

INSIGHT INTO INDUSTRY

News of Industrial Advances in British Columbia

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In this Issue

- B.C.'s Economy Softens
- High Tech Lingerie
- Literacy Deficit
- Compensation and the Bottom Line
- Opportunities in the Soviet Union
- Do Canadians Have the Right Stuff?
- Calendar of Events

Dear Friends:



As 1990 draws to a close, we all look back on the challenges met with a strong sense of accomplishment. We also look forward to the coming year with a keen awareness of the competitive pressures being felt across every sector in the Province. I am confident that B.C. industry will continue to meet these challenges with a mix of aggressive market development, investment in technology and innovative management practices.

We at Industry, Science and Technology Canada are anxious to assist in your efforts. Our business services and our

sectoral and trade expertise could be of value as you begin to implement your business plan for 1991.

In the meantime, my staff and I want to wish you and your families a very merry Christmas and a joyful and prosperous year ahead.

Regards,

Victor G. Lotto
Executive Director

ECONOMIC TRENDS

By now everyone in B.C. realizes that they aren't having a very jolly time in Central Canada, and haven't had for a while. The story not making it through wire service reports though is that the recession is uneven and not all industries are in the red. The plastics, converted paper products, medical devices, pharmaceuticals as well as environmental equipment and service sectors are all experiencing continued growth.

And several mature sectors are struggling with the double whammy of

high interest rates and high exchange rates as well as fundamental structural change, including technological change. These include the tire and rubber sector, the steel sector, automotive parts, rail transit and related manufacturing, and the furniture sector. For some of these the recession could be as long and as deep as in '81. Note that none of these has a strong presence in the B.C. economy.

The experience over the past quarter and consensus outlook for the Western end of the country is quite a bit

milder. Here most industries won't be hit as severely as in the last recession.

Alberta was riding up the business cycle with improved oil and gas activity even before the situation in the Gulf. Evidence of their growing economy is the fact that their housing starts and in-migration are holding up.

Here in B.C. it's still a mixed bag. Tourism and retail sales are up over last year (back East both these are down) while the housing market and



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the wood products industry are down. Meanwhile, the unemployment rate is up but employment numbers still remain strong. There were 25,000 net new jobs added in the last 12 months while 108,000 were lost in the rest of Canada.

A plus for B.C. is the proximity to Washington State. While pausing after a vigorous expansion phase, they are not participating in the broader U.S. slowdown. The prospects of key firms, including Boeing and Microsoft, are positive for '91.

In spite of this qualified good news, we still face risks linked both to the timing and length of the U.S. recession. The weakness there, which like Canada started in the eastern states, will likely precipitate a downturn in B.C. in the first quarter of '91. Positive net growth is expected to return to most sectors by the third quarter of next year. The chief area of concern is the forest products industry, and this means problems for areas outside the lower mainland. This sector may not recover until the last quarter of '91.

While things have been slowing down in the U.S., an international recession is not in the cards. Growth in Japan and other Pacific Rim countries is constrained by the increased oil prices but continued growth is expected in '91. And nearly 40% of B.C. exports are to these countries.

Industrial output is holding up very well in Europe (the destination of

15% of B.C. exports) with no expectations for recession in '91--except in the United Kingdom--given oil prices under \$30 a barrel. West Germany is on a sound eco-

nomie footing, but there will still be inflationary and unemployment stresses related to unification. These factors are expected to dampen rather than eliminate their growth next year.

TECHNOLOGY

Makin' Lingerie: The Sensitive High Tech Approach

Terms like "piece work" and the "garment industry" evoke visions of dimly lit sweat shops where the most high tech equipment is the sewing machine and employees are viewed as slave-like extensions.

This is far from the case at Vancouver's **Adagio Enterprises**. Adagio makes high quality women's lingerie that sells in exclusive stores from Paris to Tokyo. What makes Adagio unique within the industry is its combination of computer technology and employee sensitivity.

The "pieces" in Adagio's system are the procedures required to make a given garment. A silk teddy, for example, might have 9 separate procedures to its assembly: closing the sides, attaching shoulder straps, etc. Each of these procedure "pieces" has a "work time" (based on actual timed analysis) assigned to it which pays a set price per hour.

