	Labour laws & Human Resource Management	Graduation Ceremonies and Networking			
2:00 - 3:00 pm	Entrepreneur 2. Canadian Entrepreneur	Incentive Programs	Networks					

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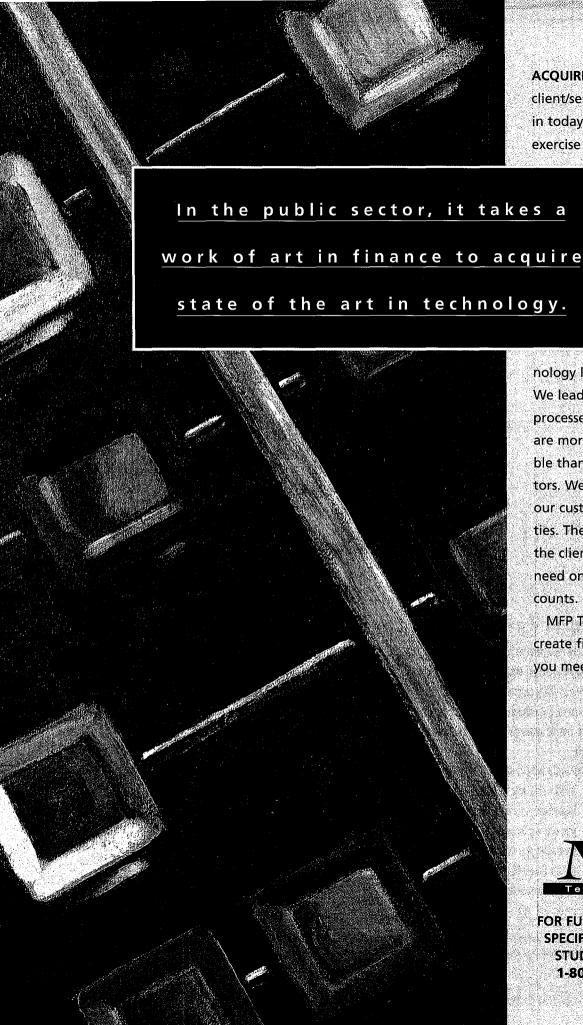


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Individual Sovereignty & New Models of Community Development

BY Brock Dickinson

The international political economy has undergone significant and far-reaching change within the last decade. The collapse of international communism, the rise of ethnic and nationalist tensions and the advent of the Information Age are but three obvious examples of a fundamental shift in global reality. The fullest implications of this rapid change have, in large part, passed unnoticed by

governments and economic planners at all levels of the traditional power structure.

Careful analysis of emerging trends and patterns in the global political economy reveals far-reaching and potentially threatening change in the very near future, change to which current decision-making structures appear largely oblivious. However, in the absence (and potential collapse) of centralized response to the emerging economy and global situation, there are avenues for effective response at the community level. Many of the most important and effective strategies for

dealing with the new economic reality that awaits us in the 21st century will be coordinated at the local level. Indeed, the greatest hope for strong and revitalized economic structures may lie with jurisdictions small enough and forward-looking enough to implement significant change and adopt new models of economic development.

Although much has been written about the end of the Industrial Age and the beginning of the Information Age, few have taken the time to analyze the political and economic repercussions of this change. Fewer still have had the insight to examine these issues against

a global backdrop that includes the growth of multinational corporations, the rise of ethnic, nationalist and religious tensions, the declining authority of national governments and, in some cases, the collapse of the nation-state itself.

In the February 1994 issue of The Atlantic Monthly, journalist Robert Kaplan published an article called "The Coming Anarchy," and touched off a firestorm of international debate that has yet to subside. Kaplan argues that we are entering a dangerous new era in which traditional nation-states will break up under increased pressures from environmental and social disasters, endless waves of refugees, and rapidly-spreading disease. Innumerable small wars will erupt over scarce natural resources, including oil and water, until the line between active warfare, organized crime and private armies is completely blurred. Already, one can see Kaplan's world in the former Yugoslavia, Rwanda, Burundi, Zaire, Liberia and several other coun-



BROCK H. DICKINSON is the Executive Director of the Western Valley Development Authority, covering seven municipalities in southwest Nova Scotia. He spent six years with the United Nations, working with businesses and governments on five continents. A noted speaker and essayist, he continues to travel widely.

tries. The end of the Cold War and the collapse of communism, in Kaplan's view, have not so much heralded the triumph of democracy as they have the rebirth of history's most virulent and violent excesses.

Kaplan has imagined a world in which national governments are increasingly irrelevant, and where real power lies in local authorities and structures, for better or worse. Even in the relatively stable regions of Western Europe and North America, Kaplan sees the potential for trouble. Umberto Bossi, head of northern Italy's separatist Northern League suggests that "the original sin of the Italian state is centralism," and continued ethnic tensions in regions like Northern Ireland, Belgium, Basque and Catalonian Spain, Corsican France and Quebec suggest that he is not alone in his views.

Although Kaplan does not predict the same intensity of collapse for the West that may occur in Africa or Asia, he follows theorists like Joel Garreau (The Nine Nations of North America) and Darrell Delamaide (The New Super-regions of Europe) in suggesting that future economic and political power will rest not with national governments, but with smaller regions of shared interests.

Control of Taxation

Scarcely had the debate begun on Kaplan's work when in waded the controversial team of James Dale-Davidson and Lord William Rees-Mogg, two classically liberal economists whose 1997 book The Sovereign Individual predicted the collapse of the nation state as a direct result of the interface between taxation and the cyber-economy. As they write in the book, indiand viduals companies will increasingly be able to place their financial resources or liquid assets "in a cyberaccount in a cyberbank that is domiciled simultaneously in Newfoundland, the Cayman Islands, Uruguay, Argentina, and Liechtenstein. If any of the jurisdictions attempt to withdraw operating authority or seize the assets of depositors, the assets will automatically be transferred to another jurisdiction at the speed of light."

In practical terms, this will ultimately mean that the ability of individual governments to control the flow of money — including control through taxation — will be eliminated. Without taxation, the traditional nation-state collapses. No less conservative an authority than the British news weekly, The Economist, has recently commented on the situation in an editorial entitled "The Disappearing Taxpayer." In its May 31, 1997 issue, the publication suggests that "in the coming decades electronic commerce - combined with the growing ease with which firms can shift their operations from one part of the world to another - will make it even easier for people to flee countries where taxes are too high, or to evade taxation altogether by doing their business in cyberspace."

The first cracks in the facade of national taxation structures are now emerging in Europe. In Germany and France in particular, tax policy has become a major economic issue, and failure to reform and reduce taxation levels is harming the ability of companies based in these countries to compete internationally. Aggressive tax reform, including reductions in corporate tax rates, appears to be the only successful avenue from a long-term development perspective, particularly in the context of companies that have the ability to move to other jurisdictions. Maintaining high taxation rates (which range between 40 and 65 percent in the European Community) will effectively chase business and investment to other jurisdictions. Lowering the tax rates means continued government downsizing and waning government influence.

Factors of Decline

These twin visions of national decline are reinforced by a growing awareness

of the mobility of labour and knowledge. "By definition," suggests social theorist Peter Drucker, "a knowledge society is a society of mobility. Knowledge knows no boundaries." This mobility clearly decreases the importance of the traditional nation-state structure.

There is a segment of the intellectual community that is voicing a concern about the probable decline (and possible elimination) of the nation-state. Clearly, there is significant evidence that this process is already under way.

Within the last decade, Czechoslovakia has become two countries, as has Ethiopia. The Soviet Union has become fifteen. Other national structures, from Canada to Cambodia, are showing signs of stress.

In other instances, including the situation in much of West Africa, national governments may remain in name, but not in effective reality. Even where national structures remain strong, the ability of those structures to sustain themselves in the face of dwindling tax revenues is clearly problematic.

If the process of national disintegration, to whatever degree, is underway, it is important that strategies for dealing with this collapse be identified.

Globalization

In an increasingly networked international society, and within the context of globalization, no particular nation or region will be fully shielded from the impact of the fundamental change underway.

Although Canada or Nova Scotia seem far removed from the collapse of national government in Somalia or the flight of personal wealth from the United States, we cannot be completely shielded from these phenomenon. Increasingly, what happens in Addis Ababa happens in Ottawa, and what happens in Harare happens in Halifax.

Having come to terms with this reality, what strategies can be applied in individual regions in the future, and

how does one ensure sustainable economic growth and prosperity in an increasingly anarchic world? particular, how does one accomplish this in an environment where national and provincial governments are increasingly irrelevant to daily life, and increasingly unable to deliver appropriate financial or logistical support for economic development activity?

First and foremost, it is important not to panic. The advent of the Information Age offers economic opportunity unparalleled in recent history. Although there clearly will be losers in the global economic game, there will also be countless winners.

Second, it is important that the decline of the nation state be viewed not as a "good" or "bad" process, but merely as the prevailing condition. Although the decline of the nation-state brings with it economic uncertainty and obvious security concerns, in a global economy it also offers opportunities for dynamic new partnerships, relationships and models of economic cooperation.

It is important to realize that this process has already been under way for some time. It is increasingly recognized that although nations make ideal units for reporting statistics, economic activity today has very little to do with nations, provinces, states or other traditional political zones.

Regional Economies

In the May 1994 issue of Policy Options, for example, Pamela Blais points out that "increasing economic integration has brought about a marked redistribution of economic activities among the supranational, national and local levels. The national level is clearly giving way, as sub-national entities take on new roles."

Looking back to traditional city-region structures like the Hanseatic League, Darrell Delamaide, in The New Superregions of Europe, has suggested that "as economic development continues and the nation-state recedes. the cities are ready to re-emerge as major players and to re-establish their own networks."

Even the Ontario-based consulting firm Suthey, Holler & Associates has stated that the "heartbeat of economic competition is at the level of the City. not the Province/State and not the Nation."

Although the language here betrays a distinct urban bias, what is being described is really the phenomenon of regionalism economies, whether urban or rural. In point of fact, cities in and of themselves are often not effective economic actors.

Joel Garreau showed in 1991 that the majority of economic growth in the United States was not taking place in traditional cities, but in what he termed "edge cities," often places that most people had never heard of. By 1993, 19 of the 25 fastest growing communities in the U.S. were "edge cities" — places like Walnut Creek, Rancho Cucamonga and Westport Plaza. Their success had less to do with urbanization than it had to do with the aggressive pursuit of economic objectives by a regional structure.

Rural Regions

In the politics of the 21st century, urban concentrations may begin to face disadvantages as compared to more rural regions, including a lack of access to food, water, energy resources and increased exposure to crime and vio-

Davidson and Lord Rees-Mogg also suggest some structural advantages to rural communities, arguing the historical case that in times of political change "the rural population is no longer called upon to support the crushing burden of bureaucracy" that characterizes many urban centres.

Be that as it may, the fundamental shift from traditional political structures and zones to much smaller regions has gone largely unnoticed by

policy makers. Peter Drucker notes that "our social and political theories still assume that there are no power centres except government."

As Pamela Blais put it, "This important fact is little recognized in Canada, either in our approach to economic development or in the way we manage city-regions." For example, while some provincial governments have taken the initial step of establishing bodies to promote regional development or community economic developa11 ment. authority, finances. policy-making ability and decisionmaking mechanisms remain within the traditional power structure.

Others are far more pointed than Blais in their assertions. Floyd Dykeman suggests that "the many questionable policies of (Canadian) rural development ... failed to be sufficiently sensitive to a rural perspective, exhibited an urban bias, failed to involve local residents, involved a centralized decision-making system, failed to integrate economic, social, and physical development objectives and policies, and failed to achieve governmental coordination." David Douglas is even more blunt. "The erratic entry and exit of the federal government in rural economic development through regional and sectoral initiatives has proven a very mixed blessing for rural Canada."

This should not come as a surprise. Faced with massive political change, traditional structures will invariably attempt to maintain the status quo. The lesson of history, of course, is that successful new structures will be effective because they are able to overcome the obstacle of traditional power structures, rather than be controlled by them.

Defining A Region

The challenge for those pursuing regional development initiatives is to learn from the success stories that exist and adapt their models for our own use.

Clearly, their is no simple recipe for doing this, but there are some obvious guideposts on the road.

First and foremost, it is important to identify the region. In what area does one wish to pursue economic development? How is that area defined?

Although this seems like a simple question, it is a deeply problematic one at its root. If one accepts that traditional government structures are in decline, then traditional notions of country, province or even citizenship mean little from an economic perspective.

Regions also should not be defined by traditional borders, which have precious little to do with reality. Although the concept of borders as economic barriers is not new, their role as barriers to economic development is becoming more obvious, even on issues unrelated to trade.

In rural Nova Scotia, for example, there exists a world-famous sewage treatment plant in the community of Bear River. The plant uses an innovative passive solar aquatic technology, and has become a model of appropriate and sustainable technology. Bear River itself, however, is a community that straddles the line between Digby and Annapolis counties. Because the plant is on the Annapolis County side of the community, Digby County homes (their sewage being administered by a different government) are not hooked up to the innovative system. As a result, the treatment plant suffers through the absence of an economy of scale; the sewage input is insufficient to operate the plant at peak capacity. As a result, further development of the plant, both as a treatment facility and as a technology for export, is at risk.

Of more help in defining the region is the "ecoregional" or "bioregional" approach discussed in the works of political geographer Bruce Byers. Kaplan is particularly supportive of this approach, which sees a region defined by its environmental, geologic and climatic boundaries. This approach may

be further strengthened by a regional identity that takes note of routes of activity. Does a particular waterway or transportation route tie a region together? Does a particular industry like fishing or farming create a regional cohesion? Often these approaches are in direct contrast to traditional zones of demarcation. In the past, national structures often used rivers or mountain peaks as borders, neatly cutting up both bioregions and routes of activity.

Regional Capabilities

Having defined the region, the second step in promoting regional development in the new century is to identify and build the tools needed to compete in the Information Age. To launch the economic development process, it is important to look realistically and critically at a region's capabilities and assets, and concentrate upon those, rather than wasting time and resources in the pursuit of goals that are at best elusive and at worst unattainable. There are several important tools to have in place.

Chief among these is a modern communications infrastructure. In 1946, a three-minute phone call between London and New York cost US\$650. Today, that same call costs 91 cents. A failure to keep up with communications technology completely eliminates these kinds of cost savings, and erodes the ability of both regions and individual businesses to compete. As the Information Age unfolds, communications infrastructure will increasingly distinguish "have" and "have not" regions.

Although governments and businesses are quick to acknowledge the importance of state-of-the-art telecommunications infrastructure, this often does not translate directly into action. Perhaps more significantly, it does not translate into appropriate planning or strategy building.

For example, with the growth in capacity of fibre optic cables and satel-

lites, and the emergence of digital compression technologies, there is no reason in the current marketplace for long distance telephone calls to cost more than local calls. *The Economist* suggests that "In the future, the guiding principle should surely be that it would cost the same to connect a call to the national fixed network whether it came from the other side of the world or from a local yuppie on a mobile."

Although higher fee long distance remains the norm in most jurisdictions, a few are moving aggressively to reduce these fees. In effect, the jurisdictions that take advantage of technology to reduce their long distance rates will rapidly become more attractive to many investors and corporations. Once again, those who lag behind and fail to make full use of these technologies will find themselves in costly and uncompetitive positions that have a negative impact on economic potential. It cannot be stressed enough that competition in the knowledge-based Information Age will rely fundamentally on access to cutting edge, knowledgebased Information Age tools.

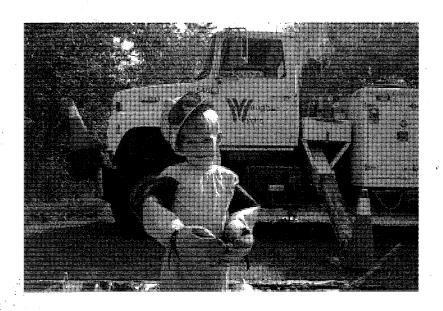
Local Ingenuity

Another necessary tool for development is ingenuity. Tad Homer-Dixon has argued that "we should focus on the supply of human ingenuity in response to increasing resource scarcity rather than on strict limits."

Essentially, the line of argument is that in a period of declining resources (natural, human, financial, etc.), regions "depending on their social, economic, political and cultural characteristics, will respond to scarcity in different ways and with varying amounts and kinds of ingenuity." Those regions that are more able to mobilize local ingenuity will therefore be better able to compete and survive in the new economy.

So far, much of this is common sense. However, having defined the region and built some basic tools, there

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is a wide variety of potential courses of action. Some will lead to increased economic development, while others inevitably lead to economic stagnation and decline. Unfortunately, the policy directions of fading national and provincial government structures are all too often the latter.

For example, many governments have unfurled the banner of import substitution, arguing that self-sufficiency in products like clothes pegs and tree fruit will create local jobs, recirculate local money and enhance self-reliance. However, in an increasglobal economy, economic growth does not stem from the practice of circling the wagons and preaching isolation. Real economic growth is much more easily attainable through focus on the export sector. In a global economy, where dollars and products have no barriers, the most effective strategy is not found in self-sufficiency, but in making others dependent on the resources, products and services of your region. The contrasting examples of Asian and Latin American growth over the last 40 years provide ample proof of this approach.

Paul Kennedy has argued that beginning in the early 1960s, "many Latin American government pursued a policy of import substitution, creating their own steel, cement, paper, automo-

biles, and electronics goods industries, which were given protective tariffs, government subsidies, and tax breaks to insulate them from international competition. As a result, their products became less attractive abroad."

In contrast, he suggests that the Asian economies set out to "create a strong base from which to mount an export offensive, not to establish an economic bastion within which their industries would be content to remain." The negative effects of the import replacement strategy are made clear by a close examination of several Latin American and Caribbean nations' changing Gross Domestic Product (GDP).

In contrast, the explosive growth of the Asian economies, largely due to export strength, clearly stands out. From a similar starting point in 1960, for example, the GDP of South Korea has risen to US\$5,000 per capita, while in Singapore it has reached US\$9,070 per capita, showing steady upward growth.

Incentives and Subsidies

Another obvious "don't" that many governments are pursuing involves the offer of incentives and subsidies to businesses in an effort to induce relocation, or to attract new branch plant

operations. In the United States, for example, the rush by competing jurisdictions to offer sizable incentives has come to be known as "The New War Between the States." In the rush to offer multi-million dollar incentive packages, jurisdictions end up eroding the tax base, cutting other programs including social expenditures, and transferring an excessive tax burden onto individuals. As a result, these incentive programs are counter-productive and ultimately self-defeating. "Ironically," Epstein, Crotty and Kelly suggest, "past studies have shown that tax incentives have generally been either ineffective or relatively unimportant in determining the location decisions of

The ultimate effect of this jurisdictional competition is what economists call a "race to the bottom" that produces little gain in the way of employment, lower corporate tax revenues, fewer public services and higher income taxes. The Economist has argued that "America's corporate taxes have withered to insignificance" as a result of this process.

firms."

On a more specific footing, economic growth in the next century will increasingly rely on the establishment of cooperative approaches to development. Regions must create alliances outside of national or provincial structures in an effort to build the most efficient and well-positioned program for growth. In Europe, this approach has given rise to regional alliances like the Club Eurometropole. In essence, individual regions must partner with like-minded interests in other regions to take advantage of new opportunities.

This is directly linked to the practices of using industrial clusters to attract new opportunities. In recent years, Moncton, New Brunswick has become something of a hub for telephone call centres. Ottawa has become a centre of information technology. Calgary is home to the oil and gas sector. The presence of many companies in these sectors in an individual loca-

GROSS DOMESTIC PRODUCT Per Capita by Country, 1960-88 (US\$)

Country	1960	1970	1980	1988
Argentina	2,384	3,075	3,359	2,862
Bolivia	634	818	983	724
El Salvador	832	1,032	1,125	995
Guyana	1,008	1,111	1,215	995
Haiti	331	292	386	319
Jamaica	1,610	2,364	1,880	1,843
Nicaragua	1,055	1,495	1,147	819
Peru	1,233	1,554	1,716	1,503

SOURCE | P. Kennedy, "Preparing for the Twenty-First Century" (New York, 1993)

tion makes these communities more attractive to companies within those industries.

In the future, however, the emergence of the cyber-economy will make geography less of an issue. Companies will be able to operate virtually from any location on the globe. Effective clustering tactics for those seeking economic development in the next century will thus focus on the creation of virtual clusters. What regional and industrial alliances can be established, and information technology systems put in place, that will allow an individual region to attract new opportunities in partnership with other regions? Over time, coalitions of interests will come to replace specific geographic clusters in importance and effectiveness.

The Education Factor

Of extreme importance in the new global economy is the matter of education. In examining the assets of successful economies in the next century, Kennedy argues that "first, and perhaps most important, is the emphasis upon education."

Drucker takes the argument a step further. He suggests that "how well an individual, an organization, an industry, a country, does in acquiring and applying knowledge will become the key competitive factor."

On a slightly different front, the ultimate source of wealth and financial resources will become increasingly important. A heavy reliance on government funds, transfer payments or foreign aid will have a hugely negative economic impact. Simply put, these funds are not likely to be available in the next century. True economic growth will develop from within communities, when ingenuity and productivity are combined to create products, services and goods needed elsewhere. As Kaplan puts it, "Wealth, ultimately, cannot be donated or transferred as part of an aid budget, or even discovered under the earth like oil. To be sustainable, wealth has to be self-created."

Finally, it is important to note that in the coming century, rural economies may have tremendous advantages over urban economies. For one, urban infrastructures require far more in the way of tax dollars to administer and maintain. As taxation ability decreases, so will the ability to maintain those infrastructures. This will be exacerbated by the fact that government downsizing will most adversely affect urban centres, where bureaucratic structures tend to be housed.

In a century where we see the combined impact of resource scarcity and the increasing value of exports, those jurisdictions producing natural resources — primarily rural regions will exercise increased political influence and economic power. The region that exports food or wood or minerals thus becomes the linchpin of the economic chain, and will be wooed by other jurisdictions seeking access to increasingly rare raw materials. To take full advantage of this trend, however, regions must ensure that the resources within their boundaries are effectively controlled by local interests, and not by extra-regional bodies or companies.

In the end, all regions will have to come to terms with these new political and economic realities, and determine whether they will dissolve into the coming anarchy, or declare their own individual sovereignty and thrive.

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Theatres of Sport and Entertainment

BY Brian Brisbin

The 20th Century produced some of the most prolific advances in technology, infrastructure and urban development the world has seen. Throughout this period, the industrialized countries laid the ground work of their infrastructure — as well as the urban components, buildings and activities that utilized it. From electricity to television, and from telephones to the Internet, this

infrastructure has become both a benefit and an impediment. The entrenchment of this hard-wired 20th-Century infrastructure has left the majority of westernized countries in a state of overload and disrepair.

Today, we have the wonderful opportunity of literally leap-frogging from the 19th Century to the 21st Century without the impediment or baggage of the land-based technologies of the present. We see this both in terms of satellite communications, television broadcasts, cellular phones, and wireless technologies for entertainment. It also is evident in the radically new directions being taken for the design of sports and entertainment facilities, which are no longer based in concrete and buried copper cable.

This vision of the 21st Century, with its harmonious integration of new technologies, charts the course we must take.



BRIAN BRISBIN is the Partner in Charge of Design for Brisbin Brook Beynon, Architects. He graduated with a B.E.S. and a B.Arch from the University of Waterloo and on scholarship attended the International Institute of Design in London, England. In private practice since 1975, Brisbin has designed many outstanding institutional, urban design and mixed-use developments internationally.

Design Philosophy

Event Architecture. Sports Stadia are not simply physical buildings which intermittently open their eyes for a selected number of games, like an inanimate object brought to life only through the activity in it.

Sports is entertainment. Entertainment is performed in theatres and this can be reflected in SCI's design concepts of the Theatre of Sport & Entertainment — an all-encompassing facility of components geared to an audience expecting the architecture of events to provide the drama and flexibility of music concerts, flat shows, circuses, sporting events, public rallies and enthusiastic celebrations.

The concept of the Theatre of Sport implies a much higher level of social values which, simply put, means a greater equality in mix between male and female, and more utilized social amenities to encourage people to come earlier and stay later within the venue. This also relates to the ultimate success of the venue both in terms of the number of activity days, as well as revenue streams.

Multi-functional Entertainment Capability. The venue must have a capability of performing to the highest standards of entertainment value for both the sporting events, as well as the many other activities that will be a part of it.

In order to do this, both seating arrangement, reconfiguration, lighting, acoustics and support activities are all critical to create the right mix for the right event.

SCI has developed proprietary designs that allow sporting "stadiums" to reconfigure into amphitheatre areas—essentially reducing their visual and physical appearance. As a result, it is possible to accommodate concerts from 10,000 to 20,000 seats in a controlled visual and acoustic manner. This ensures the greater use of the facility, and increased opportunities for programming.

As well, the basic nature of the design itself is one that allows for, rather than precludes, these opportunities — unlike contemporary designs for traditional stadiums.