While sewers are guaranteed from \$6 - \$9 per hour, they have the incentive to be as productive as possible; they are paid by the "work time" associated with each piece, not the actual time taken. Productivity averages 110% of the work time,

with some sewers in the 125% range. In this system the company knows labour costs for each garment: it's just the product of the "work time" and set price.

Each garment has numbered tags which allow the clothing to be tracked by the client order. Sewers tear off procedure "piece" tags as they are completed and the data is entered into the computer. Employees can pin-point the status of orders, or even portions of orders, without having to run around the facility.

The system estimates the real cost of each garment in terms of material, labour, accessories, etc. Operation Manager Shab Dayan explained: "a lot of people in the apparel industry just estimate the cost of a given garment in their head without calculating an accurate cost of direct labour or making allowances for defects in material, accessories, etc. They can get some nasty surprises when the year end financial statements come in showing the actual costs."

All this is not to say that Adagio only thinks of its workers in terms of productivity figures. Dayan describes Adagio's corporate philosophy: "ev-

" What makes ADAGIO unique within the industry is its combination of computer technology and employee sensitivity"

everyone contributes to the success of the firm, not just the managers. Within the garment industry it was often thought that because workers can't speak the language that they didn't understand what was going on, or have any ideas." Shab listens when a worker has problems with the "work time" of a procedure. He either helps her figure out why she's having a problem, or, if it's universal, adjusts the "work time".

Adagio's commitment to its employees is also evidenced by its track record during slow times. Because Adagio's sewers are very productive the company will take on contract sewing, which doesn't make the company anything but keeps its sewers working. Adagio has also made use of Employment and Immigration Canada's Industry Adjustment Service to keep people on part-time while UI benefits fill-in

the unworked days. Dayan: "Sometimes we ultimately have to lay some people off, but they usually come back."

Adagio's combination of high tech wizardry and commitment to its employees is allowing it to take on the increased competition of today's global marketplace, while keeping a human face on efficiency.

MANAGEMENT PRACTISES

The New Canadian Deficit: Literacy

This isn't an article about "highly qualified personnel." It's about the fact that a lot of Canadians can't read or write well enough to do their jobs. "Literacy deficits" in the labour force have come to the attention of business because they impact negatively on production, quality, productivity and ultimately competitiveness. In a nutshell, functional illiteracy is hitting the bottom line hard -- about 70% of companies feel it. For these firms **one in ten employees is functionally illiterate!**

Today a distinction is made between basic literacy and the functional literacy required by workers on the job. Functional literacy requires not only basic literacy but also includes a level of reading, math and analytical skills necessary to function, learn and adapt in today's changing workplace.

What is our "literacy deficit"? An '89 survey showed that 7% of Canadi-

ans can't read at all. Even more critical to Canadian competition, 31% who can read are functionally illiterate. And who knows what portion are technologically illiterate.

The Conference Board has tried to relate this problem to business productivity and competitiveness. Their analysis indicates that major consequences include:

- errors in inputs and processes;
- difficulties in reassigning staff;
- productivity losses;
- declines in product quality;
- slower work;
- impeding training and the acquisition of new skills;
- difficulty in understanding instructions;
- difficulties in using computers and other advanced technology;
- slowing down the introduction of new technology.

Literacy deficits impede the key

strategic objectives of companies. Technological change requires that firms alter production methods or change product lines. Such readjustments require significant training, and literacy is a prerequisite to most kinds of training.

These are serious if not life threatening business liabilities in an era of rapid technological advancement. No sector, no firm and no area of the province is left untouched, either directly or indirectly through supplier/customer linkages.



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What about the future? Functional illiteracy is highest in the 35-54 age group. So the problem isn't going to "retire" soon. And it isn't likely it going to be easier to hire the functionally literate in the 1990s when

- B.C. has one of the highest high school dropout rates in the country.
- High levels of illiteracy exist even among high school graduates.
- A large portion of students are learning English as a second language.
- A declining number of young people means fewer young people entering the workplace.

While individual firms may be able to use careful recruitment criteria to screen out those unable to read or write, given the number of the functionally illiterate people in the workforce, there might not be anyone left to hire. Some firms are unhappy with the quality of Grade 12 education in their area, and feel grade 12 isn't sufficient evidence of functional literacy.

Companies are beginning to adjust their recruitment standards in recognition of the illiteracy issue. But because of increasing importance of literacy in the workplace, most respondents have raised their recruitment standards in the last few years or are planning to. But the target is moving further down the field. What is "literate" continues to be redefined by the pace of technological change. As the benchmark rises, so do the demands for retraining and deploy-

ment - even if firms can claim a highly literate workforce.

No one has a quick and easy solution. One thing is certain though, solutions won't come without the cooperative effort of business,

Compensation + Recognition = Satisfaction

The traditional notion of compensation was: punch in at 9, punch out at 5, get a paycheque every two weeks and maybe a bonus at Christmas. Managers, however, got corner offices, executive washrooms, reserved parking spaces, performance bonuses, company cars and stock options.

Today there is a growing realization that all of a company's employees are first and foremost valuable people. People who have ideas, like to be involved in exciting initiatives, know more about what they do than anyone else, like to be acknowledged, want to be informed, and have career aspirations. People are more productive, committed and satisfied when these needs are recognized and utilized.

As organizations move to improve their quality, customer satisfaction, responsiveness and efficiency, reward systems are being reworked to draw on the untapped resources of their employees and to encourage activities that reinforce the firm's competitive strategy.

labour, educators and government. This is critical to assure that Canada will have the quality workforce it needs to compete internationally, and to enhance our quality of life.

Nexus Engineering, B.C. makers of electronics for the cable television industry, has enjoyed phenomenal success since its creation just 8 years ago. Success, in part, tied to its innovative compensation system.

Within Nexus' Burnaby facility there are no offices. Everyone, including the CEO and president sit out in the open. Plush corner offices and up-scale furnishings that traditionally divide the executives from the "underlings", and inhibit communication, don't exist. What's more, people from various departments are interspersed throughout the floor plan so that no one loses sight of the others' needs within the organization.

Employee compensation has two components: base pay and incentive pay. Incentive pay comprises 15% of the total compensation for junior staff, increasing to 50% for senior

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managers. The incentive portion is tied to factors, with defined objectives, that are directly under the employees' control, eg: on-time delivery, product returns and production volume. Dave Rowat, Vice-President for Corporate Development, stresses that "these incentives are not bonuses but are part of the employees' regular wages".

Rowat's comment highlights a distinction between compensation and recognition. **Compensation** is the exchange of a fair wage for a fair day's work. **Recognition** - which can take the form of everything from public announcements, to awards, to cash bonuses - is acknowledgement of work done outside the employee's sphere of responsibility.

B.C. Tel's STAR (Suggestions That Achieve Results) program, is a good example of a recognition system. Employees make suggestions stating a specific problem, all the background information to the problem and how they propose to solve it. For the suggestions that are used, the company pays cash bonuses of 10% of the cost savings to the company in the first year, to a maximum of \$20,000. As of last year, B.C. Tel had issued cheques totalling over \$300,000 which represented over \$6 million in savings to the company.

The moves to more innovative compensation and recognition systems reflect the realization that a company's biggest asset is its people. It starts with

trust, which might take a while to establish. But the paybacks, financially and personally, are increas-

ingly a necessity, not a luxury.