Design Vocabulary. The vocabulary of materials and forms are the essence of the physical reality of the design. While these buildings are predominantly concrete or steel structures, their exterior skin can break the scale of the design down to form a series of aggregate components, rather than one overwhelming form. This approach describes a village of shapes and forms that break down both the activities and humanize the scale of the design.

The Bowl. As event architecture, the design of the bowl is reflective of the many activities that will occur within it.

It is also very much reflective of the variety of social types that will be a part of the audience: protocol and private box suites, restaurant bar areas, premium seating, general seating and an outdoor walk around, standing room, gallery viewing, and concourse use.

An example of this can be seen in the model (below) — the main concourse, while completing a loop of the building, ranges dramatically in experience from the large restaurant and bar areas at the north end, to the completely open-to-sky picnic areas under the Jumbotron which look onto the field, as well as back to the view of the park land.

This range of opportunity in the design is not only much more harmonious with the nature of people and their ability to be spontaneous, but avoids the homogeneity that occurs with conventional seating.

The Live Studio Audience

The future of sports and entertainment is focused on broadcast capability: the ability to disseminate the activity to a larger audience with the enthusiasm of being at the live event. For this reason, we consider the stadium audience to be a live studio audience.

The venue itself must have the capability of being essentially a broadcast facility.

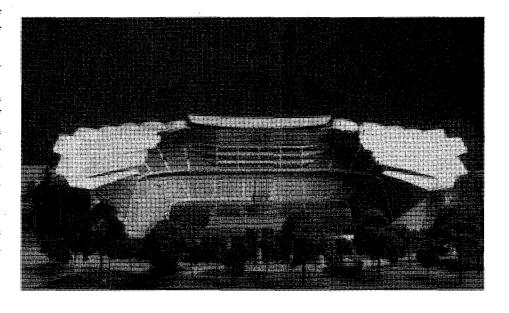
The integration of cameras, camera angles, media boxes, post production and production facilities, special lighting, and ultimately the digital technology to transmit the event, are critical to its success.

SCI is the world leader in media integration. For example, the advance technology that exists in the Helsinki Hartwall Arena marries the technologies of digital compression and satellite transmission to the entertainment activities of sports venues.

The integration of these technologies is primarily by the phone companies, since they are the largest vested interest to combine the aspects of telephone, video compression, digital broadcast, and interactive technologies into one package.

The new products of today, including cellular phones, video kiosks, video networks and the variety of Internet services are much more accessible through the wireless technologies that are now being embraced.

Some of these technologies already exist — including the SCI-patented "Smartseat" — through Infatel and New World telephone, a joint venture with Canadian companies.



Funding Sources

SCI specializes in the generation of non-traditional revenue sources in major entertainment and sports facilities. In particular, we analyze these opportunities from the perspective of how to better utilize the stadiums "physical plant" during non-event times to both attract visitors and customers and generate additional revenues.

When successful, this strategy has the added benefit of making the stadium an active vibrant part of the city during non-event times. The creation of areas for retail, entertainment and food and beverage means that "this is the place to be" for both residents and visitors:

Suite Sales

SCI has played a key role in the marketing and sale of private suites in Canadian and American sport facilities and has pioneered the licencing of 10-year contracts for private suites.

Club Seats

SCI has also developed the programs and licenses for the sale of club seats in major sport facilities. This premium seating product includes a package of exclusive customer services such as private VIP entertainment and lounge areas.

Corporate Sponsorship

Another important component of any major project is the securing of corporate sponsorship, either as a lump sum capital donation, or as pledges for set annual donations over an extended time period.

These corporate donations allow the company to name various building components, and perhaps the building as a whole, and would involve the sale of advertising in the facility.

Restaurants

The incorporation of various restaurant/lounges provides a totally different type of seating in the facility, which should in turn attract a different type of audience. Therefore, overall attendance should increase for all events.

As well, they will provide another high quality element to the building which should increase its perception in the marketplace as a first-class entertainment centre. The restaurants would provide an improved economy of scale for quality foodservice in the building, with its kitchens servicing the suites and club seat areas.

Technology

Smart Seats, kiosks, the scoreboard and monitor displays make up the main layered technologies that create the informational transactional communication in a venue.

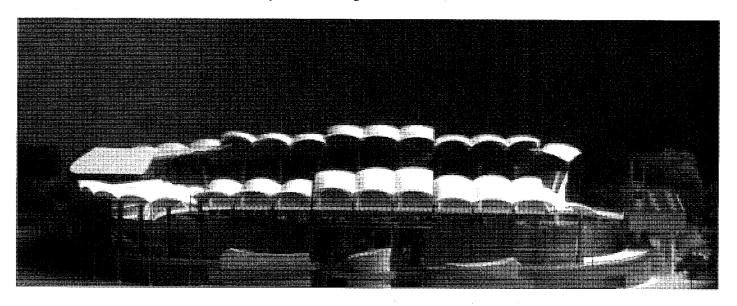
SCI has the ability to provide a revenue-stream approach that coordinates all of the above options into one program.

The Smart Seat is an ergonomically comfortable seat designed with a fully-integrated interactive video system. The seat includes a colour video LCD screen, interactive controls, in-seat audio and telephone capabilities.

Upon installation, this innovative modern entertainment system maintains the capabilities for providing the following features to the patron: video/audio broadcast of the event attended, enhanced audio with on/off features, concessions, advanced ticket ordering, border advertising, telephone, catalogue shopping, lottery ticket sales and a restaurant reservation system.

The key to combining all of the interactive components is to have an addressable network that allows the flexibility and continued programming of any changes required.

Implementation of such a network can generate an increased revenue stream — using the technologies of the 21st Century today.



Why Rural Economic Development? OMAFRA's View

Ontario's agri-food sector accounts for more than 640,000 jobs and is worth \$25 billion annually, second only to the automobile sector when it comes to overall impact in the provincial economy. As a result, the Ontario government places a strong emphasis on ensuring the continued growth of the agriculture and food industries while enhancing the long term viability of the rural

communities forming the backbone of the sector.

The Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) has been serving rural Ontario for over a century – helping to create a world-class agriculture industry and promoting rural economic development, agricultural diversification and facilitating the development of the leadership and organizational skills of rural residents.

Ministry staff have for more than 100 years been providing leading edge agricultural production research and agricultural business management advice and assistance to the province's agricultural sector. This role is continuing.

Today, rural community advisors and agriculture and rural representatives work with a wide variety of agricultural and rural organizations, municipal leaders, economic development organizations and rural communities on topics ranging from community economic development, business development and conflict resolution, to strategic planning and effective communications in order to address OMA-FRA's broader rural development mandate.

Rural Diversity

While agriculture has been the traditional economic driver in rural Ontario, the rural economy has evolved into a diverse economic system. The population base has also changed to include a greater number of non-farm rural residents who either work in their community or commute to larger urban centres.

The ability of rural residents to integrate and seek greater economic ties to non-traditional industries has risen with the expansion of the information economy and the development of telecommunications technology.

There's been a lot of change, but there's also a lot of opportunity.

With business management advisors and rural business consultants strategically located across the province, OMAFRA offers a broad range of business development services — from coaching individual entrepreneurs to developing information packages centred on major topics like business planning, marketing and finance.

The ministry also works in partnership with the private sector to develop education and training programs that will make rural Ontario's business climate as strong and competitive as it can be.

Investment attraction and client account officers give businesses in the food industry a one-window access point for government information, programs and services aimed at increasing the agri-food sector's competitiveness within the world economy.

And the ministry's new rural enter-

prise centres will enhance our role in supporting rural business development and thereby the expansion of the rural economy.

"We are committed to assisting rural communities to attract investment and create jobs," says Agriculture, Food and Rural Affairs Minister Noble Villeneuve in the introduction to OMA-FRA's 1997-98 business plan. "Our skilled staff use the latest electronic communications and advisory techniques to help boost local economies to meet the needs of local residents. That provides economic benefits and jobs for the entire province."

These services are provided to agrifood processors, rural businesses, agricultural producers and rural communities.

The Economic Impact

There's no doubt that rural Ontario plays a crucial role in both the provincial and national economies.

In 1988, just 10 short years ago, Ontario boasted agri-food exports of \$2 billion. By 1996, those exports had increased 12 percent, to \$5.3 billion. The goal for 1997 is \$6 billion – triple that of 10 years ago: a major impact when you consider every \$1 billion in exports translates to around 12,000/jobs.

That's good news for all Ontarians, because the province's agriculture and food industry is not just a global player – it's also a dominant player domestically.

Agriculture and related industries accounted for over 52 percent of primary goods produced in Ontario in 1995 and the food and beverage industry made up over 11 percent of total manufactured goods.

The importance of the agri-food sector becomes even clearer when you note the 67,000 primary agricultural producers in Ontario support 84,000 employees in the food processing sector, which in turn spins off 207,000 jobs in restaurants, caterers and taverns and 135,000 jobs in food retailing.

Ontario is also home to over 1,000 food and beverage processors, accounting for over 40 percent of Canadian food and beverage manufacturing shipments, and over 50 percent of added value. Sixty-five of the 100 largest Canadian food companies are headquartered in Ontario.

Food processors annually invest over \$860 million in Ontario.

Major Changes

Despite the growth and investment in the agri-food industry, rural Ontario is experiencing significant changes in its socio-economic structure.

We're living in an age of technology, information and global competition, where change is an everyday fact of life. Yet one thing has remained constant – the understanding in rural Ontario that in order to succeed you have to work hard, and you have to work together.

Although the total number of jobs in the agri-food sector is huge, the dependency on off-farm employment has increased. More specifically, off-farm income as a percentage of total net income increased from 45 percent to 53 percent between 1989 and 1993.

Off-farm earnings can be critical to the economic viability of families on small and mid-sized farms which, of course, is what most people think of when they think of rural Ontario. But the service sector is important too.

Between 1986 and 1991, the service sector — which includes transportation, the construction industry and other services — grew from 68 percent of total rural employment to 73 percent.

The major growth area has been community, business and personal services, which grew by 83 percent between 1976 and 1992, generating 70,000 jobs in total. In 1992, overall employment in this portion of the rural workforce was 301,000 in 1992 — 32 percent of the total rural labour force.

And more people are creating their

own jobs.

Between 1986 and 1991, the number and percentage of self-employed people increased in both rural and urban Ontario – with a 19 percent increase in rural Ontario.

Reflecting the change in the rural economy is the increase in rural nonfarm population which grew from 65 percent of the total rural population in 1961 to 88 percent in 1991.

All of these changes have brought new challenges to rural development.

OMAFRA's Business Plan

OMAFRA's business plan lays out six key strategies to reach the vision of a ministry that fosters competitive, economically diverse and prosperous agriculture and food sectors while promoting the economic development of rural communities:

- Increasing Competitiveness
- Increasing Efficiency
- Encouraging Self-Reliance
- Improving Service Delivery
- Fostering Rural Growth
- · Working Together

These six strategies are aimed squarely at the ministry's four very distinct, yet interrelated, core businesses:

- Research & Technology Transfer
- Investment and Market Development
- Rural Economic Development
- Risk Management

There's a lot happening in rural Ontario. And, as it's been since 1888, OMAFRA's right there at the centre of it all. ■

Partnership Initiatives with the Private Sector: Critical Issues for Government

BY Carolyn Lane

Today, in many parts of Canada, government at all levels is redefining its role as it relates to the delivery, management and operation of essential and non-essential services and facilities. There is increased emphasis on government downsizing and restructuring, fiscal restraint, balancing budgets, and alternative service delivery options, such as privatization and public-private partnerships. As key

issues and opportunities emerge regarding public-private partnerships, both the public and private sectors are raising the same basic questions:

- What facilities/services are essential?
- What facilities/services are non-essential?
- How can government afford the facilities/services they need?

- What level of service should the sponsoring government and the community-at-large expect?; and
- Who will pay for the provision of these facilities/services — the public sector, the private sector or a combination of the two?

Resources are limited, and trade-offs must be made. Policy makers, as well as public managers, need to ask important questions about current and proposed government activities such as: Is the private sector already providing this service and if not, is it capable of doing it better or more cost effectively than government?

Before asking how a given facility/service can be managed more effectively and efficiently, the essential question to ask is whether the government should be providing the facility/service at all.

In general, the public sector can realize a number of positive benefits by entering into a partnership with the private sector. Usually the most compelling reason for pursing such a venture is the ability to transfer all or part of the public sector's financial risk and operational obligation to a private operator.

Other benefits may include maintained or improved service levels, economic development opportunities (i.e., job creation and other economic spinoffs), and value engineering or process streamlining (i.e., developing im-



CAROLYN LANE is a Manager with Arthur Andersen & Co., Real Estate Advisory Services in Toronto. Responsibilities include developing public-private partnership and privatization strategies, and the coordination of multi-disciplinary land development projects.

She has an honours degree from the University of Waterloo, School of Urban and Regional Planning, and is completing her Masters thesis on "Public-Private Part-

nerships in Canada" at the University of Toronto. Lane is a member of the Canadian Institute of Planners and is a Registered Professional Planner in the Province of Ontario.

proved ways to provide a service).

In order to realize these potential benefits, it is important that the public sector understand the following tenets:

- The partnership must demonstrate a proven advantage over the status quo;
- neither the public nor prospective private sector partner can realize any specific benefit without also assuming some degree of risk or cost; and
- the privatization of a facility, product or service is not a panacea, and in some cases it may even be inappropriate.

- the structuring of a detailed call-forproposal process to identify the most qualified partner to assume the operation and/or delivery of a facility or service; and
- the establishment of an effective communications strategy to control what information is disseminated publicly and to potential private partners it is imperative to the creation of an effective partnership arrangement that false or unrealistic expectations are not created and that the government's position is not compromised, particularly as negotiations approach or unfold.

mately structured through a process that will provide the sponsoring government with more direction and control over the final agreement.

For sponsoring governments undertaking partnership initiatives, experience indicates that the approach to the development and execution of a successful public-private partnership should focus on the following key areas.

First, the sponsoring government must develop a strategic plan to:

• Deal with public policy issues early in the decision-making process in or-

THE PUBLIC INTEREST

The sponsoring government must develop a strategic

plan to deal with public policy issues early in the decision-making process

in order to ensure a public benefit.

In the final analysis of the viability of a potential partnership initiative, a balance between risks and rewards will be required in order that an equitable partnership can be structured.

Before any successful privatization project can be structured, a number of critical elements must be thoroughly addressed by the sponsoring government in order that it is able to knowledgeably and effectively go forward, including the following:

- A detailed analysis of the economic and financial parameters associated with a project in order to evaluate its feasibility as a privatization project;
- a decision, at the staff and political level, to proceed with a potential project;
- an analysis of the risk/reward relationship to ensure that risks and rewards are identified and valued, and that risks are allocated to the party best able to deal with them at a price acceptable to the public good;

It is critical to remember that there is "no free lunch" and that the balance of allocating risk and reward drives both the public and private sector participants.

It is imperative, therefore, that the sponsoring government fully understands, at an early juncture in the process, both the opportunities and constraints which a potential public-private partnership would provide, so that it is able to effectively structure a venture which preserves the public interest.

Planning an Initiative

To ensure that public-private partnerships provide the maximum amount of protection for both parties, a considerable amount of pre-planning must be conducted into the design and structuring of the partnership, in order to reduce the risk and ongoing exposure of the sponsoring government.

Such pre-planning will ensure that an appropriate partnership is ulti-

der to ensure that there will be a public benefit over traditional service delivery (e.g., cost savings to the municipality);

- generate political support; and
- ensure the private partner's acceptance of the initiative.

Prior to issuing a Request for Qualifications, the sponsoring government should undertake a detailed feasibility analysis to provide a well-articulated rationale for undertaking the initiative. The feasibility analysis should seek answers to questions such as the following:

- What is the partnership to achieve?
- What is the nature of the partnership?
- · What is the desired outcome?

The feasibility analysis should establish the business parameters for a partnership, the qualifications required of private sector partners, and the identification/outline of the partnering

process. Considerable forethought will be required regarding the appropriate business structure around which a partnership will be developed. Included among the many factors which will serve to shape the business structure are the:

- financial and operational structure through which the facility/service will be operated;
- up-front and/or on-going financial and/or operational involvement which the sponsoring government and/or its key constituents may have (if any);
- viability of the project's economics;
- the legal structure through which the partnership will be implemented (i.e., joint venture, etc.).

Assuming that key project issues and concerns are addressed in the feasibility analysis and supporting presentations, the municipal politicians will be involved early in the process and staff will be able to secure the political support and commitment to proceed with the partnership initiative.

Second, the sponsoring government must clearly define the scope of the partnership so both the government and the private-sector proponent are entirely certain of the goals and objectives of the initiative, ensuring that the "rules of the game" do not change midway through a project.

Third, the sponsoring government must ensure that the project warrants the attraction of private capital by answering the following questions:

- Is there a secure and predictable cash flow?
- Is there a high probability for a reasonable rate of return?

Fourth, the sponsoring government must assess the risk allocation, financial or otherwise, that the public sector is willing to bear or transfer.

Political Commitment

Any public-private partnership initiative must have the complete support of public-sector management and provide the necessary framework to allow the staff of the sponsoring government to identify and act on public-private partnership opportunities.

Public-private partnership initiatives require significant political commitment in order to succeed. Political leaders and staff will be called upon to explain and defend positions which may appear to, or actually do, impose additional costs on the electorate. Once an acceptable partnership initiative has been developed, the government staff must accept the role of project advocate. No partnership initiative will succeed if the sponsoring government vacillates.

To accomplish the above, political

leadership should commence the partnership process with a clear set of political and economic objectives which can be easily articulated to both the public and private-sector partners.

The partnership selection process should be objective, and based on the qualifications of the bidders and compliance with the government's objectives for the partnership.

Well-defined frameworks are necessary to identify and analyze opportunities and related risks, select advisors, obtain offers/proposals, select the preferred proponent, and execute and close the transaction. Rigorous analysis is necessary to identify the risk-reward relationship to ensure all risks are identified, and the risk is allocated to the partner best able to deal with it at a price that is acceptable to the government sponsor.

Good Public Communications

Effective internal and external communications — including identification of public-private partnership opportunities, the time frames envisaged, and the prioritization of these opportunities — are essential.

However, there are dangers associated with going forward too quickly or publicly promising too much. Going forward with an initiative too soon, without undertaking considerable upfront planning, may create false or unrealistic expectations with politicians



and/or the public.

In the absence of extensive financial and economic analysis, government officials may send the wrong message to proponents in terms of promises made about the structure of agreements or the financial opportunity.

If a time frame is identified but not adhered to, the sponsoring government is at risk of alienating potential proponents and the public, putting the sponsoring government's credibility at risk. By disseminating too much information early in the process, the government may potentially compromise its future negotiating position with the

on other issues, is required.

Most importantly, the government sponsor must feel comfortable with the representatives of the private-sector proponent. Relationship-building starts long before the negotiations, establishing a level of trust, communication and commitment between all parties. This is the cornerstone to successful negotiations.

When initiating and undertaking negotiations, the sponsoring government should keep in mind that successful negotiations take time. It is important to budget for the necessary time and effort.

 ensure that the public interest is served.

Conclusions

The economic development professional should be aware of partnership initiatives that may exist in their own and in other municipalities, and should seize the opportunity presented by public-private partnerships. They should not limit their activities to the expansion and retention of business in the community, but rather, should be creative in identifying potential partnership opportunities and acting as a

POLITICAL COMMITMENT

Despite a detailed selection process, negotiating a

partnership agreement can be an arduous and time-consuming task

requiring commitment and flexibility.

private sector proponent.

Public concerns are generally high regarding the objectivity of the partnering process, the pricing of user fees, and labour and contracting practices.

It is essential to ensure that stake-holders, prospective bidders, and the general public believe the entire partnership process is open and conflict-free, and that there is a high likelihood of the optimal solution being chosen. Regular communication with the public through newsletters, press releases and occasional press conferences helps to maintain trust in the selection process and support for the result.

Negotiation Strategies

Despite a detailed selection process, negotiating a partnership agreement and finalizing contractual details and financing arrangements can be an arduous task.

Firm political commitment to maintain the sponsoring government's objectives, while also showing flexibility

Public-sector negotiators should understand the critical aspects of the deal structure and what the municipality is trying to achieve through the negotiations.

This includes identifying any "deal breakers" as early in the process as possible, and tackling these issues upfront to avoid wasting time, money and effort.

Overall, the sponsoring government must:

- Retain control of the entire negotiation process;
- have a strategy in place for both the maintenance of confidentiality and for the disclosure of appropriate information within the sponsoring government, and to the public;
- create incentives for the proponents to improve the deal;
- be flexible;
- know who to call on for assistance if the staff is not experienced in conflict resolution or alternative dispute resolution; and

catalyst to facilitate the partnership process. By leveraging their extensive private sector contact base, the economic developer can act as a "relationship broker" by introducing the right public and private sector contacts to each other. Ultimately, the goal is to attract additional business to the community and enhance community development without placing a financial burden on the taxpayers.

While advocating enhanced cooperative approaches between the private and public sectors, it is important to underline that private-sector involvement in the provision of services and facilities which have been traditionally provided by government, is not a panacea, and may even be inappropriate in some cases. Whatever the fiscal imperative, the public interest demands that some functions remain entirely in public hands.

The challenge for government is how to safeguard the public interest without being the supplier of the first and last resort.

NETWORKS:

The Unchampioned Business Growth Technique

BY Patrick W. Olive

Networking will be a strong force in the business world of the future as very few single entities or corporations will be able to tackle the complexity of the global marketplace. It will require new thinking and creativity, imagination and risk, innovation and proactivity, flexibility and a complete and thorough understanding. Canada as a trading nation will be compelled to: "nurture an innovative

economy through a new approach which focuses on small and medium enterprises (SMEs), on regional economies and on communities themselves ... developing a focus for economic cooperation and networking" (Gilles and Jeffrey, 1995).

The focus on networking and cooperation is basic to the viability and success of our business enterprises. It is a

movement that has yet to be recognized and successfully tapped on a national basis. Durham Region, however, is using networks to expand the community's potential and is encouraging other communities to develop a similar system.

There continues to be a basic misunderstanding of terminology between *networks* and *strategic alliances*.



PATRICK W. OLIVE is the Commissioner of Economic Development for Durham Region, which is part of the Greater Toronto Area. Previously, he worked in the the land development and construction industry.

He is a past president and current Director of the Economic Developers Council of Ontario (EDCO) and a member of the Economic Developers Association of Canada (EDAC). Olive was named Canadian Economic De-

veloper of the Year for 1996 and was awarded the 1997 inaugural Ontario Economic Development Achievement Award.

He has his M.A. in Urban & Regional Planning (Waterloo University) and an MBA (York University).

The Webster's dictionary defines a network as: "forming business connections and contacts through informal social meetings." Networking is the "interconnection of two or more networks in different places."

In other words, it is an umbrella system that involves companies discussing problems and opportunities, making business contacts that are fruitful now or in the future and exchanging knowledge with colleagues, peers and perhaps even competitors.

This powerful concept is not new. Community, provincial and federal organizations and associations have all utilized this informal approach.

What springs from such a process could conceivably be a formal relationship of two or more companies which ultimately join forces to tackle a problem or take advantage of an opportunity by way of a more formal arrangement — the Strategic Alliance.

According to Lewis Jordan, the Strategic Alliance is a "formal and mutually agreed commercial collaboration

between companies. The partners pool, exchange and integrate specific business resources for mutual gain. Yet the partners remain separate businesses."

Inherent in this definition is that two or more companies are involved in a formal contract which is normally, but not always, a written document.

Each uses each other's strengths and resources to expand their own business, enter new markets, delve into research and development, or launch new products. It is an extremely cost-effective way for firms to expand and prosper.

This is not to imply that it is easy and

tain sectors, particularly among beginners."

What is more disturbing is the use of the term "strategic alliance" by government-initiated organizations such as the Canadian Business Network Coalition (CBNC). This group continues to perpetuate the confusion by referring to a strategic alliance which, in this case, is three or more firms forming a network. I commend what this group is doing but let's call apples, apples and oranges, oranges, particularly since the CBNC evolves from the Federal Government's Policy as stated in their 1993 Plan entitled "Creating Opportunity:

promise sank even further into oblivion when, in October 1994, the House of Commons Standing Committee on Industry presented a paper on fostering growth within the small business sector entitled "Taking Care of Small Business." This report relegated a few of the final pages to discussing the potential of Canadian Industrial Networks. After discussing networking examples in Denmark and Italy, the paper took a typical government approach by suggesting that further studies were warranted.

With a majority Liberal Government, policy could easily have been

DEFINING AN ALLIANCE

A strategic alliance involves two or more

companies in a formal contract which is normally, but not always,

a written document.

straightforward. On the contrary, it is wrought with trials and tribulations as well as the most important 'T' word — Trust. SMEs can participate on an equal footing with multinationals as most multinationals recognize the importance of staying ahead of the rest of the pack and maintaining their competitive advantage.

Networks and Government

It is extremely unfortunate that professionals continue to confuse networks and strategic alliances.

Phillippe Roy, a senior advisor in Industry Canada, has spent a number of years looking into networks. He has travelled the world to understand and document the synergy that is created by networks. Phillippe is fast to point out that "it is absolutely essential to distinguish business networks from strategic alliances."

"Despite this very clear demonstration among seasoned practitioners, there is considerable confusion in cerThe Liberal Plan for Canada."

In 1993, the Liberal Party under Jean Chretien took the helm of the Canadian Government. The Liberal Plan, as stated in their Red Book, focused on many items and issues. One important policy focused and supported activity at the sub-national level, namely the region. The third section of the Red Book suggests building an effective strategy on the networking approach.

"Liberals favour a new approach. We see strong regional economies as the building blocks of Canada. Concerted action and the mobilization of scarce resources are necessary to achieve strong regional economies in the age of international competition and change. One of the most important ways of making this happen is to develop forums for economic cooperation, joint action, and integrated development on the regional level."

The possibility and the promise were there but, unfortunately, the vision was blurred during the first term of the Liberal Government. The networking implemented to influence significant small and medium business growth. They failed to grasp this opportunity. The only concrete result from their 1993 Red Book was, as previously mentioned, the establishment of the Canadian Business Networks Coalition, an organization that appeared to be founded on the promise of networking but was manipulated and relegated to establishing 30 strategic alliances.

To date, the CBNC appears to be a success story, but if the funding supplied to this organization had been used for networking, the results would have been definitely more significant and lasting.

SMEs would have been the focus rather than the major multinationals that dominate CBNC's success. As we will see later in the Durham example, little resources and, in particular, funding is required to obtain phenomenal results.

Recently, an election was called and again the Liberal Party presented their Red Book, this time entitled "Securing Our Future Together: The Liberal Plan 1997." There is not one mention in this document of networking or the "new approach" which focuses on SMEs and regional economies. It appears the Liberal Government has completely abandoned its previous platform as outlined in the 1993 Red Book. Perhaps no longer is it felt necessity to develop an innovative economy at the regional level. Let's hope this is not the case and it is only an oversight.

In fact, personal experience has proven this to be correct as local representatives of the Canadian Government are becoming very involved in partnering with their regional colleagues, whether it be Regional Government or a larger entity such as the Greater Toronto Area. It is essential that this approach be formulated and documented in order that it become government policy.

The role of government is especially critical and can play a major role as a catalyst and facilitator, but ultimately business has to take control. This is where the intermediary role of the economic development professional plays a critical part.

Creative and proactive economic development professionals are continually developing and evolving programs that assist their businesses in competing in the global marketplace. This professional is extremely knowledgeable about his/her community and can provide additional linkages to the outside world. This is the basis on which the Durham Region Business Alliance Network has achieved success. It was a process developed with the intention that it be emulated across Ontario and Canada. A network of networks would join all regions and their respective businesses within the province, linking them to the resources that all levels of government could provide.

The Durham Experience

Durham Region has tried and tested the networking concept and we believe

that the potential is unlimited. This conclusion has its beginnings in a couple of trade missions in the early 1990s to Germany.

As a result of these trade missions, it became obvious that the German industrialists were preoccupied with:

- the recession and downsizing activities:
- the unification of East and West Germany;
- the high cost of green field start-up and market entry;
- the shrinking global market in which firms operated;
- the trade blocks being set up, such as NAFTA and EU.

It was necessary to develop a new strategy that would address these concerns. Consequently, Durham Region undertook to develop a very extensive and comprehensive Strategic Alliance Program whereby the Regional Economic Development Professionals (EDPs) had the necessary information about companies interested in strategic alliances with other international firms.

As a result, a *Strategic Alliance Booklet* was produced that listed all Durham Region firms which were in a position to undertake a strategic alliance. These booklets were distributed worldwide to all Canadian Consulates and Embassies, trade associations and agencies which were in a position to match Durham firms to their local firms.

This process has developed an international link for Durham Region SMEs. However, it soon became apparent that a strategic alliance need not only apply internationally but Durham firms could develop a similar arrangement locally if all of the required traits matched. The development of such alliances would contribute significantly to the development of the regional economy. The result was the formation of the Durham Region Business Alliance Network (BAN) in early 1993.

The Mission Statement of BAN states:

"BAN is a not-for-profit organization established to foster business creation, improved performance and growth through the promotion of all forms of strategic alliances among businesses, financial institutions, academia, government and not-for-profit organizations for the benefit of all."

The Vision is:

"In the near term, the Durham Region BAN will become recognized as the premier example of a proactive and financially self-sufficient strategic alliance formation organization in Ontario and throughout Canada. In the longer term, the mature and established Durham Region BAN process and structure will be a model capable of duplication elsewhere in Canada and the world."

The Structure

The BAN Strategy is to act as a facilitator to bring businesses, financial institutions, academia, government and not-for-profit organizations together in an environment conducive to good communications and the successful implementation of strategic alliances. BAN assists businesses to resolve problems and realize opportunities and to identify and put in place necessary training, education, advisors, financial and other resources, needed to develop successful strategic alliances of all types.

A critical component of BANs Strategy is to seek opportunities to create linkages between individuals and organizations and focus efforts on business creation within Durham Region.

This allows BAN to bring resources together to help businesses use government programs effectively, to bring financial resources together, to facilitate technological transfers and to provide a focal point for all participants.

BAN is centered and focused on a hub which is called the Strategic Management Team (SMT) which could be likened to the management of a corporation. A Chair from the private sector heads the team of Chair people from the groups, including resource people from the public sector such as the NRC, the Economic Development Department, and the Ministry of Economic Development Trade & Tourism.

Monthly meetings review the strategic direction of the organization as well as the results of the meetings of Pro-active Opportunity Development Groups (PODs).

A Project Review Committee operates under the auspices of the SMT and is required to support and advise the Strategic Management Team and its chair person on the merits of proposals received from the PODs. If a "focus" or "super focus" resource or project advice is required, the Review Committee will provide an opinion.

An Advisory Council meets twice a year and is likened to a Board of Directors in the corporate environment.

Consisting of the "who's who" or senior stakeholders within the Region, the main purpose of the Council is to promote BAN's existence within the Region and give high-level executive input to its operations.

Surrounding this ring are several mentors who are available on a payfor-service basis and are retained by corporations that have initiated a strategic alliance and wish to retain a professional consultant during the development.

The POD Concept

A POD is a gathering of various individuals and/or representatives of companies that are interested in solving corporate problems, evolving opportunities to commercialization, or jointly pursuing opportunities and thereby initiating a strategic alliance.

A POD meeting ideally consists of

15 to 25 participants and is structured to provide the maximum participation of all members.

The chairperson, after a comprehensive training session, is vital to the success of the POD. He or she must keep the meeting fast-paced, generate synergy and, most important, create an open, trusting atmosphere among POD participants.

PODs can be vertical or horizontal in nature, ie. single-sector or multi-sector. The Network Administrator keeps minutes of the sessions and especially notes the "hits," which involves recording the individuals who have offered solutions to a member's problem, or provided assistance and/or resources to a member's proffered opportunity.

The administrator will track these "hits" and follow-up on a regular basis to ensure that the hit evolves to the desired conclusion.

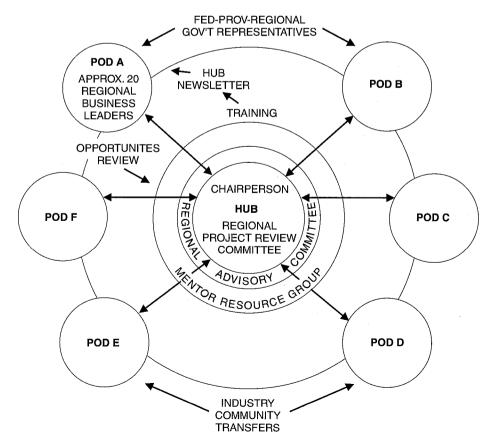
The administrative staff is there for logistical support, such as: minute taking, tracking, follow-up enquiries, database formulation, newsletter preparation and circulation, meeting notification and reminders, meeting logistics, as well as educational and training support.

The Process

The network has developed a process that is focused on solving participants' problems and the successful commercialization of opportunities that have been identified during meetings. This process is comprised of many such processes. However, there are basically six macro steps.

- 1. Strategic Alliance Training. Training courses and presentations for all BAN members.
- 2. Business Example Speakers. Exposure to real life examples of strategic alliances through speakers and presentations.

STRATEGIC MANAGEMENT TEAM (SMT)



- 3. Introduction and Ideation. Round table introduction by all members with a brief introduction of their nature of business and scope of market; planned sharing and formal recording of problems, challenges and opportunities presented by the members in a round table discussion that sets the stage for the creation of strategic alliances.
- 4. Focus and Follow-up. Detailed focused assessment and follow-up of strategic alliance opportunities by the potential alliance participants and identified experts relevant to the pro-

Where appropriate, the Project Review Committee also will be involved in the focusing process.

5. Project Mentoring. The identification and involvement of a designated Project Mentor as a consultant to assist in planning and managing the strategic alliance to successful completion.

6. Financial and Technological Implementation. The identification of sources of financing, technology support resources and other resources, expertise and implementation assistance for the project.

While these methodologies are not new, their incorporation into a community is. Once this process is instilled in the community, there is a greater chance for the successful completion or development of the opportunity. However, in order for this process to succeed, the infrastructure has to be developed.

To date, BAN operates five PODs two cross-sectional manufacturing PODs and one each for electronics, tourism, and professional services. Another is planned to represent the home business sector. In addition, a POD has been started to act as a catalyst for establishing an electronic network for Durham Region. It is now operating

under the auspices of the Regional Strategic Plan.

A schedule has been established, which lists all meetings of the SMT, Advisory Council, POD meetings and all-POD meetings for the calendar year. In addition, formal documentation has been developed to provide guidance to BAN's Executive and members covering such areas as Codes of Conduct, the Membership Agreement and Waiver, Non-Disclosure Forms, etc.

Recently, an analysis was compiled by R. Walker, a member of the SMT, in an attempt to assess weaknesses and strengths of the BAN. In 1995, there were 11 POD meetings, while in 1996 there were 17 POD meetings. The meetings recorded five and 68 "hits" respectively. The average meeting attendance was 16 representatives with the range from 11 to 23 attendees. Successful "hits" have ranged from a single exchange of excess raw materials



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— saving the respective companies money — to six firms developing a bid to a multinational firm to recycle a product that was formerly disposed in landfill sites.

BAN is on its way and will soon be self-sustaining. It is important to point out that BAN would not be where it is without senior and local government involvement. The Federal Government in particular has played an important role in its development which cannot be overstated as to its significance. The persistence and dedication of the Regional Economic Development initiative as well as the business community has been the foundation of its success.

Conclusion

In summary, networks provide an opportunity that will promulgate success and growth of the economy. Building on the strengths of others while combining one's own strengths can only build competitive advantage and market leadership.

Rosabeth Moss Kanter refers to this as the "infrastructure of collaboration." She states: "The infrastructure for collaboration consists of pathways by which people and organizations come together to exchange ideas, solve problems or form partnerships. It helps people move across barriers of localism, parochialism or provincialism that divide them."

This infrastructure can be strongly reinforced with the commitment and support of government — that means all levels of government, but in particular the senior levels. No sector of society is isolated. All components have to pull together as a team and provide those aspects over which they have influence.

Glenna Carr points out that "Governments create bridges for trade and exchanges of expertise and develop an environment where alliances and relationships of trust can flourish."

Networks do work. They do have significant impact but only if they are

administered properly, constantly monitored and run by the private sector with assistance and support of government.

It is vital that provincial and federal government policy be developed and implemented that supports the creation of networks.

The Liberal Plan once had this vision. It is time for its revival. ■

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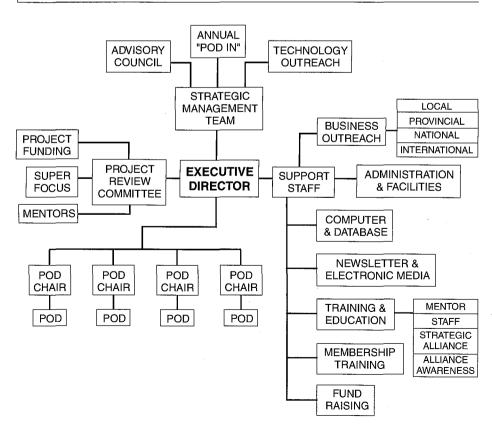
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DURHAM BUSINESS ALLIANCE NETWORK (BAN) ORGANIZATION



Virtual PR

FOR THE ECONOMIC DEVELOPER

BY Melanie Kurzuk

Virtual public relations has made the transition from an industry buzzword to an essential keyword. It's an interactive communications approach that utilizes technology to achieve the maximum impact on an intended audience. Virtual public relations is no longer a concept. It is an electronic information application that should be built into an organization's strategic public relations infra-

structure. The PR environment is changing with the development of new creative communication channels, globalization and growth in the media.

Today's PR professional must think beyond the traditional paper news release. Effective use of new, creative multi-media channels such as the Internet, video news releases and satellite media tours, will effectively deliver key messages and build a company's profile.

With the ability to disseminate a news release worldwide at the push of a button, and with the increase of databases and information services, millions of people across the world can receive news electronically. The "think global, act local" philosophy now applies when developing virtual PR elements. Business and industry around the world have a front seat on economic and technological developments.

In our own backyard, the media is showing growth after years of downsizing through the 1980s and early 1990s. There are a few reasons for this growth including an overall significant improvement in the Canadian economy, CRTC approval for new specialty channels, and significant ownership

changes. There has also been an explosion of trade and ethnic publications.

What does this mean for the economic development professional? In short, there are more mediums to target virtual PR efforts.

The Media and the Internet

The media's use of the Internet has increased dramatically over the past two years. Although the preferred delivery of news releases remains by a dedicated and simultaneous wire, the media are using the internet for story ideas and research.

In some cases, freelance writers are surfing the net for news sites where they can access news releases from wire services.

About 69 percent of newsrooms are hooked up to the Internet, according to a 1996 study by Canada NewsWire and Ernst and Young. (It's probably closer to 80 percent for 1997.)

The study also revealed that 48 percent of reporters use the Internet at



MELANIE KURZUK is Corporate Communications Manager of the Canada NewsWire (CNW). A communications professional with 13 years experience in the media and corporate public relations, she began her career as a talk-show host and news reporter with the CHUM radio group, before joining the Ontario Lottery Corporation as Media Relations Coordinator.

least once a day, and 51 percent said it would benefit them to receive multimedia news releases.

Reporters vary their use of the Internet based on the type of news they cover. Business reporters are the most likely to be on-line (91 percent). Sixty-two percent of general news reporters and 50 percent of lifestyle/entertainment reporters indicated they were hooked up to the Internet.

When the media were asked what they find most useful about company home pages, 61 percent said news reof the organization and the PR campaign. Is the story about job creation or economic growth? Are the objectives to promote a community as a competitive development destination? Is there a local story angle of fostering community relations through innovative partnerships? Can the story take on an international flavor by creating awareness of a new technological product for the business or academic community? Is the story visual?

Once the objectives are established, the second step is to develop a strategy nology stories as they move on the wire.

Electronic dissemination ensures that all outlets on the network receive the information simultaneously. This ensures a level playing field for all members of the media and financial community who receive the information. The network can be customized to reach a local, regional, national or international audience.

As a news release crosses the wire, the information is picked up by hundreds of databases and information

INTERNET IMPACT

For the first time, the general public can view unedited

material prior to its interpretation by the news media by surfing web sites

that provide access to corporate news releases.

leases and 46 percent said product or service information.

The Public and the Internet

There is a paradigm shift happening with news-hungry consumers who want access to full-text news releases without the editorial spin.

The shift entails consumers who are surfing news sites on the web that provide access to corporate news releases.

For the first time, the general public can view unedited material prior to its interpretation by the news media. In fact, the media's traditional role as the "gatekeeper" of information is changing.

With the introduction of "push" technology such as Canada NewsWire's (CNW) Portfolio Email, Internet users can register to have specific company news releases automatically sent to their email or to a CNW mailbox.

Building The Infrastructure

In order to build effective virtual PR elements, first consider the objectives

for integration. There must be an integrated approach within the organization in an effort to reach all audiences simultaneously and effectively. An integrated plan builds on the "three exposure rule" for an effective campaign. The rule states that the intended audience requires a minimum of three exposures to a message, before they are able to recall the message.

The Virtual PR elements

The basic element of any PR campaign is a news release. Leading-edge technology provided by a wire service extends the life and reach of the news release. This fact is important to remember when determining what information should be included in the news release.

The best delivery method is to send the news release electronically into the editorial computer systems of newsrooms. This allows editors to capture all the news at one source, and assign stories to reporters. Most reporters have access to news wire services at their individual terminals, and can follow economic development and techservices across the world. Some of these services redistribute the news release unedited, while others such as Canadian Press and Dow Jones create an editorial story from the original text.

For maximum exposure, news releases are posted on the internet. At CNW, all news releases are posted on the company web site at www.newswire.ca for a 13-month period. A searchable database allows reporters and users to search news releases in English and French by category, date, industry, keyword, organization, stock symbol or subject.

The net posting is a virtual extension of the life of a news release. The net can provide further enhancements with a hypertext link directly from the news release to the organization's web site. Or add audio and video components to create an interactive news release.

Canada NewsWire has already posted audio commentaries for leading-edge organizations like TransCanada PipeLines. Gary Lloyd, Director of Investor Relations, TransCanada PipeLines, says "it's another outlet for exposure for those who use the in-

ternet. I see it becoming more standard in the near future, just like turning on the radio."

As the new millennium approaches, the interactive news release will become a typical element for the virtual communicator.

According to CNW's Internet Business Specialist Cynthia Hastings-James, the potential to reach new audiences and speak directly to them is significant.

"The interactive news release gives a powerful new perspective on raw

to expand its market, as well as its PR channels.

The Power of Television

Multi-media can be achieved through a video news release to enhance electronic text news releases. If the announcement has wide appeal and is best told with pictures, then include it as virtual PR element. The video news release is a 90-second broadcast-quality news report that provides visuals for a story. The video news release is

better pictures."

The satellite media tour can be vital to the economic developer when the objective is to gain coverage across the country. The company spokesperson appears on camera from the studio to talk about a product, service, or idea and is broadcast live via satellite to individual television reporters across the country for a series of exclusive, locally tailored, one-on-one interviews.

A satellite media tour allows users to travel to as many as six cities in one

POWER TELEVISION

he satellite media tour, broadcast live from the studio to

several television stations, can be vital to the economic developer when the

objective is to gain coverage across the country.

numbers and data. It gives an organization the ability to explain and quantify its business."

Streaming audio has become commonplace on the net, and companies are striving to get their news out in a meaningful way.

In response, CNW has developed a new half-hour live radio program which is archived on the net in streaming audio. The duo technology approach ensures the widest possible audience.

Innova Technologies Corporation is one company that saw value in participating in Canada's Business Report. "Canada's Business Report was one part of a comprehensive PR strategy," says Innova CFO Mike Nealon.

"It helped to build a cumulative awareness of the company, its success, and its future potential among our investors."

Innova used a four-minute interview segment called *Market In Profile* to tell the company's story, and explain the impact of its new product EndoporeTM System, which is used to anchor dental prostheses to the jawbone.

The company is constantly looking

distributed via satellite or by hard copy in the appropriate television format.

B-roll footage is another avenue to get your story on the airwaves. A video b-roll package is a loosely edited package of visuals and interview clips sent to the stations without a scripted voice-over. In preparing for a video news release or b-roll footage, come to the table with a news hook that will appeal to the viewing audience. Give the story a human interest angle. Tie the story into a much bigger related announcement by government or industry.

With the recent start-up of 24-hour news channels in Canada, the television stations have a huge appetite for images. For instance, CTV News must fill 96 newscasts per day with visuals. Prior to the station going on air in October 1997, CTV Television Network Chief News Editor Robert Hurst offered advice to PR practitioners on how to get their client's story on air. "The more creative you can be to tell your story, the better chance of getting the attention of a news editor," he says. "If your story is visual, consider video — we are always desperate for more and

hour. It's cheaper than airfare, the spokesperson stays fresh and so does the news. In exchange, the news reporter obtains a unique interview opportunity. It is convenient for the production of news coverage. The news director does not have to assign camera crews, a producer or editing facilities.

Canadian Highways International Corporation utilized the technology in June 1996 on the official opening of Metro Toronto's Highway 407 Express Toll Route. The satellite media tour was a significant media event in a strategic communications plan that began in 1995. Communications Manager Frank Switzer saw real value in the technology. "Using satellite can be effective because it allows access to audiences in targeted markets. It's also cost and time effective for a busy CEO who can accomplish a number of interviews within the space of an hour."

"To get the best impact, my advice is to make sure you are timing the satellite media tour at the most newsworthy point," he says. "You must build anticipation before booking satellite time."

Switzer will employ the technology again. He believes it's a great educational tool and international selling tool for economic developers.

The satellite news conference is also an effective virtual PR tool. A company announcement is broadcast live into television newsrooms as required. The option for receiving stations to participate in a question and answer period is possible.

Picture Perfect

On the print side, news photos can be an effective virtual PR tool. A news photo will increase awareness and reach more than 4.5 million daily newspaper readers. Photos, in color or black and white, can be transmitted electronically to photo desks in Canada, North America or worldwide. Photographs are a major component of all print publications and are in constant demand.

Taking a multi-technology approach to virtual PR still includes the traditional fax. The fax remains a reliable and available technology for specific audiences. A demand fax service is a case in point. The College of Nurses of Ontario use demand fax to serve its 143,000 members, media, and the public. Demand fax utilizes a dedicated 1-800 number for instant fax delivery of documents through touch tone telephone selectivity.

"We receive upwards of 400 requests for documents during peak months," says Roger Goodman, Manager of Communications, The College of Nurses of Ontario. "Knowing that the system is reliable and changes can be made easily helps us meet our communication needs for our members."

The demand fax service provides another channel for people to get information in addition to the College's web site. They promote the 1-800 number in newsletters, business cards, and news releases.

Virtual PR Results

The best way to survive the information age is to acknowledge that in order to reach multi-audiences, one must use multi-technology.

"You can't reach all the people the same way," says Dave Rowney, PR Manager, at Ernst and Young. "If they are not reading newspapers, then you have to reach them other ways like through the internet. It's a whole new way of thinking about which channels will reach your target audience."

Rowney encourages clients to maximize their efforts on the Internet. With literally millions of people able to do on-line searches, company information needs to be on the world wide web. "Every news release should include an e-mail address or website address. Better yet, add a direct link from the news release to the company home page in an effort to drive traffic to the site."

The market for electronic information and virtual PR is expanding. The market has expanded from traditional media and the financial community directly to the consumer. It remains to be seen whether communicators will take full advantage of the virtual PR elements now available to them.



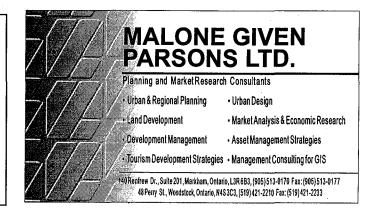
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Survival of the Finest:

The Soul of Business in the 21st Century

BY Christine Corelli

f there is one word that captures America's movement into the next century, it is "change." As we move into the 21st Century, we have seen a global economy emerge that is characterized by rapid change, technological and scientific breakthroughs, and an unprecedented level of competitiveness. Takeovers, mergers, downsizing, and reorganization are the norm. Organizations

state they must get "lean and mean" and "do more with less" — not only to survive, but to be able to move forward.

Today, we are bombarded with information from all sources and are working harder than ever. In a typical 24-hour period, we receive as much information as people living in the 17th Century did in their entire lifetime. This can be very challenging for us, because although there are billions of

molecules for memory in the human brain, the mind cannot comprehend, retain, and recall all this information. Psychologists even have a name for it — "Information Fatigue Syndrome."

Many people are blaming the Internet. In one example, some managers at Software Spectrum Inc. grumbled about getting more than 100 E-mail messages per person every day. A recent Gallup survey found that 71 percent of managers, professionals and

support staff feel overwhelmed by the volume of messages from all sources. Telephone and voice-mail are still the main culprits, but E-mail is fast catching up.

Much of the information we receive, we search for ourselves. NASA reports that the Mars Pathfinder Mission resulted in over 100 million hits on their web site per day!

It is technology that is most dramatically changing our world. Because of modern technology, we now live and work in an era of speed, where our lives are now choreographed to move, work, learn, and service customers faster. We are living in the age of information and technology. "Today's consumers are looking for anytime, anyplace access. If you don't provide it, someone else will." (Online Resources & Communications Corp.)

We now have a networked society where we are doing business under a new set of rules with customers who are more demanding than ever, where loyalty and hard work no longer guar-



CHRISTINE CORELLI is a full-time professional speaker and consultant, specializing in the areas of leadership, change management, strategic selling and optimum thinking.