EXPORT MARKETS

Open for Business, Comrades

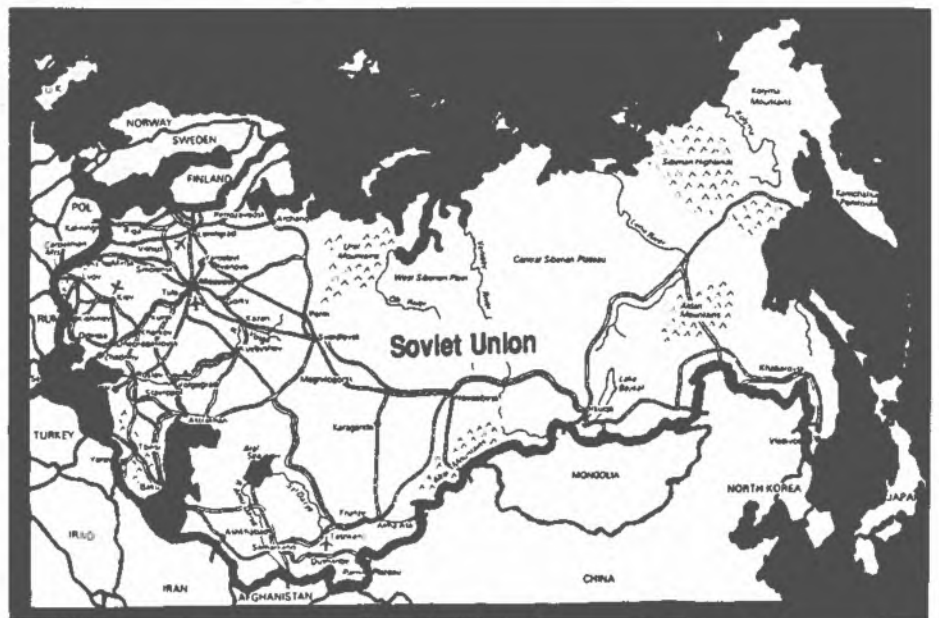
Perestroika in the Soviet Union is changing more than the social and economic order. It's also unfolding opportunities for experienced Canadian businesses to get a foothold in a fast evolving market.

And it's a big, mostly concentrated market. The world's largest country has a sizeable population of 285 million. This is concentrated in 25% of its area, in the industrialized European republics.

Perestroika doesn't mean that all

the old ways have been cast off. Bureaucratic lines of authority remain and still pose challenges for Western businesses. There are about 6,000 enterprises authorized to engage in trade, but their authority is under constant review and they often have serious limitations. Joint ventures are still the preferred way of doing business. Lack of ruble convertibility and currency controls still pose challenges for Western businesses.

A liquidity crisis is emerging and will likely continue through '91. This



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means that Canadian export sales next year can only be on a credit basis. While 1992 looks to be better for trade, the Soviet market is still a challenging one even for those firms that are export experienced and that have the ability to commit themselves for the long term. A cultural connection helps but clearly isn't enough to clear all the hurdles.

A declining birth rate is starting to have serious consequences on the growth of the labour force in industrialized regions. This in turn is emphasizing the need to use labour effectively by increasing productivity and competitiveness.

Wheat, petroleum equipment/services, mining products/services and agricultural products/services, are the biggest Canadian exports to the Soviet Union. Several other areas have been identified as the promising areas for export growth.

Advanced technology products and services are mainly provided by other COMECON countries. But good

opportunities exist to meet growing demand for a variety of competitively priced electrical and electronic equipment exports including telephone equipment, switches and data communications.

These reflect the fact that the Soviet telecommunications system is out of date, is inadequate to meet current needs and as this is recognized as a necessary condition for business growth, is an increasing priority for development.

Europe provides most of the forest products equipment and services to the Soviet forestry industry. This is one of the top four key industrial sectors with significant wood production and currency-earning exports. However, export competitiveness has been hit by increasing wood handling costs.

Lack of technology to effectively sort and ship various species is the weak link.

Addressing low productivity and environmental concerns requires major investments in both sawmills and

pulp and paper. This means good prospects for equipment and services for pollution abatement, logging, sawmill, wood drying, pulp and paper.

Renaissance Eastern Europe (REE) is a new External Affairs trade and industrial development program designed to increase Canadian companies' business in Central and Eastern Europe as well as the Soviet Union. REE shares costs associated with market penetration and new forms of business cooperation for firms that have already taken advantage of PEMD (Program for Export Market Development). Letters of intent with Soviet business are necessary prerequisites for participation in REE.

The REE program also emphasises trade missions, trade fairs and business information seminars. Two major trade missions are planned to Soviet trade shows in 1991. EXPOCOMM in June '91 is a trade show for computer and telecommunications companies. The Construction Technology and Building Materials Show in September '91 targets firms in the resource industry including forest products, mining, and oil & gas as well as those in transportation, cold weather technology and tourism related construction. Potential participants for both trade missions are being recruited now.