Her company, Christine Corelli & Associates, Morton Grove, IL, has delivered numerous programs to the American Economic Development Council on a variety of topics for business excellence. Clients include such or-

ganizations as Exxon, Sears, United Van Lines, Reynolds Aluminum, J.C. Penney, and Arthur Andersen.

antee a job for life. We are experiencing erosion of stability and security and feeling pressured to perform even though we don't always know how to proceed. Yet, we must make tough decisions faster than ever.

We all know that human beings function under rules. We create rules as a guide because the alternative is chaos. In the past, everyone knew what the rules were. Today, because of modern technology, the rules are changing so rapidly no one is quite sure what they are. Many organizations are in chaos.

Technology is causing the chaos. It has enabled us to change all the rules at once for everyone, instantaneously. Just trying to keep up with new technology is a constant challenge. To be competitive in a changing world, it is not only essential that we incorporate and learn new technology, but it is critical to create structures to help people cope with changes in the rules. Right now, many people are confused, concerned, and bewildered. Many people feel totally unconnected to the new reality that is around them. Business structures have changed so dramatically, organizations are asking, "How do we survive?"

A New Mind-Set

What type of mind-set do we need to be able to survive and win?

Brave — We must have courage to face change and meet it head on. And we must have courage to make those tough business decisions we need to make every day.

Opportunity Focused — We must focus on what new opportunities we will have living and working in a networked society.

Willingness — We must be willing to adapt to change. Charles Darwin taught us about "Survival of the Fittest." Today, it is not only the strongest who will survive but those who are the most adaptable. And those who can adapt to

change will not only survive, but thrive in the future. It might be called "Survival of the Finest in the 21st Century."

We must be willing to learn to love to learn. "The illiterate of the future will not be those who cannot read and write, but those who cannot learn, unlearn, and relearn." (Alan Toffler)

We must be willing to have a total quality mind-set. For many people, when it comes to getting ready for the 21st Century, their biggest problems in coping are internal — within themselves — shifting from a 20th Century mind set to a 21st Century mind-set. Each of us is like a fine musical instrument such as a violin. What makes our music play is an intricate thing called a mind. We can use that instrument to be creative and in sync and rhythm and harmony with others and our changing world, or we can use it to be out of rhythm and be in disharmony. The choice is ours. That is the type of mindset we need to survive as the finest in the future.

Change is occurring all around us, and the speed and volume which it is changing makes us feel like we have a big locomotive engine coming right at us and we can't stop it. There are three things we can do with that change train. We can:

- 1. Ignore it.
- 2. Get run over by it.
- 3. Ride it in the direction it is going. And, "we must use change to provide the creative tension to keep us moving forward." (Ian Morrison, President, Institute for the Future)

Those who will compete and win will be those who have the vision and the ability to take a good hard look at reality, understand it, accept it, and take action today to be successful tomorrow. "It's not where the puck is, it's where the puck is going" (Wayne Gretzky, hockey star).

The Networked Society

Today, we live, work, and play in this world of speed, information and tech-

nology with a networked society that is sleepless. Our new global marketplace operates 24 hours a day, and we must sell and compete around the clock. New markets and customer bases are being created overnight. Globalization means we must market our products and services everywhere in the world, but we now have new and different competition we may not have expected in the past.

Not too many years ago, we cut our marketing teeth here in America, in a homogeneous market, sharing a single language, one currency, and a common communication system. The new global consumer marketplace is exploding. Large countries, such as China India, Indonesia, Brazil, and Russia, are fast emerging from decades of poverty to create a mammoth market with a different complexity and soul from anything we have experienced in the past.

As these countries progress, their stronger economies will make an even greater dynamic impact on business and the marketplace. For example, in Brazil, new business approaches are being developed. The Volkswagen truck-line plant is being managed totally by the suppliers. There is not a single Volkswagen employee on the assembly line. Each supplier is responsible for integrating their product into the final vehicle. Many American companies are anxiously waiting to see the results of this new approach to manufacturing.

The area outside Shanghai in China has grown from almost nothing in the space of the last 10 years to be one of the largest economic forces on the planet. It will become a major powerhouse in the next 10 years. China, India, Indonesia, Brazil, and Russia all have huge populations and some of the key conditions for long-term economic success, if they are politically and economically well-managed.

Technology has leveled the playing field. From their own homes, customers can now order from every conti-

nent. Amazon.com, an international bookstore on the Internet, could claim to be the largest bookstore in the world offering 2.5 million books. Until recently, a typical Barnes and Noble branch store contained something like 17,000 volumes — realizing they were late getting on the train, they are now on-line. This is just one way technology has leveled the playing field.

With Internet technology, small home-based businesses can now look and act just like the big corporations. For instance, today an author can publish and market his or her own book, competing with larger publishers. The Internet allows that book to become immediately available to millions of people around the world at very low cost.

Evolving Technologies

Because of "Moore's Law" conceived nearly three decades ago by Gordon Moore, one of the founders of Intel, technological capability is doubling every 18 months and prices are continuing to drop. This September, Intel announced a technology breakthrough that throws Moore's Law out the window. Instead of doubling the amount of memory on a chip and thus increasing its speed and efficiency at the historic pace of every 18 months, the new technology could bring such improvements every nine months or faster, and at a lower price. Therefore, smaller less-capitalized companies now have access to technology once reserved for more well-heeled competitors.

Not only are we able to design graphics and text on a personal computer, but we can create the same typesetting that was only reserved for large printing houses in the past. We cannot only create text, but we can incorporate audio and video in the documents, put it on the Web, and anyone in the world can listen to what we have to say.

Technology has made the small company compete very effectively with the big company. Just as a speed-boat has the ability of running fast circles around the Queen Mary, many small companies have the advantage over

large companies because they are not encumbered by political decisions, committees, and layers of management that large organizations have. Small business can just say, "Let's do it," because they now have the technology to get the job done.

Technology has definitely leveled the playing field because it gives organizations the ability to communicate and manufacture more rapidly. And as businesses in developing countries progress, they will be more competitive in the playing field. The person weaving a carpet in the Andes can now eliminate the middle person and sell directly to a store in Dallas. It is a more level playing field and anyone who can provide value-added products will have the chance to succeed.

Small players can now rapidly become large businesses. Just this past summer, @Home Corporation, a two-year-old American company which provides Internet services via cable modems, with fewer than 300 employees, sold nine percent of its stock in the market in an initial \$95-million public

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offering. Large companies have always assumed that size is one of their market advantages.

But now what happens is anyone can become a large company overnight by combining technology with a good idea and capital.

The Future Today

"Futurists and trend forecasters are predicting the imminent arrival of a bigger global marketplace that is so highly automated, so fast-paced, so ruthless, and so inescapable, that it will dramatically change the way we conduct our business today" (The Futurist-June, 1997).

The impact of technology on our networked society and on the soul of our business system is pushing us in new directions:

- We will move toward computeraided customization to help the marketplace custom-tailor cars, appliances and wardrobes.
- Cyberspace will create new markets that don't yet exist — perhaps beyond present comprehension.
- Products will be designed and created by customer demands, making it difficult to do long-term planning.
 Conditions will change so fast, no outcome will be easily predicted.

Our children will learn much differently with incredible sophistication. Using virtual reality, they will take field-trips inside St. Peter's Basilica, as demonstrated at Epcot Center this year. As a child, I had to learn the Dewey Decimal System and go to the library to get a book. Now we use a computer and a browser to search the Internet to get a lot more information than ever existed in my entire hometown library. Medical students are now learning anatomy and performing surgery using virtual reality. It has been reported that medical technology is doubling every five years.

We will have even more incredibly sophisticated satellite capability. Net-

work computers could become ubiquitous. People will use SMART Cards to access personal databases stored in a remote computer located on the public switched telephone network. They may not have to carry laptops to do many of their more routine computing tasks.

Voice-activated phones and computers are now a reality. Phone systems that automatically translate into another language will help us to communicate with people and expand our businesses internationally.

"If the most optimistic computer scientists are correct, tomorrow's shirt-pocket computer could hold a billion bytes (equivalent to holding 2,000 books) and run at orders of magnitude beyond the speed of today's fastest PC." (Marvin Cetron, Owen Davies, "The Futurist")

Fifteen years from now, product designers will still be figuring out startling ways to use the new intelligence of everyday appliances — such as a Smart Stove that would let us know when the pasta is "al-dente."

We will see more of these "information appliances, such as Smart phones, smart TVs and the like, that are optimized to perform a single task, simply, easily, and inexpensively. For example: a kitchen information device that would cook with instant access to recipes and ingredients, while a sports information appliance would give armchair quarterbacks all the latest scores and statistics, with the touch of a button."

The videophone will reshape the way we communicate, resulting in less business travel and commuting. We will be using computers for almost every aspect of business without having to travel from home or office. Perhaps we will see less traffic jams on our highway system!

We will be wearing computers, such as those under development by NEC at their Advanced PC Design Center. They will be tailor-made for specific user groups. For example, a journalist will be wearing a computer that will

process their story as they speak the words to the computer. That technology is available today from Dragon Systems.

Micro-businesses will spring up everywhere. For those looking to launch new products and services, the "return to quality" will foretell success.

The Marketplace & Business

In years past it has been the product that breeds success. It is no longer only the product, it is the entire process.

It is how you communicate with people. It is business excellence and quality that determine survival in this world.

"We want to think about global competition as if it's the Super Bowl. We want to play hard for the season, win the big game, and sit around during the off-season and gloat about how great we are. But the competitors we face in business today don't want to wait until next year for a rematch. They want to play again next week and every week until they finally win. It's tough for us to accept that we don't control the rules of the game anymore. We've got to be ready to battle formidable competitors everyday, forever, without a break." (Bill Almon, President, Conner Peripherals)

There was a time in business when quality was thought of in terms of the final product.

Consumers today look for quality in all aspects of the business process: how the product is conceived, how it is developed, how it is marketed, and how it gets to their doorstep. Most important, how it is serviced after the purchase. And that is why, when competing in a networked society, "the race for quality has no finish line."

Customers expect businesses to know what they want and what they are willing to pay for it.

They expect a product to work the way they want it to work, to have all the features they want it to have, they

want you to tell them how to use it, and they want them to be available if they have a question about the product. If businesses cannot deliver what the customer wants, the networked society will tell them where else to go to get it.

Therefore, we cannot compete in a networked society without having a total quality mind-set. In the future, more things will happen "just-in-time" as businesses respond to customer demands and the changing marketplace.

As a result, they must have the ability to make faster business decisions, and maintain an efficient infrastructure in order to make smart decisions faster.

Who will survive and be able to compete?

Large organizations will thrive if they have a mind-set like that embraced by Hewlett Packard, Microsoft, etc. where they do not view themselves as huge monoliths, but as multiple divisions operating autonomously. They empower their divisions and their people to do what needs to be done as long as it aligns with their overall thrust and strategy set from the top.

Organizations will "Survive as the finest in the 21st Century" who:

- Can outdistance their current and future competitors with innovation.
- Create new visions of what their industry might look like in the 21st Century.
- Are willing to take calculated risks to introduce innovative products to the marketplace that their customers are demanding.
- Drive technology change that underlies key product changes.
- Leverage vendor expertise, and partner for success through alliances.
- Learn faster than their competitors.
- Lean on technology.

We must keep up with technology and make sure our employees spend time on the Web to check out the competition.

Many companies are spending all their time sending E-mail to each other, which is not the best use of the Internet. What is most important in using the Web is to learn about their competition and their customers.

Organizations today must rethink their entire business strategy. They need to look at the way they create products and services, their distribution channels, markets, customers, structure and knowledge base. Technology will be both the driver and the tool for this examination.

"The new economy is all about competing for the future and the ability to transform businesses into new entities that couldn't be imagined in the past and tomorrow may be obsolete." (Don Tapscott, "Tomorrow's Business," July, 1997)

We must ask ourselves: "How much further into the future is your competition living?"

Organizations will "Survive as the Finest in the 21st Century" which are:

Forward-Thinking. They have a solid eye on the future.

Optimistic Attitude. They are optimistic about the future, and hire people who are optimistic and comfortable with change.

Customer Directed. They internalize the customers' goals as their own and are driving change in how customers understand and use their products or solutions. They are serving the most demanding and challenging customers. Organizations must focus on the voice of the customer and exhibit behaviors and actions that help build customer loyalty.

Have a Sense of Urgency. They have a sense of urgency and emphasize speed. They are almost willing to make decisions even before they know all the facts. "Time to market" is crucial.

Succeed as a team. There is higher involvement with people. People must feel empowered to take any action necessary to represent their organization

and satisfy customers. Your organization is known by the people it keeps. These people need to be recognized, retained, and rewarded. They must be able to work with incredible ambiguity, be self-confident, know how to simplify, and trust others.

What must we do as individuals to survive and win?

- Overcome personal resistance to change. Change is the only thing that has brought progress.
- Focus on the excitement of the unknown and the excitement of seeing the planet as an ever smaller world comprised of diverse people all working together to shape a better future. This is an exciting time to be alive!
- Embrace technology and innovation.
 Technology has been and will remain the server of humankind, and a source of betterment for the world.
- Make time for creative thinking to think that which has not been thought.
- We must take time for creating, dreaming, strategizing, improving operations and making decisions. These are the things that will help us grow and prosper. Many people have great ideas but don't move on them. We must buy into quality, teamwork, and communication. "Quality occurs when we consistently upgrade ourselves." (Terry Brock, Computer Consultant, Orlando, FL)

People and Technology

Technology is about people. It enables people to work and live together in closer communion. We are moving ever closer to becoming one world, one soul.

The global marketplace was created by people, consists of people and is served by people. If technology is going to serve people, it must be directed by those who value people and hold a genuine concern for the betterment of the world.

ECONOMIC DEVELOPMENT MARKETING

as a Private Sector Initiative

BY | Angelos Angelou & Jon Roberts

Economic development as a public sector activity — an activity which deserves funding and support equal to other tax-supported activities — is no recent phenomenon. Economic subsidies go back to the 18th century. In fact, the debate over public inducements for industry is apparent in Jefferson's discussions with Washington where he argues against the "bounties for the encouragement

of particular manufactures." His point is that government is already over-extended and does not need to assume still other functions. It is no small irony that this discussion is as current today as it was in 1792. We still do not

have a clear understanding of the role of government in economic development, and we still do not have a clear understanding of what best promotes business growth.

Since Doug Ross and Robert Fried-

ANGELOS G. ANGELOU is principal of Angelou Economic Advisors Inc., an Austin, Texas-based firm specializing in technology consulting services, economic analysis and forecasting, and market development strategies. Previously, he was Vice President of Economic Development for the greater Austin Chamber of Commerce.



JON M. ROBERTS is managing director of economic development at Angelou Economic Advisors Inc., responsible for developing international investment strategies. Previously, he served as Director of Business Development for the state of Washington and more recently for the Texas Department of Commerce. Roberts was a founder of the Oregon Technology Venture fund.

man wrote about "The Emerging Third Wave" in economic development in 1990, there has been much soul-searching among academics and politicians about the role of government. The odd presumption in these debates is that economic development activities are somehow dependent on public sector funding, and that without this funding there can be no programs. It may, in fact, be evidence that most of the writing is being done by public officials who have grown dependent on public support.

Peter Eisinger begins his article in the May 1995 issue of the Economic Development Quarterly by saying that "State and local economic development policy is clearly in a state of ferment." He raises the stakes by suggesting that there may be little evidence that traditional economic development incentives have any tangible effect on business investment or job creation.

It is far from clear that there is a common definition of economic devel-

opment. We can speak of it as a public sector effort to promote growth, but we diverge almost immediately on how that might be accomplished.

It is the contention of this paper that economic development need not rely on public sector funding, and that such a reliance may reduce the effectiveness of any economic development program.

The ED Process

The economic development process has two parts. The first deals with the marketing and promotion of a region to should include a determination of the type of development that best meets the needs of the community.

It is from this framework that inducements and tax abatements begin to make sense as public investments in an already public process on behalf of the private sector.

As economic development has become increasingly competitive among cities, states and countries, the argument for more funding and more resources has gained steam — if we do not perform better than our competition, we will see our tax base shrink and unemployment rise. But this argument

sults-oriented and efficient in the use of resources.

There is indeed a role for the public sector as a catalyst in the negotiations between a potential investor and the bureaucracy of the various government departments and elected officials. But this role should not be confused with economic development marketing and the special requirements attached to that process.

This model of economic development organization has proven to be effective in Texas, where such cities as Austin and Dallas have catapulted to the forefront of technology develop-

MARKETING EFFECTIVENESS

Publicly-funded organizations tend to be more

concerned with due process and procedures than being results-oriented

and efficient in the use of resources.

attract capital investment and new jobs. This responsibility is typically that of the local chamber of commerce or an economic development corporation and includes efforts to create a business climate conducive to business growth and formation, often by lobbying government institutions.

The second, and equally important part, deals with how the public sector reacts to opportunities presented to it and the process that must be followed for a successful outcome.

This decidedly public function acknowledges that business growth is integrally related to how governmental bodies function: in short, how it is possible for a business to operate in a particular jurisdiction. It begins by acknowledging that business growth is inherently tied to regulatory and zoning restriction. It also encompasses inducements and the public permitting process.

By acknowledging the fact that public entities cannot help but be involved, the economic development process

ment is made to other public entities, as economic development organizations become ever more heavily dependent on public funding. This trend is evident for cities and states of all sizes. And while development professionals may admit that public funding is not desirable, they have come to regard it as an absolutely necessary source of revenue.

It is precisely this assumption which renders current economic development organizations ineffective. In addition, it marginalizes financial and human resources by disconnecting them from the existing business development of the region.

The perception that development organizations are out of touch with the business community is sadly reinforced in most communities by the indifference of developers to their existing industries.

Publicly-funded organizations tend to operate like public organizations which can be more concerned with due process and procedures than being rement. Their privately-funded economic development organizations direct business development by bridging the gap between marketing the region and the use of public sector financing initiatives such as inducements and tax abatements.

Private Sector Involvement

There are many reasons why private sector involvement is best suited to drive economic development marketing.

Following are examples of how an economic development organization can structure itself to take advantage of private sector involvement. In addition to weaning development organizations away from public dollars, there are numerous other benefits.

Professional Staff. Professional staffing is a necessity. Organizations can no longer afford to be perceived as "good old boy" networks. Successful economic development practices require

new skill sets. Public sector employees do not have the marketing savvy to fit the bill. The private sector is much better suited for hiring and training the appropriate staff.

Regionalization and Consolidation. Private companies do not operate in terms of political boundaries. Their workforce is regional, and they are indifferent to whether an incentive package comes from one city or another. Regionalization leverages greater financial resources, drawing assets such as labor force availability, education and training facilities and the economies of scale into a region-wide infrastructure.

While this approach is obvious to businesses (and to the average citizen), it is at odds with how publicly-funded development organizations operate. Powerful suburban communities increasingly attract the most affluent population (because of the higher quality of schools and housing). This creates unhealthy competitive environment and undermines public funding where the beneficiaries (new workers, increased tax base for the region) of competing programs are identical. Without the active involvement of the private sector, better communication and coordination among public entities is virtually impossible to achieve.

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Levels of Public Funding. In reviewing data for selected cities, it is evident

that in most communities 30 percent or more of the marketing and operational budget of economic development organizations is publicly financed. This is on top of the millions of dollars in incentives that may be offered to prospective employers.

The more public dollars, the greater the restriction on how these organizations can operate. Valuable time and resources are used to keep up with cumbersome reporting requirements. Often, there can be violations of client grograms for entrepreneurial training confidentiality and the extensive scrutiny of public hearings can leave prospective employers exposed and weary of public officials.

Moreover, economic development organizations relying on public financial support lose touch with the private sector. Finally, they are constantly dependent on inherently unstable revenue streams and the constant threat of these funds being reduced from year to year.

International Markets. Technology is also changing the structure of organizations. The advent of new telecommunications technologies has allowed smaller firms to operate internationally. Operating in the world economy is no longer a privilege held by large multi-national corporations, but is a real opportunity for many very small enterprises as well.

The government sector, on the other hand, does not have the relevant experience with international markets or the ability to adapt to these business conditions.

The much Industry Clustering. vaunted "targeted industries" approach to economic development relies heavily on low-cost structures and government subsidies. The approach pays little attention to the existing industry base and is divorced from the existing social and physical infrastructure of a region.

An industry cluster approach requires the marketing involvement of the private sector. It requires strategic planning experience, with long term goals and both flexibility and a healthy dose of opportunism. This is another area in which the private enterprise performs better than the public sector.

Entrepreneurship and Investment.

Few public development organizations appreciate the value of capital in-flow and investment. As a result, they are ill-equipped to handle entrepreneurial businesses or corporate spin-offs. State are not linked to private capital sources, and many minority business



development efforts are doomed to failure because they unwittingly restrict access to private dollars by creating an unrealistic expectation for the availability of public financing.

A development organization which involves both financial institutions and venture capital firms stays well ahead of the curve. But it cannot do this if it depends on public funds.

The incentive for participation in economic development must always be increased business for existing firms and institutions. This can - and must become the motivating factor for private involvement.

A New Partnership Role

In the following "Economic Development Linkages" chart, business acts as the focal point around which public sector funding is appropriated, and links the research capacity of higher education to economic development activity. Much of the rationale will center on a community's claims of cultural and intellectual resources, especially on the adaptability of the human capital required for modern industry. This is a role that colleges and universities should play. Only private enterprise, however, has the credibility to

sources. It also smoothes the relationship between recruitment and retention.

A privately funded economic development effort can work. It is the most appropriate model for marketing and running development programs. It allows for the formation of long term strategies and for true partnerships with local government and education leaders. It also gives new meaning to volunteerism and builds in a mechanism for the growth of existing businesses.

Public sector contribution must be limited to being a facilitator and col-

fulfilling its mission.

A dynamic and responsive approach is not typical of the public sector. This is not so much a criticism as it is a reflection of how public agencies are designed to operate. Why, then, require them to do what they are not designed to do? It is the function of private business to increase profitability, and this is best accomplished through a dynamic and responsive approach to changing market conditions. An economic development effort, which marries the social responsibility of the public sector to the aggressive flexibility of private business, is the most ef-

BUSINESS GROWTH

A privately funded economic development effort is the

most appropriate model for marketing and running development programs,

and for establishing long-term strategies.

make and support these claims.

To break the hold of public financing, private industry must be seen as having the same goals as the community at large. What other meaning can a "partnership" have? Economic development marketing will increasingly be focused on claims of having a flexible economy (technology-driven) with competitive costs and a good quality of life.

Austin and Dallas rely exclusively on private sector finances for economic development marketing. That is not to say that the public sector contribution to economic development is non-existent or unimportant. In many cases, both city governments have provided the necessary inducements for the attraction of new employers. The model for attracting new businesses and marketing the region, however, is radically different.

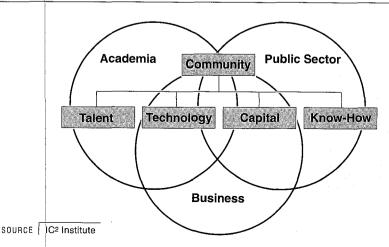
Private sector funding allows for quick decisions, less public scrutiny, less bureaucracy and a more efficient deployment of financial and human relaborator in the development process. Its efforts must concentrate on infrastructure, fast tracking the development process and providing the inducements recommended by the private sector.

It is, of course, possible for development organizations to continue as they have. But it is also true that the more dynamic and responsive the organization, the more effective it will be in fective model for the future.

Neither large cities (which have become dependent on public dollars), nor small communities (with a more limited economic base), should shy away from this approach. Both benefit from a regional approach, and both are in a position to leverage the involvement of private businesses.

This model works. Adapting to it may soon be a necessity. ■

ECONOMIC DEVELOPMENT LINKAGES



HOME BUSINESS

& Community Economic Development

BY Jeffrey J. Celentano

There has been a revival of home entrepreneurship. From our earliest mercantile beginnings through the middle years of the Industrial Age, most businesses and industries operated from the home. However, over the first eight decades of the twentieth century, home-based businesses have often been regarded as a blight on the character of clean residential neighbourhoods. Today, a

series of social, economic and technological trends have fostered a new boom in the home busines sector.

The September 1996 issue of Entrepreneur Magazine estimates that the home-based business sector is a \$454 billion industry in the U.S. On the Canadian scene, Orser and Foster (1992) have estimated that anywhere between 600,000 to 2 million Canadians (nearly one quarter of the working population) do some or all of their paid labor at home. Add to this the shrinking of corporate North America and technology that makes "virtual offices" feasible and a new group (projected as large as 31 million in the U.S.) of home workers is generated.

Despite these numbers, many Economic Development Professionals do not give this sector of the economy its proper due.

Both Gertler (in Loreto and Price, 1990) and Skelly (1996) refer to "traditional" local economic development

activities, but the home business sector is significant by its absence. In their report for the City of Kanata, Dutton and Wells (1995) call for an innovative "bottom up" approach to local economic development, recognizing that home-based business comprises a "significant" sector in the local economic development scene. Perhaps the tendency at the local lovel to overlook these smaller "trees" in the entrepreneurial "forest" is one reason behind the recent (August 1997) failing grades in awareness by municipalities as noted by the Canadian Federation of Independent Business.

Certainly, Economic Development Professionals should be familiar with some of the main aspects of the home entrepreneurship.

What should Economic Development Professionals know about the Home-Based Business (HBB) sector?

As part of any good CED professional's research, the home-based business sector is worthy of analysis. One of the dominant characteristics is firm size.

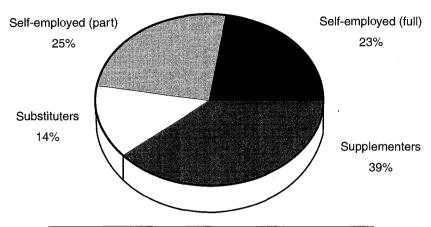


JEFF CELENTANO is the Manager of Planning Services for the City of North Bay, Ontario. He has studied the phenomenon of home-based business during his 20-year career as a professional land use planner and public administrator and started his own home-based business in 1995. His articles on home-based business have also been featured in "Plan Canada" and the Globe & Mail's "Report on the Home Office." He can be

reached by e-mail at jeffc@mbox.city.north-bay.on.ca.

THE HOME-BASED WORKER IN CANADA

Gallup Poll, June 12-15, 1991



SOURCE Orser & Foster, "Home Enterprise: Canadians & Home-Based Work," 1992

Easto (1995) along with Dutton and Wells (1995) point out that the vast majority of home business enterprises employ between one and two workers (including owner/operators). Orser and Foster point out that approximately 23 percent of home-based workers surveyed in 1991 were full-time self-employed, with an additional 25 percent categorizing themselves as part-time self-employed.

These analysts also point to several other significant characteristics of the

home-business sector, including a concentration on service businesses, a majority of female workers as opposed to male workers, as well as distinct advantages in the areas of efficiency, flexibility, and competitive position.

What are the concerns of home-based entrepreneurs?

Numerous authors, including Priesnitz (1995), Gurstein (1995) and Dutton and Wells (1995) have outlined the concerns facing the home-based business operator since the seminal find-

ings of Orser and Foster in 1992. Their concerns can be generally distributed into the following categories:

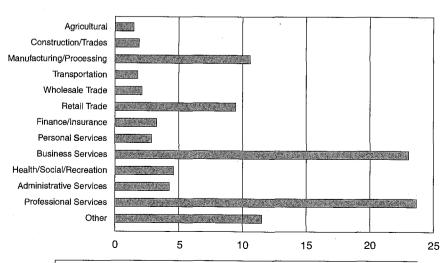
- Space Adequacy: making sure there is adequate and appropriate space in the home for the business;
- Technology Adequacy: making sure there are proper technological "tools" on hand;
- Isolation: preventing the perception that the home entrepreneur can not/will not be able to conduct business outside of a home;
- Credibility: conveying the fact to others that the entrepreneur is running a viable going concern;
- Work Day Intrusions: addressing the issues that the entrepreneur faces in separating work life from home life;
- Neighbourhood Complaints: ensuring that the entrepreneur is not creating negative "spill-overs" due to noise, hours of operation, signage, parking on street, etc.;
- Competitor Complaints: balancing the valid or invalid complaints lodged by (sometimes larger, sometimes less successful) competitors;
- Municipal Complaints: seeking an appropriate and equitable treatment by municipal government in areas such as bylaws and regulations, awareness of small business issues, value for money in local spending; and
- Fair Treatment: searching for equitable treatment from banks and professional business service organizations, regardless of firm size or gross annual income.

Gurstein's study for C.M.H.C. also reveals something interesting in terms of the "community" services required by a "typical" home entrepreneur in a "typical" residential neighbourhood.

Over 80 percent of the respondents considered desirable "community services" to be fairly common items to a residential neighbourhood — parks, restaurants, local branch banks, postal outlets and personal service establishments. Among the less-frequently

OCCUPATION OF HOME-BASED WORKER

by Percentage of Respondents



SOURCE | Prof. P. Gurstein, CMHC, "Planning for Telework & Home-Based Employment," 1995

desired services were copy centres, personal fitness establishments and childcare centres.

Clearly, a case could be made that home business activity is not likely to dramatically alter the design and land use make-up of most residential neighbourhoods. It is unfortunate that, in many Canadian communities, outdated policies and regulations either prohibit such activity or make it extremely difficult to exist "in the light of day." (Celentano, 1994)

The increasing popularity of home-

Second, home entrepreneurs, economic developers and local government officials must work together to develop useful and equitable HBB performance standards that will minimize "spill-over" effects to adjacent properties.

Third, CED professionals have got to give the home entrepreneur what Rodney Dangerfield never gets: respect. They can accomplish this task and gain credibility in a variety of ways:

i) Formal recognition of the HBB

v) Encourage the formation of HBB networks within your community, either as a stand-alone group or as part of a broader based business network group; and

vi) Tailor a fair allocation of your staff resources to home business/micro business needs.

Home-based businesses do not look like smokestacks, but they make a vital and diverse contribution to local and regional prosperity. And they do this one job at a time.

ECONOMIC TRENDS

f the home-business sector is the spark of a

new "economic revolution," then economic professionals must find ways

to nurture, support and monitor it.

based business has specific implications for local decision-makers, the broader community and economic developers.

First, if we agree that home business/small business is the spark of Thurow's "economic revolution," then community economic development professionals must find ways to nurture, support and monitor it.

sector in program planning efforts;

- ii) Target the sector in the delivery of locally-oriented business service networks;
- iii) Inventory the number and type of services provided and promote them to your clients;
- iv) Facilitate the resolution of issues of concern to the HBB sector with local officials;

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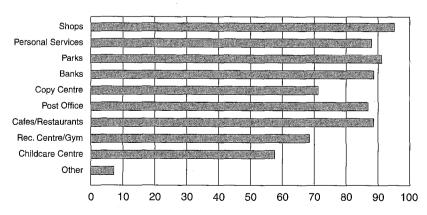
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AVAILABILITY OF COMMUNITY SERVICES

by Percentage of Respondents



SOURCE Prof. P. Gurstein, CMHC, "Planning for Telework & Home-Based Employment," 1995

Increasing Your CIQ: The Competitive Intelligence Edge

BY Jonathan Calof

Competitive Intelligence (CI) is one of the hottest areas in management today. CI has been proven useful for dealing with complex environments, and study after study has shown that CI has significant performance advantages. Unfortunately, it is doubtful whether more than nine percent of North American firms have world-class CI capability. And in Canada that number may be lower as

the debate continues on whether to do CI and how to do it. In the meantime, many of Canada's competitors have embraced CI — world-class CI training and development is happening in France, Japan, Israel, Sweden, and Korea, to name just a few.

The purpose of this article is to demystify competitive intelligence and lay out a new and exciting role for economic development agencies in the development and enhancement of their

regions' intelligence infrastructure.

Two years ago, there were no CI conferences in Canada. Between September and December 1997 there were six. Five years ago, there was one chapter of the Society of Competitive Intelligence Professionals in Canada. Today there are eight, with Canada being the fastest growing region of the Society. In the summer of 1997, competitive intelligence was featured in the Globe and Mail, Canadian Business, the

Ottawa Citizen, Montreal Gazette, and many other publications, as well as national television and radio.

Managers of major companies are proclaiming the importance of and need for CI.

Robert Flynn, CEO of Nutrasweet, claims that CI is worth \$50 million a year to Nutrasweet. Samsung's executives have stated that "Samsung's future success is dependent on the company's ability to collect and react to competitive intelligence." And Gary Costley, ex-President of Kellogg's, has stated that "I believe companies that don't do this won't succeed."

These comments have been echoed by Judy Vezmar, Vice President & General Manager, Xerox, USA: "Xerox and other US firms that really want to stick around for a while will make competitive intelligence an absolutely integral part of their business every day."

It is hot, important, and beginning to attract a lot of attention. And its not just attracting the attention of large



DR. JONATHAN CALOF is an Associate Professor with the University of Ottawa's Faculty of Administration, and Chair of the Canadian Council for Competitive Intelligence. He has conducted more than 100 competitive intelligence seminars and has helped several of Canada's largest companies and government agencies develop competitive intelligence capabilities.

For more information on CI in Canada, visit the SCIP

Canada Council Web Page at www.cicanada.uottawa.ca or contact the author at calof@admin.uottawa.ca.

firms — CI was the focus for the association of micro-entrepreneurs.

Defining Cl

One of the best definitions of CI comes from Benjamin Gilad: "Information which tells us how competitive the firm is. It is understanding the competitive arena, being able to predict competitors' moves, customer moves, government moves and so forth."

Most companies and organizations feel they have this understanding. In fact, at some basic level, all firms do CI. Who does not know their competitors or customers? But how deep and how proactive is this knowledge?

True CI is a process for predicting moves and blind spots of regulators, customers, competitors, suppliers, and so forth. It is used to identify opportunities and minimize surprises. In Japan, for example, many companies develop biographical and psychological profiles before negotiating with suppliers and customers. This gives them an edge in the negotiation process.

Best Foods, a billion-dollar US food company, provides another example of true CI development.

According to Lorry Hathaway, Best Foods President: "This does not mean we did not have any competitive data. We had a fair amount of competitive data around. It was bits and pieces of information that were interesting but were isolated, they certainly weren't cohesive and they were coming from various areas of the company. Nobody was pulling them together, and they

tended to be marketing and sales activities that our competitors had, but there was nothing about integrating them and trying to understand, most importantly, the why — why our competitors were doing these things, how it related to their strategy and more importantly, how does it relate to us.

"When we got competitive information we tended to react to it. The key is to be proactive, to try to do something before the fact rather than when they do something we react to them."

Hathaway goes on to describe Best Foods' first CI project, which involved side-by-side profit-and-loss techniques, management profiling, skills development programs, and business systems designed to integrate information and provide Best Foods with true CI. Hathaway also drives home what CI is and isn't:

- It's proactive. The intent is to predict what is going to happen, not what did happen.
- The process involves analyzing information, not just finding it and using "best judgment." These techniques are needed to understand the "why" issue.
- It integrates information already existing in the organization perhaps the single best source of information.
- It is championed by the President and is positioned next to the executive office.
- Companies that think they are doing CI well, had better look at it more carefully.

How to Predict Companies' Actions: A Few Sources

Magistantietes

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Community meetings: Financial analysts meetings Government hearings

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Human Resources Manufacturing Furchasing

Special piterest prouts

External

Associations
Business development organizations
Government agencies/officials
Local labor commission

Research and development Sales force Sanor management

Distributors
Industry equipment suppliers
Chambers of Commerce
Consultants
Customers

Collecting and Analyzing

Competitive intelligence is about mining information sources (see table, left) and using appropriate analytical techniques to put this information together. The saying in CI is that you do not have intelligence until you've analyzed the data and drawn out actionable recommendations.

Consider the following example:

1. A newspaper article notes that a competitor (in the United States) has

laid off 50 employees. No explanation is given. What is concluded?

- 2. This information is validated by placing an employee outside the competitor's plant and counting the personnel. This validates the 50 layoffs.
- 3. A search of Uniform Commercial Code (UCC) filings reveals that the company bought a new piece of equipment six months ago. (In the United States, a UCC filing is required when equipment is leased or purchased with a loan.)
- 4. An analytical technique called a side-by-side profit-and-loss statement could be used to recreate the financial statements of this privately-held company. The analysis shows that the company is now the most efficient firm in the industry. This is the reason for the layoffs and the effect of the acquisition of new equipment.
- 5. A recommendation based on this analysis is made to senior management.

Many companies are "data rich" they have a lot of information on competitors, customers, suppliers, and other key stakeholders. But without the proper analysis, they are "intelligence poor." Best Foods talks about war games, competitor profiling, and sideby-side profit and loss. Xerox talks about using surveys and sophisticated analytical techniques to forecast who the early technology adopters are. The Japanese are famous for pattern-recognition analysis. All told, over 100 different analytical techniques that draw out meaning from data have been catalogued.

But competitive intelligence is more than analysis. CI practitioners tend to use the term "actionable competitive intelligence." This refers to information that has been analyzed appropriately and includes recommendations that are useful to management. Managers today want more than information—they want to know what to do about it.

To put the process in perspective,

world-class CI spends more time creating meaning from information (analysis and dissemination) than it spends collecting the information. For example, firms doing world-class CI spend 20 to 30 percent of their CI time in data collection. By contrast, firms doing lesser CI may spend up to 60 percent of their project time collecting information. This does not leave much time for planning or getting meaning out of the data.

What Role Can You Play?

Adopter: CI is useful if your job involves creating value from informaworking with clients, predicting what is going to happen in your environment. The value of doing competitive intelligence has been proven in many studies. It also is worth adopting if only because your competitors (foreign government economic development agencies and some Canadian ones) are getting more and more involved in CI. There are a wealth of sources which readers can go to if they wish to enhance their competitive intelligence skills. Courses throughout Canada and the United States and books about the subject abound.

Developer: Governments in France, Japan, Israel, Sweden, and many other countries are devoting their resources to help their firms develop competitive intelligence capabilities. In France, for example, the government is providing CI training to firms. Further, in 1995, France announced the creation of the "Committee for Economic Competitive Intelligence and Security" with a mandate to boost France's CI capability. This committee is chaired by the Prime Minister. Accordingly, a second option is to use your knowledge of CI and your resources to convince companies in your region to develop or enhance their CI capabilities. However, be forewarned — there are several attitude barriers you may have to deal with

before you can convince firms that CI is for them.

Myth 1: It's unethical.

There is a perception in the ranks of management that CI is "industrial espionage" and as such cannot be supported by top management. The technical definition of espionage is "clandestine or coercive attempts by foreign entities to obtain" information. Within the SCIP code of ethics, there are two guidelines that stand in the way of this:

- To comply with all applicable laws.
- To accurately disclose all relevant information, including one's identity and organization, prior to all interviews.

CI is the legal collection and analysis of open source information, not espionage. This is reinforced not only in the SCIP ethics code but also in *Navigating through the Gray Zone* (available from SCIP). This publication presents the CI ethics guidelines of several well-known firms including Du Pont, J.C. Penney, and Cheesebrough-Pond's.

Myth 2: This is just marketing.

CI requires the integration of existing knowledge throughout the organization — not just marketing. In particular, CI involves knowing how to analyze competitors' financial statements and hiring practices (tasks normally associated with accounting and human resource divisions); how to analyze processes (an R&D or production skill); how to conduct patent analysis (an R&D skill); and how to conduct standard marketing analysis.

It could also be said that each area of the organization could benefit from better CI.

For example, production could benefit from benchmarking best manufacturing processes; human resources could use an in-depth investigation into competitors' hiring and reward practices; and R&D could benefit from gray literature analysis.

Myth 3: This is just for big companies. One of the growth areas for CI consult-

ants is small- and medium-sized companies. Making better use information is something that all firms can benefit from, not just large companies. Further, the costs and time involved in doing quality CI need not be prohibitive. For example, I was on a project that involved developing management profiles and financial statements for a highly-secretive firm. Part of the project required that I have information on Latin America. The project was done in three days with a very small budget and one CI resource me. No travel was involved. The project was a success. I have seen CI efforts succeed simply by placing a few people together to focus on specific issues. The key in the low-cost start is to focus employees on a specific CI problem and let their experience help solve it. However, for this low-cost option to work, someone on the team must possess CI management skills.

Myth 4: Why do we need it? We are already successful.

There are two basic reasons for firms to do competitive intelligence:

- Having better information in today's complex environment is desirable.
 - Many of their competitors are doing it.

There is an old CI joke: 50 percent of the largest American firms do CI, 60-80 percent of European firms do CI, and 150 percent of Japanese and Korean firms do CI. This isn't far from the truth.

North America lags significantly behind Europe and Asia in the area of CI. And while North American firms have been debating the ethics of CI, their competitors in Japan, Sweden, Israel, and Germany just kept doing CI. Most of these countries have an innate advantage in CI, since their national cultures value information and intelligence and they operate in a more collectivist manner.

Myth 5: We already do it.

The difference between what people think is CI and world-class CI is dramatic. If firms feel they're already doing CI, try to persuade them that they could be doing a better job. Use examples of CI in action or the skills checklist from this article (for CI stories, see Benjamin Gilad's book *Business Blindspots* or Fuld and Company's web page at www.fuld.com).

Bringing CI to Your Region

With all the interest currently being evidenced towards competitive intelligence, the most exciting role for economic development agencies is to bring true, world class competitive intelligence to their firms. Agencies around the world are finding exciting intelligence partnership opportunities between industry and government once their firms truly understand competitive intelligence. All over the world, the most successful method has been

Competencies Required For Competitive Intelligence

Prepared by the Society of Competitive Intelligence Professionals

i) Obtaining Cl Requests

- Understand flow to identify and elicit the intelligence needs of decision makers exactly.
- Develop effective communication, interviewing, and presentation skills
- Understand basic psychology types to appreciate the different orientations of decision makers.
- Know the organizational structure, culture, and environment as well as the key informants.
- Remain pharme
- Articulate intelligence needs into the intelligence evels.
- Know the internal and external capabilities.
- Conduct an information resource gap-analysis.

2) Collecting Information

- Obtain knowledge of primary and secondary sources:
- Know the various methods for accessing internal and external, primary and secondary sources.
- Manage primary and secondary sources appropriately.
- Know how to execute the mangulation, multi-method, multisource approach.

- Develop confidence level by ensuring reliability and validity of sources.
- Recommendation (e.g. in the importantion).
- Know the difference between hypothesized and open assumptions and why
- Develop formal research skills.
- Recognize corporate information-gathering patterns and collect accordingly
- Know the ethics associated with data gathering.

Analysis and Synthesis of Information

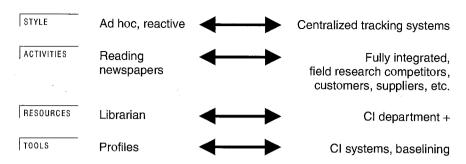
- Recognize the interaction between the collection and analysis phases.
- Amalyze creatively:
- Employ inductive and deductive reasoning.
- Use network analysis, alternative thinking.
- Obtain an overview of basic analytical models
- Introduce exciting and attractive models to elicit the discovery ery notion of analysis rather than the dry, research approach
- Know when and why to use personality mofiling, financial

CI awareness and training sessions for industry.

In the past two years, an experiment of this sort has been run in Canada in the province of Alberta. The Departments of Economic Development and Tourism and Agri-Food and Agriculture have provided CI training to industry and in one case have worked on a joint CI project. As one measure of this program's success, industry placed a high value (in the six-figure range) on the joint project. In addition, the demand for training has far outstripped the number of sessions offered to industry. For CI training to work, however, your organization must have sufficient knowledge of CI. Otherwise, the clients you decide to train will be asking for things you do not understand or cannot provide.

One final caveat. My experience with building CI awareness is that it creates an interesting problem — convincing management that it will take time to develop world-class CI capa-

COMPETITIVE INTELLIGENCE EVOLUTION



bilities.

CI is about skills development, process, and structural and cultural change. Recent estimates indicate that it takes at least five years of committed effort from senior management to create a world-class CI capability. Firms must evolve to world class intelligence. It takes time to develop the skill base, and while structural change such as the development of integrating mechanisms can be created quickly, changing culture is very difficult. Employees

must believe that there is value in sharing information, and all must be aware of what they should be looking for and what should not be shared outside the company. Learning that intelligence goes well beyond data collection, but that collection efforts must be refined, also takes time and commitment. But, as countless studies have shown, the results make this investment well worth it.

Start increasing your CIQ by first creating CI awareness. ■

analysis, economic analysis, accounting analysis, trend analysis, risk assessment, quantitative and qualitative analysis, influence diagrams, apportunity analysis, pattern analysis, core voluerabilities analysis, event analysis, linchpin analysis, etc.

- Recognize the inevitable existence of gaps and blind spots.
- Know when to cease analyzing (analysis paralysis)

4) Communicating Intelligence

- Use persuasive presentation skills:
- Demonstrate empathy and use counseling skills, when approneture
- Organize findings and convey them with assertiveness and diplomacy.
- Use the format or mode appropriate for each end-user.
- Recognize the effective volume and level of dissernmenting intelligence.
- Realize that listening can also be a form of presenting.

5) Contextual and Management

- * Define the mustigence function:
- Explain how the intelligence cycle transfering information into intelligence.
- Explain the role of competitive intelligence within decision making, strategic planning, and business development.

- Differentiate between competitive, competitor, business, tech nical, and counterintelligence.
- Discuss the importance of a learning/knowledge-based or ganization.
- Develop insights on how to identify the strengths, weaknesses, and biases regarding information sharing within an organization.
- Present models for the structure and organization of a competitive intelligence unit and the pitfalls of various alternatives.
- Offer alternative structures depending upon organizational size.
- Discuss how to conduct a decision audit, or information audit, and a knowledge audit and the importance of these insights
- Present ways to keep current with advancements in information technology.
- Present methods for creating a competitive intelligence culture
- The methods and importance of conducting an ongoing 360 degree swot analysis
- Discuss ways to market/sell competitive mielligence within the organization.

Economic Development & CORPORATE INCENTIVES

BY R. Gregory Clark

When do the incentives, used to attract or retain major corporations, cross the line from economic development to "corporate welfare"? When does the amount of taxpayer's money and other marketable assets owned by the public sector and given or leased to corporations become just too much? The answer to this is, "It depends." Not on what side of the table you're on, but on how the deal is

structured and who has promised what. Not all deals favor the corporation, and not all favor the government. Because both parties do not always get what they thought they would out of the deal, at the end of the day the local citizenry has generally taken one side of the issue or the other. The deal was either good business and therefore is termed "economic development," or it was bad business and called "corporate welfare."

The answer to "It depends" is three-fold.

First, a deal can make sense if it is needed to stimulate, jump-start, or

maintain the economic engine of a locality's basic or non-basic industries. Second, a deal makes sense if there is confidence that what is being given up balances with what is expected to be gained.

And finally, and probably the most important, the deal makes sense if the expected return on the investment over a reasonable and performable analysis period meets a specific, predetermined investment criteria.

All levels of government are competing in the global marketplace in attracting corporations to their localities. All are using, to some extent or an-

other, monetary incentives to attract these companies.

But the attraction side of economic development is only one-third of a well-balanced, sound, economic development program. The other two areas are retention and expansion. Arthur Andersen calls this the CARE process: Corporate Attraction, Retention and Expansion.

Although Attraction represents only one-third of a well-balanced economic development program, roughly 85 to 90 percent of the monetary incentives used by the public sector is in this area.

And how does the private sector rank the importance of incentives in making their decision?

Some say its fifth on the list, some say eighth, and some say that incentives really just affect a specific site decision.

Regardless of what corporations are saying, the local jurisdiction has to answer three questions pertaining to the area of Attraction and the use of incentives.



Greg Clark is a Senior Manager with Arthur Andersen and directs the firm's work in the area of Corporate Incentives and Public Investment Analysis out of Dallas, Texas. In addition to client service work, he currently teaches courses for the American Economic Development Council.

First, what companies are going to be targeted for the local area and/or region and why?

Second, when negotiating a specific agreement, are we confident that the net return on the investment is reasonable and achievable and that it meets the predetermined return criteria?

And finally, are adequate measures in place within the agreement to protect both parties against default or noncompliance.

It is no secret that the time is fast approaching for more accountability in both the private and public sectors regarding economic development and the ernment is going, and has gone, too far. But as long as incentives are going to be used to lure corporate partners to relocate to a particular area, these questions will remain unanswered for years to come.

One recent estimate puts subsidies to business in the U.S. at a record \$500,000 per new job created.

This figure may be overstated if it does not take into account all of the costs associated with the development of the new facility and the incentives that were granted.

It could be understated if it does not take into account all of the potential

The first two terms are Fiscal versus Economic Impact.

Fiscal vs. Economic Impact

Fiscal Impact refers to the net effect that a particular project will have to the local jurisdiction's revenues, expenditures, and capital expenditures. Sometimes these are collectively referred to as the Direct Effects because these "revenues less expenditures" represents a net stream of cash that can be directly accounted for by the local government. Direct Effect, or Fiscal Impact, equals the revenues that are

USE OF PUBLIC FUNDS

Officials will have to develop a standardized

methodology to adequately disclose their rationale for

"making the deal."

use of incentives.

As the local citizenry becomes more educated, as more deals are deemed inappropriate, and as more governments rush to get legislation passed which will restrict or prohibit the relinquishment of public funds, officials will have to develop a standardized methodology to adequately disclose their rationale for "making the deal."

But how do we determine what makes sense for our community? How do we go about evaluating a prospective deal instead of just comparing it to another jurisdiction's offer and then upping the ante?

And finally, how do we go about presenting it to our constituents — the taxpayers — who are our ultimate partners in this endeavor.

For purposes of this discussion, let's put aside the questions: Is all this fair? Is it equitable? Do all communities have a fair chance?

The answer is probably not. Some critics charge that many companies are taking unfair advantage and that gov-

revenues, both direct and indirect, that the corporate partner may potentially generate.

Arthur Andersen Insight

Over the past several years, Arthur Andersen has developed what's known as the "Arthur Andersen Insight."

Insight is a methodology and computerized model that assesses the measurable impacts and return from existing projects, programs, or incentives packages over a specified period of time in order to measure return, provide accountability, and exhibit fiduciary responsibility.

It is important to note that what we are referring to here is a methodology — not just an input/output model — which may only show a portion of the picture.

To begin, it is important to define some modern day terms, the definitions of which have become skewed or all together changed over the past five to ten years. expected to be generated to the local jurisdiction by the subject development within the impact area, minus the expenditures and the capital expenditures that are expected to be incurred by the local jurisdiction within that same impact area over the analysis period.

Economic Impact, on the other hand, looks not only at the direct effect that a project is expected to have but also at those dollars that are thrown off into the local jurisdiction's economy. For example, when a company says that it is going to spend \$50 million during its construction phase on a particular project, the first question to be asked should be, "How much of that \$50 million will be spent in the local jurisdiction, or within the impact area?"

Let's say for discussion purposes that only half of the total amount, or \$25 million, will be purchased in the local jurisdiction.

The direct revenues that would be generated would be the sales tax on the initial purchase of the \$25 million plus

any property taxes that will be paid during construction.

The economic revenues would equal the taxes paid plus the \$25 million that was originally thrown off into the economy from the initial purchase. This same methodology would remain with respect to utilities purchased, employment, and other items during this initial phase of the project.

It is relatively simple to give a project credit for the fiscal and economic revenues it is expected to generate over the analysis period.

With respect to expenditures, however, special attention should be given as to whether or not certain costs, or a portion of these costs, are directly related to the subject development and should therefore be taken into account when determining the fiscal or economic impact.

Analysis Period

There has been a lot of discussion over the past few years as to how long the analysis period should be. Some say it should be the life of the project, while others say it should be anywhere from 10 to 30 years.

With respect to the analysis period of a corporate incentive agreement, if the deal does not make sense over a 10-year operational period, it will not make sense over a 20 to 30-year period. While its true that 30-year projections were, and still are, required to show debt coverage for a particular bond issuance, an analysis period in excess of 10 years is inappropriate when analyzing a corporate incentive agreement.

Framework of an Incentive Analysis:

REVENUES:

- 1. CONSTRUCTION (REVENUES): Revenues to the Public Sector during the Construction phase within the Impact Area. Fiscal Revenues include all tax revenues associated with goods and services purchased by the corporation in the local area such as: sales, property, and usage taxes related to real estate, personal property, construction materials, furniture, fixtures and equipment, utility consumption, and impact fees, if applicable. Economic Revenues includes the fiscal revenues plus the value of those items purchased locally such as: materials for construction, furniture, fixtures & equipment (FF&E), utilities, soft costs, and construction payroll.
- 2. OPERATIONS (REVENUES): Revenues to the Public Sector during the Operations phase within the Impact Area, Fiscal Revenues include all taxes assessed on the subject project related to the portion of goods and services purchased locally such as: lease payments, additional furniture, fixtures. and equipment (FF&E), depreciated property, materials for operations of the facilities, and utilities. Economic Revenues include the fiscal portion as well as the total value of those items spent locally such as: payroll from operations, new furniture, fixtures, and equipment (FF&E), materials for operations, and utilities.
- 3. OFFSITE (EMPLOYEE REVENUES): Revenues to the Public Sector generated by the subject develop-

ment's employees and their family members within the Impact Area. Fiscal Revenues generally include the sales taxes on goods and services generated by new employees and their family members who are projected to live within the impact area; property taxes generated by new residents to the impact area; and any special fees generated by new employees within the impact area. Economic Revenues in-

PUBLIC

clude the fiscal portion as well as the total amount of sales generated within the impact area by the employees and their family members as well as the aforementioned sales and property tax revenues generated by the new employees within the impact area.

4. INDIRECT (REVENUES): Revenues to the Public Sector generated from the use of multipliers which calculate the

Visitors

TOTAL

Indirect

FRAMEWORK OF AN INCENTIVE ANALYSIS

Offsite

Construction Operations

	1-2 years		10 years					
	1	2	3	4_	5	6		
REVENUES Fiscal Revenues	\$	\$	\$	\$	\$	\$		
Total Fiscal Revenues	\$	\$	\$	\$	\$	\$		
Economic Revenues	\$	\$	\$	\$	\$	\$		
otal Economic Revenues	\$	\$	\$	\$	\$	\$		
	Total Economic	Hevenues In	ciudes ine risc	aı portion in its t	otai			
	iotal Economic	Hevenues in	ciudes ine risc	ai portion in its t	otai			
EXPENDITURES Fiscal and Economic Expenditures	7	8 \$	9	10	11	\$		
Fiscal and Economic Expenditures otal Fiscal and Economic	7	8	9	10	\$			
Fiscal and Economic Expenditures	\$	\$	\$	\$	11	\$		
Fiscal and Economic Expenditures otal Fiscal and Economic	\$	\$	\$	\$	\$	\$		
Fiscal and Economic Expenditures otal Fiscal and Economic	\$	\$	\$	\$	\$	\$		
Fiscal and Economic Expenditures otal Fiscal and Economic Expenditures	\$	\$	9 \$	10 \$ \$	\$ \$	\$		

The analysis period is generally split among five phases: Construction, Operations, Offsite Employee, Indirect, and Visitors.

The Construction phase generally represents those activities that produce revenues and necessitate costs during the first one to two years while the facility is being constructed.

Operations is generally the 10 years that follow once a Certificate of Occupancy has been issued or the company has officially taken over an existing facility and has commenced operations

in earnest.

Offsite Employee Effects quantifies the revenues and expenditures that are expected to occur related to the spending of the project's employees, together with that of their family members within the impact area.

Indirect Effects represent those revenues and expenditures related to additional companies that may locate within the impact area as a result of the subject project.

And finally, the Visitors phase accounts for the revenues and expendi-

tures associated with the subject company's visitors.

These concepts are graphically illustrated in the exhibit entitled "Framework of an Incentive Analysis." (Line item examples and notations related to each of the various phases, noted with numerals, are explained below.)

Use of Economic Effects

There has been a lot of debate over the past few years as to whether or not the economic effects should be taken into

additional earnings that will be generated by new companies locating to the impact area as a result of the subject development. It is in this phase of the analysis where the number of additional employees, based upon state, regional, or local multipliers quantified based upon the industry in which the subject company operates. Generally, all of the revenues quantified in this phase are referred to as "Economic."

- 5. VISITOR (REVENUES): Revenues to the Public Sector generated by visitors to the subject location. Fiscal Revenues include non-lodging tax revenues such as sales tax revenues based upon a percentage of visitor expenditures on a per day basis as well as lodging tax revenue which is generally the Transient Occupancy Tax based on prevailing averages of occupancy and average daily rate.
- 6. TOTAL (REVENUES): Total Fiscal and Economic Revenues during the five phases of the analysis period. While there is no number reference, the figures are also calculated "down" for each phase of the project.

EXPENDITURES:

NOTATION REGARDING EXPENDI-TURES: Generally speaking, all expenditures quantified over the analysis period are Direct, or Fiscal Expenditures. The reason for this is because it is often times difficult and immaterial to distinguish between which costs are incurred by the local jurisdiction and which ones are incurred by other companies within the impact area. Therefore, for purposes of this article, all

expenditure descriptions are referred to as Direct Expenditures by the local jurisdiction.

- 7. CONSTRUCTION (EXPENDI-TURES): Expenditures incurred by the Public Sector during the Construction phase related to the funding of any hard costs such as: site acquisition, preparation, or improvement; structure demolition; special utility improvements; landscaping, facility construction. It will also include any soft costs such as payment of impact fees; payment of relocation expenses; special development financing (the difference between market rates and actual rates would be included as a cost); any architectural or engineering fees; and other waived permitting or expediting fees. In addition, this section will also include any utility discounts and tax abatements granted during the construction phase as well as a uniform Cost of providing Government Service on a per resident and a per employee basis.
- 8. OPERATIONS (EXPENDITURES): Expenditures incurred by the Public Sector during the Operations phase related to the same items as noted under "Construction." This would include the value of all incentives both standard and special, any tax abatements, and a uniform Cost of providing Government Service on a per resident and a per employee basis.
- 9. OFFSITE (EXPENDITURES): These include a uniform Cost of providing Government Service related to all new employees and their family members working at the subject development and residing within the impact area.

- 10. INDIRECT (EXPENDITURES): These include a uniform Cost of providing Government Service related to all new employees and their family members which have located to the impact area as a result of the subject company who will be working and residing within the impact area.
- 11. VISITORS (EXPENDITURES): Generally it is difficult to quantify any specific expenditure associated with visitors because reliable, historic data does not exist. However, if a subject company did indicate that it holds an annual function, which would necessitate additional police or fire protection, the practitioner may want to quantify and amount for such costs. A uniform Cost of providing Government Service is generally not applied to the number of visitors to the impact area.
- 12. TOTAL (EXPENDITURES): Total Fiscal Expenditures during the five phases of the analysis period. While there is no number reference, these expenditures are also totaled (down) by phase to equal total Fiscal and Economic Expenditures.
- 13. FISCAL IMPACT: This row equals: Total Fiscal Revenues minus Total Fiscal and Economic Expenditures.
- 14. ECONOMIC IMPACT: This row equals: Total Economic Revenues minus Total Fiscal and Economic Expenditures.

account. In addition, many are arguing whether or not the offsite, indirect and visitor effects should be taken into account as well.

Many times, a deal does not make sense on a fiscal or direct basis alone.

It is only when you add in the economic effects, that the investment is justified by the return.

But because so many deals have "gone south" because they did not meet the original projections, many public officials are beginning to say that it was because the economic or the offsite and indirect effects were overstated.

Structurally, and based upon common sense, it is reasonable to assume that if a new company locates to a specific area there will be additional fiscal and economic effects other than those directly associated with the subject company.

Depending on the soundness and reasonableness of the underlying assumptions, this should not be the issue.

Sample Analysis

Going back to our analysis, we can show the same components over a twelve-year period — two years of construction followed by two years of operations.

The "Manufacturing Company Sample Analysis" (below) is a bit different in that the analysis has been put into a linear mode showing the time periods across the top and the phases of the project down the left-hand column.

At first glance this may appear to be a "good" deal, as evidenced by the \$236.9 million economic impact over a 10-year operational period. And, in

the end, it may be a good deal. But at this point, we cannot make the "go" or "no-go" decision.

Time Value of Money

Why does this sample analysis answer the question as to whether or not this is a good deal? Because it does not take into account the time value of money. Generally speaking, most of the cash outlays by the public sector will be in the first few years of the project's life, probably during the Construction phase and maybe during the first year of Operations.

The lion's share of the revenues that the public sector will receive, on the other hand, such as the tax revenues, which may be abated to some extent or another, will generally not commence for another two years and may not sta-

MANUFACTURING COMPANY SAMPLE ANALYSIS

	Constru	iction		Operations									
REVENUES	Year 1	Year 2	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	TOTAL
FISCAL REVENUES:													
Construction	41,775	217,050											258,825
Operations			340,208	404,110	409,273	414,760	420,263	426,121	433,321	439,946	446,337	453,160	4,187,498
Offsite Employee Effects			6,379	13,918	14,293	18,134	22,613	23,224	23,851	24,495	25,156	25,836	197,899
Indirect Effects													'
Visitor Effects			2,320	2,348	2,378	2,408	2,438	2,470	2,503	2,536	2,571	2,606	24,577
											<u> </u>		
Total Fiscal Revenues	41,775	217,050	348,906	420,375	425,944	435,302	445,314	451,815	459,675	466,977	474,064	481,601	4,668,799
EGGNOVIO DEVENUES							·						
ECONOMIC REVENUES:													
Construction	7,506,775	8,182,050											15,688,825
Operations			9,640,208	9,874,210	10,054,066	13,651,063	13,932,946	14,222,647	14,521,353	14,827,355	15,141,206	15,463,790	131,328,843
Offsite Employee Effects			431,629	450,649	462,817	709,084	732,220	751,989	772,293	793,145	814,560	836,553	6,754,940
Indirect Effects			5,819,940	5,977,078	6,138,459	9,456,297	9,711,617	9,973,831	10,243,124	10,519,688	10,803,720	11,095,420	89,739,175
Visitor Effects			135,908	137,838	139,819	141,854	143,945	146,091	148,296	150,560	152,885	155,273	1,452,468
Total Economic Revenues	7,506,775	8,182,050	16,027,684	16,439,775	16,795,162	23,958,299	24,520,727	25,094,558	25,685,066	26,290,748	26,912,370	27,551,036	244,964,250

Total Economic Revenues includes the fiscal portion in its total

ΕX	PF	NE	ΙT	UR	ES

FISCAL & ECONOMIC: Construction Operations Offsite Employee Effects Indirect Effects Visitor Effects	3,999,860	371,746 	243,660 45,227	246,189 46,448 	248,786 47,702	302,180 74,250 	306,288 76,255	310,508 78,314 	314,842 80,429 	319,293 82,600 	323,864 84,830 	328,558 87,121 	4,371,607 2,944,167
Total Fiscal & Economic	3,999,860	371,746	288,887	292,637	296,488	376,430	382,544	388,822	395,270	401,893	408,694	415,679	8,018,949
FISCAL IMPACT	(3,958,085)	(154,696)	60,019	127,739	129,456	58,872	62,771	62,993	64,405	65,084	65,370	65,923	(3,350,150)
ECONOMIC IMPACT	3,506,915	7,810,304	15,738,798	16,147,138	16,498,674	23,581,869	24,138,183	24,705,736	25,289,796	25,888,855	26,503,676	27,135,358	236,945,301

BUSINESS DEVELOPMENT

bilize for possibly five years.

Remember that the analysis is being performed today, and it therefore has to address today's dollars in order to adequately compare apples to apples.

In any deal, it is reasonable to as-

relocate over the analysis period, a lower discount rate may be used.

If, on the other hand, this is a start up company and there is a much higher risk in the company's ability to produce the projected cash flows, a higher using the Net Fiscal Impact only, the Net Present Value is negative.

Summary

The decision as to whether of not to do a "deal" such as this still lies in the hands of the local jurisdiction.

Several iterations of the analysis may need to be prepared in order to achieve the optimum results by "tweaking," or modifying certain parts of the incentive agreement.

Regardless of the decision, what we are doing here is using private sector investment techniques in a public sector setting. Maybe the term "Corporate Incentives" is inappropriate because of the size of the stakes today. Maybe it should be termed "Public Investment." And maybe the term "Economic Impact Analysis" is inappropriate as well.

Maybe this exercise should be called "Public-Private Partnership Analysis." No matter what we call it, it has to be done. ■

SUMMARY OF NET PRESENT VALUE ANALYSIS

Discount Rate	Net Economic Impact	Net Fiscal Impact		
12%	\$105,067,500	\$(3,296,414)		
10%	\$118,606,401	\$(3,322,232)		
8%	\$134,612,789	\$(3,343,540)		
6%	\$153,643,647	\$(3,358,978)		

sume that there is an inherent degree of risk in receiving a future cash flow over the next 10 to 12 years from the project.

By applying an appropriate discount rate over the projection period, or by looking at a range of discount rates, one can discount the future dollars that are expected to be received and compare them directly to those that are expected to be spent today.

Present Value Analysis

If the deal involves a computer manufacturing company that has been in business for the past 20 years, and the likelihood is low that it is going to

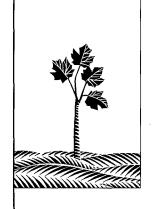
discount rate would be applied. Once this Present Value Analysis is performed, the practitioner is in a position to make a good and prudent business decision.

The Net Present Value Analysis, shown in the above chart, reflects that by using the Net Economic Impact figures this deal is a positive investment for the local jurisdiction.

If it is deemed a low-risk endeavor, the present value is approximately \$153.6 million.

If it is determined that it has a higher risk associated with it, the present value decreases to slightly over \$105 million.

By computing the Net Present Value



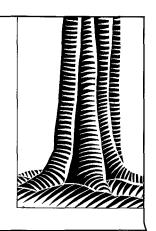
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ONTARIO'S CONSTRUCTION INDUSTRY

Providing Skilled Workers

Construction activity is rising across North America and this may create a new concern—skills shortages. In this situation, the organized contractors and building trades are at their strongest. Two traditional capabilities assure a reliable supply of skilled workers: first, mobilizing work teams from outside communities; and second, formal training programs. Contractors and local unions take

great pride in providing these services. Ontario covers 1,068,000 sq. km. (it is larger than France). Long distances represent an important barrier and a potential business cost. The building trades and their contractors have cre-

ated an efficient system that bridges these distances and allows market flexibility.

Improving construction activity in the past two years has created opportunities for trades people to move among union locals, provinces and regions to staff big projects. For example, key trades have moved to Newfoundland to help build the Hibernia Oil Platform. There is an international dimension as well.

To meet the demands of major construction projects, the building trades are working to facilitate cross-border mobility.

Joe Maloney, National Representative of the Building & Construction Trades Department of the AFL/CIO, Canadian Office, reports: "The unions are working with U.S. and Canadian governments to allow short-term clearance for rapid, expedited mobilization of construction crews to fill the needs of short-term, high-density

The Ontario Construction Secretariat

The Ontario Construction Secretariat (OCS) was established as a joint labour, management and government initiative in the 1992 revisions to the Labour Relations Act. The OCS's mandate is to collect and distribute statistics and general information on the organized Industrial, Commercial and Institutional (ICI) construction industry. Building a consensus on the accuracy of this information creates a shared vision of strengths and challenges. In addition, the OCS promotes the interests of the industry, seeking opportunities to create jobs and strengthen stakeholders. The OCS brings union members, contractors, owner/clients and key government decision makers together outside the crisis of collective bargaining to focus on issues of common concern.

The OCS is funded by workers and contractors and governed by a Board of Directors drawn from Ontario's government and 25 Employer and Employee Bargaining Agencies (EBAs). To contact the OCS visit our web site at www.onconsec.org or call 416-969-6575.

jobs in both the United States and Canada"

Within Ontario, a similar flexibility in the organized labour market has helped move needed workers into the Windsor area, where industrial and institutional building has been strong. This crucial capacity for assembling large and skilled work crews is a major advantage for the organized construction industry. Over the past 12 months, the demands of a new casino in Windsor, and a major ethanol plant in nearby Chatham, have required a carefully

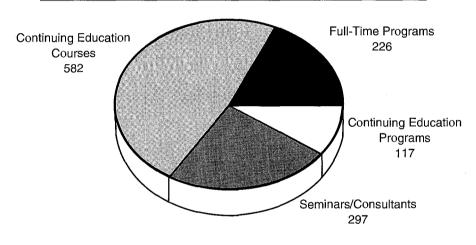
staged mobilization of over 1,000 workers from other communities. Trades people have been drawn from all over Ontario as well as other provinces from Newfoundland to British Columbia.

This story is repeated in many other communities, for example, the mobilization of 2,000 "travel" workers to build the Toyota plant in Cambridge, Ontario last year. The Cambridge area work, that coincided with the Windsor construction, brought workers in on "travel cards" from all over Canada,

including 200 sheet metal workers from Newfoundland. These mobilization efforts are standard procedure for the organized industry.

Unions facilitate this process by sharing the capacity of hiring halls and memberships. The skills of existing workers are assured by the high standards set in the joint labour/management training programs, as well as the national "Red Seal" program that recognizes certificates of qualification for trades in all provinces. A flexible workforce keeps costs down and jobs on schedule.

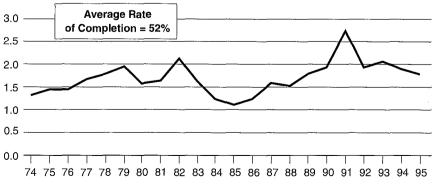
CONSTRUCTION TRAINING RESOURCES IN ONTARIO



SOURCE | Canadian Construction Secretariat & "Directory of Construction Training Resources in Ontario"

CONSTRUCTION APPRENTICES, ONTARIO, 1974-95

Selected Trades, by Number of Apprentices ('000)



SOURCE Human Resources Development Canada; Canadian Occupational Project System; Ontario Ministry of Education

Training Programs

There is evidence that construction labour markets will continue to tighten in 1997 and 1998. As demand rises, the option of mobilizing workers from other regions becomes less feasible. The industry will again look to its reserves of young apprentices and recruits to fill this growing need. Traditionally, the building trades and their contractors have played the key role here as well — supporting the training programs that keep the workforce skilled.

Ontario has developed a remarkable system for training construction workers. The system offers over 1,200 training opportunities for apprentices and journey persons to upgrade skills in up to 25 trades.

These opportunities range from seminars, offered by private consultants and training institutions, to five-year apprenticeship programs with hundreds of hours of formal classroom work.

The core of this system is apprenticeship. Ontario has developed programs that complement training offered in other Canadian provinces and allows graduates in all provinces to work in other regions if they have achieved the Red Seal Certification. Workers in the system are offered a combination of classroom and shop-based learning in facilities with mod-

ern equipment and computers. Workplace-based experience is supervised by journey persons who are committed to giving apprentices individual attention.

Most trades set out a wide variety of materials, equipment and work situations that are required during the program.

This assures apprentices will get both a breadth and depth of skills. Most trades are now involved in upgrading all aspects of this training at a national and provincial level.

The building trades, contractor groups and government have worked

awards for excellence.

Exhibitions at trade shows, videos and other promotions are prepared for high school students as part of a recruitment strategy.

Upgrading Skills

Once workers have completed apprenticeships, there is a wide range of upgrade training available to keep skills current.

This training is offered from joint union/contractor training trusts, universities, private trainers, building material and equipment suppliers, and neered computer-based, multi-media and remote delivery systems for construction safety training. Altogether, over 50 courses are offered by the CSAO.

Construction training is balanced across both regions and trades. Virtually every area of the Province has formal training in union facilities and/or community colleges.

These programs are actively recruiting the best young people, and these efforts have succeeded in graduating 2,000 new journey persons a year — even through the tough times in the early 1990s. The industry's continuing

SKILLS TRAINING

Completions in the apprenticeship program

have been kept up in spite of weak labour markets

in the 1990s.

together to attract young people into the construction industry. Completions in the apprenticeship program have been kept up in spite of weak labour markets in the 1990s. Building trades support apprenticeship excellence through friendly competitions and community colleges.

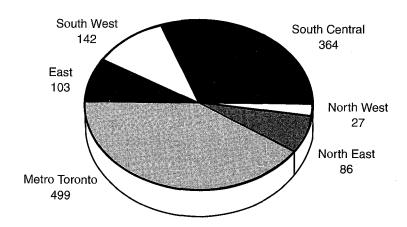
Ontario is particularly proud of the Construction Safety Association of Ontario (CSAO). This group is funded by the industry and has developed many innovative and practical safety training courses. The CSAO has pio-

commitment to training was apparent during the recent province-wide review of apprenticeship.

Owner/clients investing in Ontario have recognized the benefits of this system. John Phares, Celanese Canada, was Project Manager for the construction of a major new chemical producing facility in Millhaven (near Kingston), Ontario. He has supervised building several projects of this type in the southern United States and in South East Asia.

He notes that, "The unions provided a ready supply, having no problem staffing over 700 positions with workers. Trades on site included pipefitters, boilermakers, welders, instrumentation mechanics, electricians, ironworkers, millwrights, carpenters and others. I was impressed by the commitment of these workers, who accomplished much of the job in very difficult winter weather."

CONSTRUCTION TRAINING RESOURCES IN ONTARIO Geographic Distribution



SOURCE Canadian Construction Secretariat & "Directory of Construction Training Resources in Ontario"

ONTARIO HYDRO

Supporting Economic Prosperity

n 1906, Sir Adam Beck founded Ontario Hydro to ensure that every Ontarian would have equal access to affordable electricity, while helping build the foundations of the province's economic future. Today, the company has become one of the largest electrical utilities in North America in terms of installed generating capacity. Ontario Hydro serves more than 2.8 million customers through

306 municipal electric utilities, as well as directly serving almost one million retail customers and more than 100 large industrial customers.

Since its inception, the company has played a major role in shaping the destiny of the province it calls home. In the 1930s, Ontario Hydro forever changed the lives of rural Ontarians by electrifying farms and villages throughout the area. In the 1950s, as consumers saw an explosion of new electrical appliances, Ontario Hydro switched to more efficient, 60-cycle power. To ensure the economic success of this switch over, the company changed motors in seven million appliances in one million homes.

For the rest of the century, Ontario Hydro has focused on delivering electricity in environmentally safe ways to provide power for the growing provincial economy.

In 1922, Beck expressed his rather colourful perspective on the developing company: "We have been in business since 1906, and we have been

pleasing and displeasing the public ever since. We have been cussed and discussed, boycotted and investigated, talked about, lied about, hung up, held up, and robbed. The only reason we are staying in business is to see what happens next."

That mix of praise and criticism still surrounds Ontario Hydro as it continues to support the province's economic prosperity.

New Business Philosophy

Over the past 90 years, Ontario Hydro has evolved to keep pace with the times. The company has responded to the fiscal and competitive challenges of the late 20th century by preparing itself for the future.

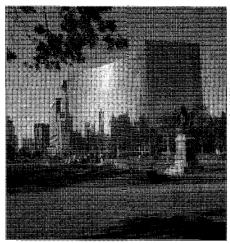
One of the most important steps was its dramatic restructuring. In 1997, Ontario Hydro moved from a vertically integrated utility to a corporation with three signature business areas: transmission, retail, and generation.

The company has made a particular

effort to ready itself for the opportunities of customer choice at the retail level by drawing on the experience of other restructured, deregulated industries. For example, it has maintained very low rates and is continually improving services in order to retain customers. In fact, in a recent survey of North American monthly industrial utility bills, Ontario Hydro's rates were shown to be considerably lower than many U.S. utility companies.

Throughout this process, company employees have risen to the challenge of change. Says John Fox, Ontario Hydro's Managing Director for GENCO: "The readiness, willingness, and ability of each Ontario Hydro employee is demonstrated by a consistent commitment to high-quality performance, to learning more, and to satisfying customer needs."

The framework for a competitive North American electricity industry is nearing completion. As a proven industry leader, Ontario Hydro is ready to face that future.



Ontario Hydro has been providing electricity and electricity services since 1906. Its head office is located in Toronto, Canada's largest city.

Working with Ontario Hydro, companies such as Dofasco can take advantage of advancing technologies that give more control over their power use, what it costs, and how it can be provided.

Economic Development

As a provincial electric utility, Ontario Hydro has always had a role to play in the economic development of Ontario. The utility is an active member of the Board of Trade of Metropolitan Toronto, and also works hard to encourage economic development across the entire province. Together with the Ontario Ministry of Economic Development and Trade and Tourism, as well as the Economic Developers Council of Ontario, the company co-founded Team Ontario, which fosters economic development by encouraging companies to locate, invest, and do business in Ontario.

As part of its commitment to this unique organization, Ontario Hydro sponsors the annual Economic Development Achievement Award.

One of the most recent examples of the effect of the company's economic development strategy is in the automotive industry. Ontario Hydro put forward proposals to attract development in the automotive industry by emphasizing reliable power, engineering services, and financing.

A number of manufacturers have recently chosen to locate in Ontario, and the company is proud to have played a role in those decisions. Ontario Hydro sees itself as a partner in business, forming strategic alliances to encourage economic growth. For example, the company was instrumental in a recent decision by steelmaker Dofasco Inc. to invest in a new furnace. In partnership with Hamilton Hydro, Ontario Hydro was able to offer Dofasco a rate and service package that included low-cost surplus electricity.

Additionally, Ontario Hydro's low cost of electricity was critical in Abitibi-Prices decision to replace two



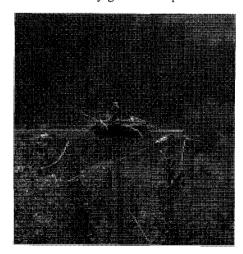
Ontario Hydro's mix of generation, including hydroelectric from locations such as Niagara Falls, provides low-cost, reliable electricity throughout Ontario and interconnected sites in other parts of Canada and the United States.

older pulp-making plants with a new thermo-mechanical pulping plant.

Economic development and innovative pricing are just two components that make up the complete Ontario Hydro package. Extensive customer service, including a new calling centre that offers more efficient response, and the delivery of safe, efficient sustainable power are also essential to customer satisfaction.

Ontario Hydro's new direction and new entrepreneurial spirit mean that the utility is in closer touch with customer needs and is well prepared for the coming challenges and changes.

In 1996, on the occasion of its 90th anniversary, Executive Vice-president Ron Stewart described the company's success: "The reason Ontario Hydro is considered a world-class utility, and a formidable competitor, is because we have always been industry leaders and pacesetters by taking bold and innovative steps in meeting the needs and wants of the Ontario public. We must continue to do so. As we celebrate our 90th birthday and think of our past successes and our future challenges, it is helpful to remind ourselves that we have had 90 years of preparation for the opportunity currently before us to become a truly global competitor."



Ospreys often nest on poles in remote parts of the province. Ontario Hydro, as part of its program to minimize its impact on the environment, provides nesting towers for these and other birds.

The Royal Building System™ *A Canadian Success Story*

When Vic De Zen arrived in Canada back in 1962, it took him less than one-half hour to begin his career in the building industry. With just \$20 in his pocket, Vic, as he likes to be called, got off the plane from his native Italy and went straight to work installing TV antennas and storm doors. Trained as a master tool and die maker in Switzerland, it wasn't long before he had landed a job as a

tool and die maker for a manufacturer of building products. After spending a few years as an employee, Vic knew he could create a better future for himself, his employees and his customers by going into business on his own.

He was right! From its beginnings as a single line extruder of plastic building products, Royal has grown into an international group of companies manufacturing advanced building products and building technologies. As a public company, listed on the Toronto, Montreal and New York Stock exchanges, Royal reported sales of \$849 million for its 1997 fiscal year. Under Vic's leadership, Royal has achieved annual average sales and profit growth of 22 percent and 35 percent, respectively, over the last three fiscal years.

Royal's building products include vinyl window frame extrusions, vinyl siding, vertical window blinds, pipe and doors. After becoming one of North America's largest extruders of PVC building products, Vic set his sights on broader horizons, introducing a revolutionary building system worldwide, known as the Royal Building SystemTM. The System is a highly engineered, polymer-based System which incorporates concrete in the structural components of the System.

Export Sales

The first home manufactured from the System was erected in Germany back in 1992. Today, there are single and multi-family homes, schools, factories, medical centers, hospitals, car washes and other types of structures made from the System in over 40 countries around the world. In all four corners of the globe, builders are quickly becoming aware of the advantages of the System.

Structures made from the System are virtually maintenance free, can be constructed quickly without the use of heavy equipment, have proven them-

VIC DE ZEN is Chairman, President and CEO of Royal Group Technologies Limited, Vaughan, Ont. Founded in 1970, the company now employs more than 5,000 people at some 84 locations.

The Building Products Group produces siding, pipes, vertical blinds and window profiles. Housing systems and storage building systems are produced by the Building Technologies Group.

Vic De Zen was named the 1995 Canadian Entrepreneur of the Year, and the 1996 Ontario Entrepreneur of the Year.

selves durable against hurricanes and earthquakes, are affordable, and are less expensive to heat and cool. As one industry observer commented, "Vic is the Henry Ford of the building industry," revolutionizing the way we build, not only in North America, but around the world.

When asked about his vision for the system, Vic responded, "We are offering the world a way to build faster, stronger and more affordably, through partnerships around the globe." He added, "There are many areas of the world growing so quickly that conventional building methods just won't allow them to satisfy all their needs for houses and commercial buildings."

Armando Boullhesen, Vic's manufacturing joint venture partner in Argentina, commented on a decision by the government of Buenos Aires to erect 18 schools made from the System saying, "The System made possible the construction of 329,000 square feet of

schools space in the record time of 90 working days."

Bradley Lewis, who distributes the System under the name Affordable Homes on the island of Antigua, pointed out that "Hurricane Luis toppled many homes on the island but left structures made from the System standing."

Product Innovation

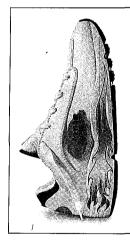
Innovation by Royal is not just restricted to The Royal Building SystemTM. The company has relied on new products for growth since its inception. Royal has recently introduced a PVC garage door, PVC fencing and decking and a system for construction of basement foundations which will leave both home owners and foundation trades people smiling.

The foundation system, being marketed under the trade name ROYCET, incorporates factory installed insulation in two inches of an eight-inchwide hollow polymer panel, in which concrete is poured.

Home owners will enjoy a warm, leak resistant basement with durable finished walls.

Galli Tiberini, President of ARG construction which has partnered with Royal to bring the revolutionary foundation system to market, commented that "ROYCET allows new home buyers to significantly expand the livable space in their homes for a very small increment in cost."

While Vic has achieved more than most people can dream of, he states with determination, "We are just getting started." Along with over 5,000 employees, many of whom he knows by their first name, he continues to provide building solutions for the world. Reflecting on Royal's success, he concluded that it makes him "happy to offer affordable and durable homes to families around the world."



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KEY LEGAL ISSUES in Structuring & Negotiating Strategic Alliances

BY Jeffrey S. Graham

Strategic alliances are important tools for many technology-based companies. Since the early 1980s, cash-hungry biotech companies have used alliances to facilitate the clinical development of human therapeutic products. In some cases, the need of these companies was primarily financial, given the significant expense associated with commercializing new therapeutics. In other cases, small

biotech firms were looking for partners who had experience with clinical trials or in marketing and distributing pharmaceutical and other products, as well as financial resources. Frequently, the alliance was of strategic importance to the smaller biotech company. In recent years, companies in many other sectors have recognized the benefits to be gained from strategic alliances.

A strategic alliance can be important

to a company's success. However, even where the basis for a sound deal exists, a poorly negotiated alliance can negatively affect both the company and its prospects. Accordingly, the decision to establish an alliance, and the manner in which the alliance is implemented, can be critical decisions for a company.

In any strategic alliance, experienced advisers can make an important

contribution to ensuring that a company achieves its objectives. In particular, experienced advisers can anticipate and offer practical advice on how to avoid many of the potential pitfalls of strategic alliances.

Defining an Alliance

Strategic alliances are extremely varied, making them difficult to define in traditional legal terms. They are typically more than simply a single contractual arrangement and less than a full-scale corporate acquisition transaction.

In the typical alliance, the parties' rights and obligations are not fulfilled upon the closing of the transaction or the initial delivery of a product. Instead, the substance of the alliance remains to be completed over the course of the agreement. In addition, it is possible that some of the actual obligations of the parties also will be defined over time.

An alliance usually consists of at



JEFFREY GRAHAM practices law with Borden & Elliot where his practice focuses, in part, on representing start-up and emerging growth companies and includes issues related to the acquisition and commercialization of technology through corporate partnerships.

He is a member of the Bars of Ontario and the District of Columbia. Previously, he practiced corporate and securities law with Hogan & Hartson, Washington,

D.C. He holds business and law degrees from McGill University and graduate degrees in corporate and international law from Columbia University and the University of Cambridge.

least two contractual or transaction components. For example, it may include a combination of licensing agreements, research and development agreements, manufacturing agreements, distribution agreements and equity or debt investment agreements.

To craft a successful strategic alliance, one must integrate the various elements into a unified whole. The result may be one comprehensive agreement or a series of inter-related agreements. As such, an alliance is usually more difficult to structure than a traditional single-purpose agreement. In structuring an alliance one must craft both the components and design a system that defines the inter-relationship among the components.

Key Risks to Consider

While the benefits of a well crafted and effectively implemented alliance can be substantial, it is important for any company considering an alliance to understand as well some of the potential risks.

Small Company Risks.

For a small company, the primary risk of entering into an alliance is the loss of flexibility and future opportunity. Many small companies intend to be fully-integrated companies. If the scope of the alliance is too broad, or the terms are too restrictive, it may be difficult to realize this goal. To address this issue, a small company will seek to retain as many rights as possible, especially rights to manufacture products and to develop future products.

A related risk is that the terms of the alliance will be so restrictive that the alliance becomes a form of inadvertent acquisition of the small company by the larger company. This can happen where the licenses are broad, covering not only products but core technologies, or where restrictive rights of first offer or first refusal on new products and new deals make it extremely difficult for the smaller company to enter

into transactions with any third party.

Another risk for the smaller company is that the deal will not fulfill its promise. When this happens, the smaller company can suffer significant damage. If the larger partner backs out, the smaller partner may be left with people, equipment and facilities that it can no longer afford. In addition, the public and industry perception may be that the smaller company is somehow not up to standard because of the cancellation of the alliance.

Risks for Larger Company.

For the larger company, the greatest risk is dependence on the smaller company. This is particularly serious if the small company fails because of financial problems, lack of experience or otherwise. Additionally, the smaller company may use the alliance as a form of leverage to the disadvantage of the larger company. The larger company may be vulnerable if the smaller company retains the manufacturing rights and is unable to meet demand for the product. There is also the risk that the smaller company could be acquired by one of the larger company's competitors.

Another risk for the larger company relates to what rights it will have to exploit product improvements where technology is being licensed by the smaller company to the larger company as part of the alliance. To obtain rights to future improvements the larger company may need to make some future commitments to the smaller company. A long-term relationship could mean long-term dependence.

Structuring the Alliance

It is important for both parties to focus on the key terms of the alliance such as who supplies what to whom initially and how and under what circumstances can the arrangements be changed. The parties must focus as well on the issues that will enhance the probability of success — day-to-day details of the

management and administration of the alliance.

The following factors contribute to the success of any alliance:

- Multi-level buy in In addition to a "champion" within each partner, it is important to strive for personal relationships and feelings of partnership throughout the staffs of both partners.
- Mutual understanding To the extent possible, both partners and their advisors should understand the other's philosophy, objectives and strategies.
- Flexibility Both before and after the deal is concluded, both parties should be willing to consider alternative structures that are consistent with the objectives of the alliance.
- Clear definition of scope A clear understanding of rights and obligations of both parties will help to reduce misunderstandings.
- Mutual ongoing incentives/shared risks — The deal should be structured to give both parties incentives to perform throughout the term of the arrangement.
- Thorough planning Both parties should invest time and energy in an implementation plan, both at a strategic level as well as the nuts and bolts of the deal.
- Good communications Arrangements can be structured to encourage informal communications and should require regular formal meetings.
- Effective decision-making and dispute resolutions It is advantageous to make clear allocations of decision making. Some decisions must be left for joint determination by the parties. An effective pre-litigation dispute resolution mechanism can avoid unnecessary deadlocks and litigation. This does not simply mean arbitration. It means procedures such as escalation through operational and managerial levels that force each party's personnel to discuss the dispute with their counter-

parts and preclude litigation until deadlock is reached at the highest levels of management.

- Reasonable termination provisions
 — Since even the best corporate partnerships terminate at some point, termination provisions can impact on how the deal will ultimately be viewed. Parties need to carefully consider: who is entitled to terminate; whether the whole arrangement comes to an end necessarily or whether the deal is divisible; and what are the rights and duties of the parties upon termination.
- Equity investment An equity or debt like investment brings with it its own special considerations. An equity investment is not a substitute for ensuring that the arrangement is a priority for the other party and that senior management of that other party has made a sufficient commitment to the success of the project.

Chronology of a Deal

Once a company decides to pursue an alliance, it must identify and evaluate potential partners. After the potential partner is identified, the company must obtain "introductions." Usually this occurs through personal relationships of key company personnel. If after the introductions the parties conclude that discussions are warranted, usually a mutual non-disclosure agreement is entered into.

The goal of the initial negotiations is to reach a "letter of intent" or "preliminary agreement" specifying the major terms of the transaction. Once the letter of intent is settled, preparation and negotiation of "final documents" begin.

Carefully drafted agreements can reduce the risk of future misunderstandings and enhance one party's position if the other party is unable or unwilling to carry out its duties.

Key Legal Issues

To some extent, the key legal issues

will vary depending upon the nature of the alliance. Some of the most common legal issues are as follows:

Licenses. License agreements specify the terms and conditions under which one party may take actions that would otherwise infringe on the other party's intellectual property rights — patents, copyright, trade secrets, trademarks. The principal terms specified include the rights being licensed, where and for what purpose the rights may be exercised and the consideration that the licensor will receive.

Royalties. Payments for technology transfer can be made in many ways. They can consist of fixed payments on specified dates, or connected to milestones. When it is difficult to measure the potential for commercial success at the point of the negotiation of the alliance, running royalties may be appropriate.

Other issues include when does the royalty obligation expire, what reporting obligations are there, and what right does the licensor have to audit the licensee.

Development obligations. There are sometimes development obligations that include sanctions for non-performance, including making non-performance an event of default. If there are development obligations there are usually project management provisions. There must be procedures, criteria and an agreed process if the original product does not meet the criteria. There will also be an understanding with respect to the funding of the work.

Manufacturing and supply. Another element of some alliances is manufacturing and supply relationships. The buyer is required to purchase all or a specified portion of its requirements from the seller. There will be the normal terms and conditions of a supply relationship, e.g., price, quantity, delivery, etc. It may address whether or

not the buyer can look elsewhere for the product and will often provide a requirement for forecasts to be delivered to the seller by the buyer. There can be provision for license and knowhow transfer if the seller cannot meet its obligations to supply. There may be a provision giving the seller an out if there are inadequate orders. Changes in the form of the product, at the option of the seller, may also be addressed.

Transfer of Technologies. The alliance may involve the transfer of technologies and the provision of technical assistance. The alliance arrangements may include provision for the protection of the rights of the licensor and give the licensor special rights of recourse in case of infringement, including the right to seek injunctive relief.

In addition, the alliance agreements will set out who owns what (e.g., improvements) and address issues related to the joint development of technology.

Representations. Like any significant agreement, alliance agreements will contain a series of representations and warranties that provide comfort to each party with respect to matters that are being assumed in good faith. These include the relative rights of each party to enter the agreements free from the risk of being challenged by a third party and the ability to carry out the party's duties under the agreements without infringing the rights of other parties.

Final Comments

Strategic alliances will continue to be an important tool for companies seeking to expand more rapidly than internal resources permit.

More and more companies are likely to consider strategic alliances in the future.

While the success of any alliance cannot be guaranteed, carefully negotiated agreements can increase the potential for success.

Life Cycle ECONOMICS

BY David Magahey

Life-cycle costing is neither a new concept, nor complex in its methodology for economic determinations. What is new, however, is the increasing prevalence of municipal outsourcing, partnering and privatization. The results of this changing method of acquisition for goods and services by municipalities often leads to a requirement to compare apples to oranges and still ensure that the

taxpayers are getting value for the money. Life-cycle costing analysis just may be the answer.

Put aside, for the moment, the discussion of risk valuation and the transferring thereof — a hot topic these days. Life-cycle costing can be a simple, but telling, analytic exercise.

In concept, all of the costs for each different alternative are accounted for over the life of the contract, asset or whatever is being procured.

A discount rate is then applied to the total estimated costs for the years of service (for each alternative) to arrive at a Net Present Value (NPV). This NPV represents the value today of all of the costs during the life cycle of the assets.

Cost Inclusions

If we take, by way of example, the acquisition of a new water treatment facility and its operations for a 20-year period under two different scenarios, we must first ensure that all appropriate costs are captured.

Typically, these costs can be broken down into the two main categories of

Construction and Operations.

Construction Costs

During the construction phase, the municipality will typically enter into either a fixed price design-build agreement, or will substantially engineer the project and, in turn, enter into a construction contract with a general contractor.

Additional costs (over and above engineering and construction), that can be incurred during this stage and need to be identified for the analysis, would include:

- · Legal fees
- Permitting, licensing, etc.
- Bonding & Insurance
- · Interest and financing costs
- Consulting engineer costs

While this list is not all inclusive — and individually these costs may not represent a significant portion of the project's total cost — they can, as a group, represent a substantial cash out-



DAVID G. MAGAHEY is Vice-President, Project Development for CH2M WaterWorks (Canada) Ltd., a member of the CH2M Hill Group of Companies. His responsibilities include the development, structuring, and financing of water and wastewater projects.

lay. Moreover, when rolled into the overall financing and amortized over a 20-year period, the compounding effect of the interest payable on the additional funds borrowed to pay for these costs can be significant.

Operating Costs

In our example, costs during operations can be broken down into three categories:

Financing Costs — which would include debt and equity interest payments and principal repayments;

automation and capital cost payback requirements to achieve the result.

Scenario A

Financing Structure:

Example Scenario A, has the following financing attributes/features:

Capital Cost	\$30,000,000
Capital Structure	80% Debt
	20% Equity
Debt Interest Rate	8%
Stated Equity Return	17.5%
Required Term	20 years

assumed:

Capital Cost	\$28,500,000
Capital Structure	80% Debt
	20% Equity
Debt Interest Rate	8%
Stated Equity Return	17.5%
Required Term	20 years

As additional enhancements to more appropriately match the financing structure with the projected increase in customers, the capital structure incorporated the following:

· a debt repayment constructed with

LIFE CYCLE COSTING

Applied appropriately, this type of analysis

can provide an economic determination to measure alternative solutions

to the acquisition of goods and services.

Variable Operating Costs — which would include chemicals, power, and perhaps labour; and

Fixed Operating Costs — which would include minimum power charges, labour costs, insurance, bonding, general and administrative expenses, ongoing third party costs (i.e. independent laboratory testing), property taxes, site lease payments, and all routine and any major repairs that could be reasonably predicted and estimated.

Once all yearly costs have been identified, and those not subject to fixed price agreements have been reasonably estimated (including inflation), the Life Cycle Costing analysis can be calculated on the alternatives.

For our example, we will use the following two different scenarios. Additionally, we will assume an engineering review would determine that both scenarios were capable of meeting all of the performance criteria stipulated, but used different processes, levels of

The debt component of the Capital Structure is assumed to have a standard mortgage style structure with level payments that results in full amortization of the obligation over the Required Term. The equity component earns its return on a level basis, year over year.

Operational Structure:

From an operational basis, Scenario A has several additions over and above the assumed base technical requirements. These include:

- automated remote sensing and operations for various activities that occur outside of the plant;
- a small turbine generator to provide power at a remote pumping station;
- an incrementally expensive technology (membrane) that reduces the daily amounts of chemicals needed.

Scenario B

Financing Structure:

In example Scenario B, the following financing attributes/features have been

payment increases of 15 percent occurring every five years (a three percent per annum increase that assumes the increase in customers would effectively absorb the impact to the existing customer base);

- a final balloon payment equal to 20 percent of the original Capital Cost and,
- an Equity Return calculated on an increasing basis to lower early year payments (10 percent return year one) but averages the Stated Equity Return over the term.

Operational Structure:

The operational structure is assumed to have no significant difference to Scenario A, except for items noted as additions under Scenario A.

As it is important that certain external variables are isolated and dealt with by the parties in the same manner (normally stipulated by the municipality in the request for proposal), we assume, in our example, that in both scenarios all costs were required to be

estimated over a 20-year term and escalate based on the municipality's estimates of growth. Also, as typically required within the RFP, all costs were fixed at the base year — Year One, subject only to indexing based on inflation or other such mutually agreed index.

Outcome

Based on the above example, a Life Cycle Costing analysis, contrary to the lowest capital cost analysis routinely used by municipalities, would support the selection of Scenario A.

In this example there are a number of determining factors that were used to highlight what a Life Cycle Costing analysis can reveal:

Benefits of Step Payments

While the benefit of stepping up debt servicing payments, as provided in Scenario B, has an intuitively acceptable argument (the matching principal) it is a costly way to defer principal payments.

This deferral increases the length of time the debt is outstanding on the project and consequently the interest costs.

While the argument can be made that it allows a municipality that is currently cash strapped the opportunity to still acquire a needed service (which in and of itself may out weigh the additional cost of acquiring it in this manner) the Life Cycle analysis provides the tool to measure such cost.

Capital versus Operating Cost

One of the largest benefits of this type of analysis is the highlighting of the economic trade-off between up-front capital costs (including the cost of carrying the additional financing) that yield lower operating costs versus lower capital costs and higher operating costs.

As a component of the analysis, our example demonstrated that the net annual operating savings over the 20year period were greater than both the additional capital cost and its related carrying charges.

While this same type of payback analysis can be completed on an individual basis (and should be), a Life Cycle Costing analysis can measure these effects within the confines of the specific assumptions made that effect all of the variables.

Weighting of Returns

percent) on its equity contribution in the early years, Scenario B will require returns greater than the average later in the term of the contract to achieve the overall average.

As with the deferment of the debt, the deferred equity results in a more expensive form of financing on a Life Cycle basis.

While the decision in the example was materially influenced by three major factors, there are many more structural and external factors that can and will influence any decision made by this methodology.

Effects And Influences

Nominal Interest Rates

During periods of higher nominal interest rates (i.e. debt and/or equity rates) the net present value can be significantly influenced. In example, a \$20 million project that has a 20-year weighted average cost of capital (WACC) of 15 percent and is being discounted at 13 percent, two percent points lower than the WACC, will have an NPV of \$22.479 million.

While the NPV of the same project completed during a period of lower interest rates which provide a WACC of 10 percent, and discounted based on the same differential (two percent) will be approximately \$405,000 more at \$23,074 million.

This differential, caused by the nominal interest rates, can be prejudicial and can inadvertently mask or enhance other factors in the analysis. As such, care must be taken to understand the impact of interest rate levels and their effects on the analysis.

Term

The longer the period of Life cycle evaluation, the less useful the analysis becomes. This is the result of several contributing factors. First, the further out cost estimates are, the greater the inherent errors.

Second, later year assumptions can By not taking its required return (17.5 materially influence NPV cost values, particularly during periods of low interest rates (and therefore low discount

Underlying Assumptions

This type of analysis relies heavily on the underlying assumptions which must be made.

With many of the variables, what may be considered a small change (i.e. a change in the inflation rate assumption from two percent to three percent) may in actual fact be a significantly contributing factor.

For example, an erroneous inflation rate assumption, with two projects having substantially differing cost ratios between guaranteed costs (i.e. a fixed rate of interest) and non-guaranteed costs, could lead to the highly nonguaranteed costs proposal being incorrectly judged.

In any analysis the underlying assumptions must be constant between the alternatives under review and based on the best possible information available at the time of the decision.

The above examples and discussion was designed to highlight the advantages, potential disadvantages and the areas that can significantly influence Life Cycle costing analysis.

Applied appropriately, Life Cycle Costing can provide an economic determination that will allow municipalities to properly understand and measure the inherent economic risks, advantages and disadvantages in alternative solutions to the acquisition of goods and services. ■

Business Manufacturing & Production Costs: The Canadian Advantage

BY | Stuart MacKay & Glenn Mair

There is a widespread belief that, in comparison to the United States, Canada is a high-cost country in which to do business. This belief reflects long-held perceptions about labour costs, productivity, population densities, distances to markets, and other factors. The United States has been traditionally viewed as offering lower manufacturing and production costs. This is the perception, but

how well does it square with reality? Do Canadian manufacturing and processing firms really have a built-in cost disadvantage in comparison to the United States and other countries?

To address this question, KPMG Canada has for the last four years undertaken a series of comprehensive studies on the relative costs of doing business in different cities throughout Canada and the United States, for a wide range of manufacturing and processing industries.

Comparative costs are becoming more and more important in today's global business environment. Even modest variations in transportation and communication costs can add up to a major difference in the bottom line. Many business costs are location-sen-

sitive, and all of them must be considered in the business location decision.

KPMG's most recent study of this nature, The Competitive Alternative: A Comparison of Business Costs in Canada, Europe and the United States, was released in October 1997. This study compares the overall costs of doing business for eight manufacturing and processing industries, in seven countries — Canada, France, Germany, Italy, Sweden, the United Kingdom, and the United States. KPMG analyzed the major location-sensitive factors that drive the relative costs of doing business in each of these countries.

KPMG included 27 North American cities in the 1997 analysis — 17 in Canada and 10 in the United States. In recognition of the increasingly global nature of business, we also examined 15 cities in five industrialized Western European countries. We studied a total of 42 cities in depth, looking at eight



STUART MACKAY, left, and GLENN MAIR are members of the professional services firm KPMG, located at the firm's Vancouver B.C. office. They can be reached through KPMG's Location



and Investment Strategies Practice by calling (604) 691-3000, or at the following e-mail addresses — ckay@kpmg.ca or mair@kpmg.ca.

representative industries in each city, for a total of 336 case studies (see "Study Overview" chart).

Methodology

Each business was assumed to have sales of more than US \$10 million, and at least 90 employees. The facility was assumed to be established on a five-toten acre site, in a suburban area zoned for light-to-medium industrial purposes. KPMG used standard accounting assumptions to generate pro-forma statements, treating each business as a stand-alone operation.

We also made the assumption that in each location, the manufacturing facility would produce the same quantity of output, then distribute it into North American and European markets to generate equal revenues.

A key issue in comparing costs among countries is their relative productivity of labour. Accordingly, we developed a labour productivity index, to enable us to compare all countries on an equal basis.

Representative businesses in eight different production industries—electronics, food processing, medical devices, metal fabrication, pharm- aceuticals, plastics, software telecommunication equipment — were compared in terms of total costs over the 10-year period. These industries represent a wide mix of manufacturing processing applications.

The KPMG analysis treated costs which are relatively location-insensitive (such as raw material costs and marketing expenditures) as constant for each location. These costs vary by industry, but they typically represent about one-half of overall operating costs. The other half of corporate costs — land acquisition, construction, labour, benefits, electricity, transportatelecommunication, interest, depreciation and taxes - were analyzed and compared in detail.

Many factors other than corporate cost, such as the quality of life, personal safety, and personal taxation, to name a few, are also key to the business location decision. While our study focuses on comparing corporate costs, these other considerations also need to be factored into any analysis of specific business opportunities.

Overall results

KPMG found that, when all the cost factors are accounted for, Canada offers the lowest-cost business locations. This finding holds for all eight of the manufacturing and processing industries examined. The other countries, in order, are Sweden, the United Kingdom, the United States, Italy, France and Germany.

The size of the Canadian advantage varies by industry, and is generally greater in industries with higher research and development components, and where skilled labour requirements are relatively large.

Comparison of Costs

Initial Investment Costs. In making a location decision, one of the first fac-

STUDY OVERVIEW

MANUFACTURING INDUSTRIES EXAMINED:

Electronics Food Processing Medical Devices

Metal Fabrication Pharmaceuticals

Software Telecommunication Equipment

Plastics

JURISDICTIONS STUDIED:

Canada

Calgary, AB* Charlottetown, PE Edmonton, AB Halifax, NS* Hamilton, ON London, ON

Moncton, NB Montreal, QC* Ottawa, ON Quebec City, QC. Sarnia, ON

Sudbury, ON St. John's, NF Toronto, ON* Vancouver, BC Winnipeg, MB

Saskatoon, SK

France Grenoble*

Toulouse*

Valenciennes*

Germany

Darmstadt*

Dresden*

Dusseldorf*

Italy

Avezzano*

Modena*

Turin*

Sweden

Goteborg*

Karlskoga*

Malmo*

United Kingdom

Cardiff*

Manchester*

Telford*

United States

Austin, TX Bellingham, WA Boston, MA*

Colorado Springs, CO*

Columbus, OH Minneapolis, MN Norfolk, VA* Raleigh, NC

Sacramento, CA Scranton, PA*

LOCATION-SENSITIVE COST FACTORS EXAMINED:

Industrial land Construction

Labour

- Wages and salaries

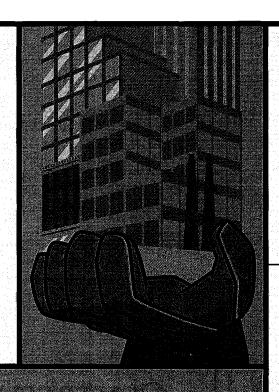
Transportation/distribution Interest & depreciation Income taxes

Electricity Telecommunication - Statutory benefits - Other benefits

Other taxes

^{*} Included in the international comparison.

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tors to be considered is initial investment costs, including land acquisition and building construction costs. Canada and the United States hold a siggeneral advantage European countries in this area. The United States has the lowest land prices among the seven countries examined, while Canada enjoys the lowest construction costs. At the other end of the scale, investment costs are highest in Germany, where land costs are approximately twelve times those of the United States.

Labour Costs. Significant differences also exist in labour costs, including wages, benefits, and wage-based taxes and levies. In total, labour costs represent more than one-half of locationsensitive costs. Labour costs are lowest in the United Kingdom, followed by Canada, after allowing for productivity differences.

Even the productivity advantages of

Germany and the U.S. are not enough to offset the cost of high wages and benefits in those countries.

Italy has the lowest base wage and salary levels, but has the highest level of employer-paid benefits and wagebased taxes.

Transportation and Delivery Costs. The UK and Germany have the lowest transportation and delivery costs among the countries examined. Germany holds a cost advantage in road transportation, partly because of its central location within Europe and partly because of its large population. The UK holds a cost advantage in terms of sea transportation. Canada, Sweden and Italy are at some disadvantage in terms of road transportation costs, since these countries are more distant from major markets within their continent.

Electricity Costs. Sweden, followed by

Canada, has the advantage in electricity cost. Both countries have plentiful sources of hydro-electric power.

Telecommunications. The cost of long distance telecommunications in the United States and Canada is much less than in most European countries. Free local calling in North America also adds to the North American advantage.

Financing costs. Financing costs may also influence relative costs. In this area Canada has a distinct advantage; its low financing costs reflect both low initial facility costs (resulting in lower borrowing requirements) and low interest rates. Low interest rates in France and Sweden help to offset the higher initial borrowings required in those countries. The United Kingdom has the highest borrowing costs, due to a combination of high interest rates and high required borrowings for land and construction costs. In the United



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States, low initial borrowings from low land and construction costs are partially offset by higher interest rates.

Depreciation charges. Depreciation charges, which factor initial facility construction costs into operating costs over time, are lowest in Canada and the U.S., given the lower construction costs in those countries.

Corporate Tax. Canada, France, Sweden and the U.K. all offer effective combined corporate income tax rates for manufacturing and processing of less than 35 percent, providing a significant advantage over the higher rates of 50 to 60 percent in Italy and Germany. High property-based taxes in France and the UK partially offset their income tax advantage, leaving Sweden and Canada as the two countries offering the lowest relative corporate tax burden for manufacturing and processing.

Results by individual city

The KPMG study also draws comparisons on a city-by-city basis. Based on the average of the eight industries, Canadian cities occupy the first fourteen places among the 42 cities examined.

The four lowest-cost cities are all located in the Atlantic region of Canada. Quebec and Prairie regions are also very cost-competitive, followed closely by Ontario and by British Columbia.

Even the highest-cost Canadian city, Vancouver, is significant less costly than all of the ten U.S. cities studied.

Among European cities, the most cost-competitive locations are in Sweden: Karlskoga Gothenburg, Malmo. Germany, the highest-cost country, also has the highest-cost cities: Darmstadt and Dusseldorf.

Within the United States, the lowestcost cities are in the Southeastern United States. Norfork VA, Austin TX and Raleigh NC have the lowest costs in that country.

Conclusions

Every one of the countries studied has some comparative strengths.

Canada is the first-ranked country overall, and for each of the industries surveyed. Low land and construction costs, combined with low interest rates, produce the lowest initial investment costs. Labour, electricity and telecommunication costs, as well as income tax rates and Research & Development (R&D) tax incentives, are all highly competitive.

France ranks sixth among the seven countries in terms of cost. One area of advantage stems from its central location, which results in low-cost road

transportation to European markets. Also, because France is the only European country examined to offer specific tax incentives for R&D activities. it is relatively more attractive for industries requiring significant R&D activities.

Germany's seventh-place finish reflects the strength of its currency in recent years. However, Germany's central location within the denselvpopulated European market gives it a

Osciali Comparison of Poles Costs for All Industries, by City

icercentage cost advantage ruis: tive to U.S. four-city average)

andomierine:

Halifax (7.5)

Ginario descorrir (7-1)

Moneter (6.8)

Quene: Cir (E.S.

Edmenton (F.d)

Sisteman (ii 4)

Winnipeg (5.4)

Hamilton (4.4)

Sarnia (4.2)

Lordon (4.0)

Kan dikala 18-31

Goteborg (3.8)

Onawa (a.k)

Malmo (3 4)

Talenta (20)

Vanceuver (A.5)

Te ford (2.1)

Bard Herbill

Horfolk (1.5)

RELATIVE COST ADVANTAGES by Selected Countries

COST ADVANTAGE FOR:	AS COMPARED TO:									
	Germany	France	Italy	U.S.	U.K.	Sweden				
Canada	11.8%	8.7%	8.0%	5.4%	3.8%	1.8%				
Sweden	10.2%	7.0%	6.3%	3.7%	2.0%					
United Kingdom	8.3%	5.1%	4.4%	1.7%	ALE S					
United States	6.7%	3.5%	2.7%			en e				
Italy	4.1%	0.8%								
France	3.4%									

significant advantage in road transportation costs. Germany's labor productivity is high, but not enough to offset its high cost of wages and benefits.

Italy is fifth overall and is third among the European countries examined. Italy is generally more cost competitive than either France or Germany, and offers advantages over all the European countries examined in terms of construction costs.

Sweden, second overall, is the most cost-attractive of the European countries examined. It has affordable labour, low electricity rates, and competitive corporate taxation costs.

The United Kingdom, third overall and second in Europe, has as its major cost advantage a low total labor cost. The UK also offers relatively low overall operating costs, for both utilities and transportation.

The United States is fourth among the seven countries in overall costs. It has the lowest land acquisition costs, and is a medium-cost country for most other cost components. Labour costs in the U.S. reflect the relatively high levels of employer-sponsored benefits associated with private medical plan premiums. Telecommunication costs are much lower than in Europe, in part due to the competitive long-distance telephone market.

Other factors

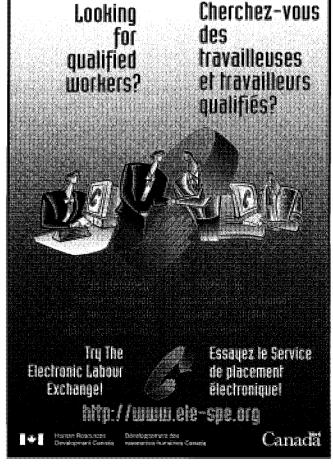
KPMG cautions that given the broad financial scope of this study, these conclusions are necessarily of a general nature. Specific site selection decisions require detailed analysis of individual circumstances and requirements, and readers are strongly urged to seek professional assistance prior to investing in any particular location.

Summary

Business cost comparisons provide a valuable "first filter" for firms in identifying those locations which merit a closer look. While final site selection requires detailed analysis of both costrelated and other factors, the KPMG study clearly demonstrates that, on the basis of costs, Canadian locations should be on the short list for many types of business operation.

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The Ontario Environment Industry:

Continuing to Meet Its Promise

BY Ed Mallet

In light of much speculation about the fortunes of the Canadian environment industry in recent years, and the impression that it has not lived up to its promise of becoming "world class," the Ontario Centre for Environmental Technology Advancement (OCETA) conducted a survey of environmental businesses within Ontario. This survey is an extension of OCETA's regional economic

study (1996) which was undertaken to determine the overall size and growth potential of environmental companies in Canada's Technology Triangle (CTT) — Cambridge, Guelph, Kitchener, and Waterloo. As a representative sample of the Ontario environment industry, the CTT respondents conveyed an optimistic outlook for their sector, despite the challenges of slower domestic market growth and increased uncertainty on the regulatory front.

Although several studies have been

published, current, meaningful information about the environment industry has been difficult to obtain. Given the positive findings of OCETA's CTT study, the *Economic Survey* (1997) was extended to companies across the province in order to provide Ontario-wide data. It will complement previous studies about the industry, the most recent being the much-quoted Ernst & Young report prepared for the Ministry of the Environment (MOE) in 1992.

It should be noted that a problem of

different definitions of the industry makes it difficult to compare information from one report to another. Some analyses include public sector activities, environmental departments of manufacturing companies, and a range of construction activities related to infrastructure, whereas other studies do not. The Ernst & Young report, as well as Statistics Canada's recently released preliminary data (1995) on the Canadian environment industry, both include municipal and other government segments in the scope of their studies.

For the purpose of the Economic Survey (1997), OCETA, with the assistance of the Ministry of the Environment's Green Industry Office and Statistics Canada, defined the "environment industry" as being comprised of only private sector companies that provide environmental products and services.

Using 1990 data, Ernst & Young characterized the Ontario Environmental Protection Industry as consisting of approximately 1,600 companies,



ED MALLET is President and CEO of the Ontario Centre for Environmental Technology Advancement (OCETA). He has held senior management positions with ICI Canada, and is a past President of Turbotak Technologies Inc. and consultant with Canadian Venture Founders. He has a PhD in Chemistry from Manchester University in England.

This article was prepared with the assistance of the

following OCETA staff: Doug Beynon, Terri Jackson, and Nancy Shepherd.

FIRST IN SPACE



with revenues of \$2.5 billion and 30,000 employees. Analysis of the results from the *Economic Survey* (1997) has indicated that private sector revenues in Ontario have more than doubled to \$5.8 billion in 1995. Statistics Canada data for the Canadian environment industry indicate that in 1995 the size of this sector was \$15.5 billion, up from an estimated \$11 billion in 1991. Most estimates position approximately 50 percent of the Canadian environment industry in Ontario.

Using Statistics Canada's numbers, this would place the size of Ontario's industry at approximately \$7.7 billion in 1995. The difference of \$1.9 billion between Statistics Canada's study and the *Economic Survey* (1997) is likely attributable to the exclusion of public sector revenues from this study.

Methodology

The survey was designed to gather data that fall into four main categories:

- Industry Profile: the distribution of companies based on size, product and service mix, and sub-sector classification.
- Sales Information: historic sales data from 1995-97, and forecast through the year 2000.
- Employment Information: employment trends, level of education, and wages.
- Market Information: analysis of

markets in which companies are currently conducting business, and those markets, domestic and export, in which they are interested in developing business.

Using all available databases and other sources, OCETA compiled a comprehensive list of 3,692 private sector companies that provide environmental products and services. The database was then further refined, and it was determined that 1,564 businesses were indeed "environmental" and still in business. Of these companies, 268 responded to the survey questionnaire, which was deemed an appropriate sample size for projections and trend analysis.

The Industry

In comparing the data gathered by Ernst & Young in 1990 and by OCETA in 1997, it would appear that the Ontario environment industry has not changed much in terms of total number of companies. This also is consistent with the findings of the CTT economic study (1996) in which data collected in 1995 and 1996 showed no real growth in terms of the total number of environmental businesses within that region.

However, CTT data did indicate a substantial change in the composition of firms; over 10 percent of companies recorded in 1995 were either out of business, merged, or out of the envi-

ronment industry in 1996, with a slightly higher percent of new companies identified as start-ups in the same year.

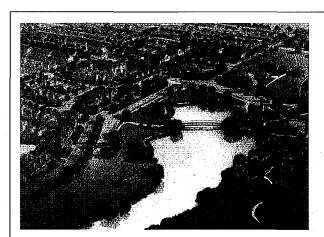
Based on the distribution of 268 respondents and the assumption that there are 1,564 companies in the industry, OCETA has been able to characterize the Ontario environment industry as follows:

- It is overwhelmingly composed of small and medium-sized companies (SMEs) with 89 percent having under 51 employees.
- The majority of companies are service-based, rather than product-based

 53 percent provide environmental service;
 31 percent provide products;
 and 16 percent provide both products and services (mixed).
- The industry is diverse in terms of its service and product offerings, but companies are concentrated in three sub-sectors: solid/hazardous waste recycling (21 percent), water and wastewater (19 percent), and engineering/consulting (15 percent).

Continued Growth

Analysis of the sales data provided by respondents for 1995 and 1996 indicates that the environment industry has grown at a rate three times the nominal GDP for Ontario (Figure 4). This has occurred during a period when it was widely believed that the industry was



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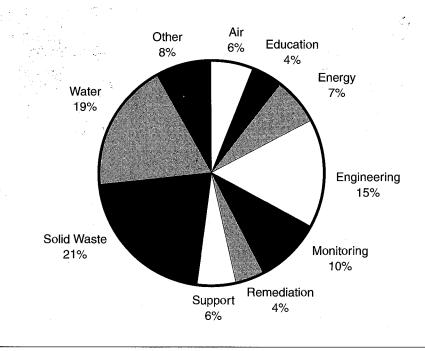
going through a critical contraction. The expected average annual sales growth rate from 1995 to 2000, made up of a blend of historic fact and forecast, is 15.9 percent compared to the 4.8 percent average annual sales growth rate for the nominal GDP forecast for Ontario. This compares favorably with other sectors, such as Motor Vehicles (4.3 percent), Machinery (4.1

percent), Chemicals (3.8 percent), Iron & Steel (3.2 percent), and Pulp & Paper (-0.1 percent). In the five years from 1995 to 2000, total sales for the industry are projected to be more than double from \$5.83 billion to \$12.18 billion.

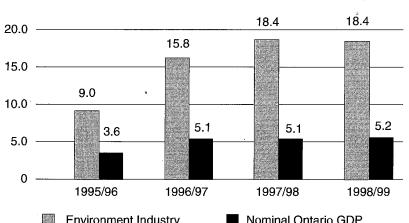
In terms of company size, SMEs (50 or less employees) indicated a five percent growth rate in revenues from 1995 to 1996, while large companies showed a growth of 14.4 percent. SMEs, however, appear to be driving the longer term average annual sales growth with a rate of 23.3 percent, forecast from 1997 to 2000, compared with a 13.9 percent average sales growth rate forecast by the large companies.

An interesting shift has taken place among product and service-based companies. The Ernst & Young survey (1992) indicated that from 1986 to 1990 the average annual revenue growth rate of product-based companies was in the range of five percent, which was half that of service-based businesses and a third the rate of companies providing both products and services. From 1995 to 2000 the average annual growth rate is expected to be 17.4 percent for product-based companies, compared to 14.5 percent for companies providing services and 15.1 percent for those providing both.

PERCENTAGE OF COMPANIES BY MARKET SEGMENT



SALES GROWTH VERSUS ONTARIO GDP Annual Growth by Percentage



Environment Industry Nominal Ontario GDP

Exports For Future Growth

In answering questions about their current market activity and those markets in which they are seeking to develop their businesses, a large percentage of respondents (96.3 percent) reported that they are currently active in Ontario, but only 9.3 percent indicated that they are interested in developing the provincial market.

A significant percentage of companies (over 40 percent) reported that they are currently active outside of Canada, with the U.S. as the top exporting target (39.2 percent), followed by South America (20.9 percent) and the Pacific Rim (20.1 percent). Within the U.S., the highest percentage of export activity was reported to be in the Northeastern U.S. (30.6 percent), which is understandable given its close proximity to Ontario, and similarities in geography, business culture, and environmental issues.

Small companies (less than 6 employees) rely predominantly on the Ontario market for their sales

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Fig mese iginamenten anminet Demo Empiro, Vice President, Pusitess Develogment Tras (etro Vice-anno 1-annevel-mes (etro) Vile-Selis percent), with 16.8 percent of their revenues generated in the rest of Canada, and only 7.7 percent outside of the country. For medium-sized businesses (6 to 50 employees), the majority of sales are still in Ontario (50.9 percent), with 23.1 percent in the rest of Canada, and 26 percent outside. The larger companies (over 50 employees), on the other hand, generate less than half their sales within the province (37.8 percent), selling more outside of Canada (39.2 percent):

Jobs, Jobs, Jobs

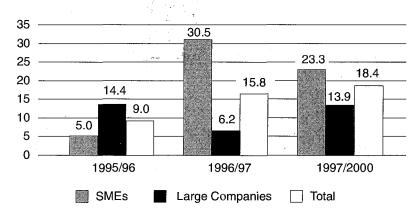
The average annual growth rate for employment is expected to be 10 percent from 1995 to 2000. The growth rate

from 1995 to 1996 was 1.7 percent, but is forecast at an annual level of 14 percent from 1997 through 2000. In the period 1995 to 1996, this low employment growth of 1.7 percent was in contrast to a revenue growth of 5.8 percent. The large service companies (primarily consulting and engineering) reported a negative growth rate of -3.9 percent, with the large product-based companies reporting a rate of 8.5 percent and SMEs, 7.2 percent. When contacted to determine why experienced negative growth and why they were anticipating positive growth by the turn of the century, several large service-based companies cited concerns regarding legislation and regulatory reform as contributors to their decision to consolidate and downsize. They believe, however, that these factors delayed work that will eventually require action; hence, the need for an eventual expansion in their workforce. Based on long-term growth projections, employment among SMEs is growing at a substantially faster rate (12.5 percent) than that of the larger businesses (6.8 percent).

In terms of education, employees in the environment industry are generally highly skilled, with almost half having post-secondary education and an average wage of \$41,407 in 1996, expected to reach \$47,240 by the year 2000. SMEs had the highest level of post-secondary education in the workforce at 74 percent. It is expected that with the growth of this sector the demand for educated, skilled workers will continue into the next century.

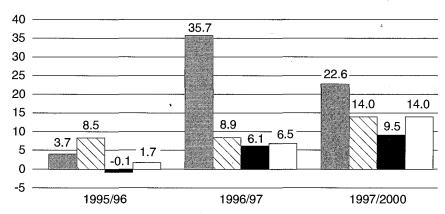
ANNUAL SALES GROWTH BY COMPANY SIZE

Sales Growth by Percentage



EMPLOYMENT GROWTH RATES BY COMPANY SIZE

Average Annual Growth by Percentage



Small Companies N Medium Companies Large Companies N Overall

The Future

The environment industry continues to demonstrate that it is a strong, dynamic sector with significant economic potential for the province of Ontario.

The growth in SMEs and productbased companies has proved to be more robust than that in the consulting and engineering segment which is more dependent on public-sector activity. This not only has implications for capital investment and manufacturing opportunities within the industry, but also demonstrates that public policies in support of the development of small and medium-sized companies are well founded.

The Economic Survey (1997) has established a useful benchmark for looking at future trends that can be tracked and compared with actual performance. It will provide valuable input for the policy making processes at both the provincial and federal levels, and it will help to focus economic development and job creation efforts. OCETA looks forward to developing a more complete picture of the environment industry over the next several years.