For further information:

- * Contact the ISTC Business Service Centre
- * Read *Doing Business in the Soviet Union* by Price Waterhouse

Shippers Take Note

If you are new to exporting to the U.S. and if you are in the food, flower or beverage business, you may be interested in a *Rates and Methods Guide*. This publication was recently prepared by ISTC. For more information contact the ISTC Business Service Centre.

"The old myths about the Canadian and American cultural differences in the value placed on achievement, merit, competition and free enterprise simply can not be sustained... the data turn up no real differences."

SPECIAL FEATURE

Banishing a Hoary Myth - the Lack of Canadian Competitiveness and Entrepreneurship

A Canadian business owner recently made the statement, "If it wasn't for the commitment I have to the people here and if it wasn't for the fact I love this country, I would have been gone by now because we really can't compete." You've probably heard similar laments about our attitudes to technology, lack of investment in training and R&D, dependence on government, saving rather than investing, as well as our caution, reserve and restraint. In a phrase, Canadians lack "the right stuff" to compete. If this is true, we don't need a fortune teller to know what this will mean to our standard of living.

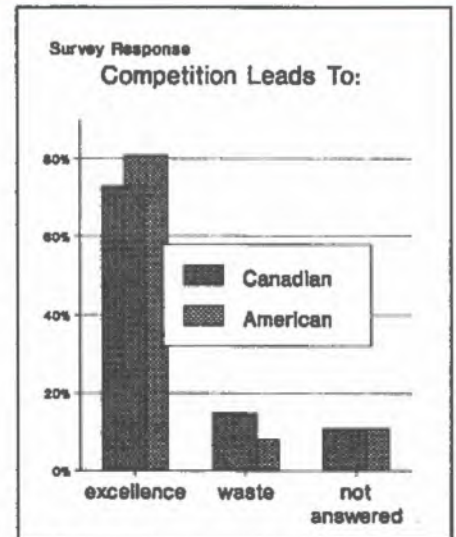
But thankfully, it isn't true today, if it ever was. Our lack of a competitive spirit is a hoary myth that derives from the theoretical inspections of people bent on discovering the distinct Canadian identity. It is often summarized as "we are different from Americans in that we are inferior competitors."

Joseph Fletcher of the University of Toronto has shed some light on this recently in a paper prepared for ISTC, **Canadian Attitudes Toward Competitiveness and Entrepreneurship**. His comparative analysis of Canadian and U.S. values reveals marked similarities on the value of hard work, achievement and excellence; the importance of private enterprise; the

benefits of a profit-based system; and the belief that competition leads to better performance.

Fletcher writes, "The old myths about the Canadian and American cultural differences in the value placed on achievement, merit, competition and free enterprise simply can not be sustained... the data turn up no real differences on any dimension relating to economic life." He concludes, "it would be a mistake to characterize Canadians and their culture as somehow lacking the basic value orientation necessary to meet the economic challenges of an increasingly competitive world marketplace."

That's reassuring. So Canadians endorse the necessary values. But entrepreneurs and business managers and governments must channel these values. They must value **technical expertise** and **champion innovation** with all its risks; anticipate, accommodate and even encourage **change**; seek opportunities with a **world wide focus**; value **persistence**; allow **flexibility** in work packages and in allocating resources; work **creatively** with unions; allow for **participative management**; insist on investing in **R&D and training**; enact **sustainable development**; and demand of managers an awareness of "**best practices**". Not everyone realizes that there is a revolution under way in the capitalist



world. While they are throwing off the chains of communism in Eastern Europe, competition in a world economy is forcing "western" business to throw off the chains of old practices. The impact on Canada from the revolution in business practices is likely to be far greater from this than from the changes in Eastern Europe. Technology is establishing new productivity standards; **where we do business and how we do it is changing fundamentally**.

And yes, we are very vulnerable -- make no mistake about it. The prosperity of our children, our environment and the strength of our social systems hinge upon the prompt and aggressive pursuit of competitiveness. We may indeed have "the right stuff", but we need to mobilize it within a business climate which can ensure results.

Calendar of Selected Events

Service Sector and Free Trade, January 16, 1991, Vancouver. A joint seminar with the Institute of Management Consultants to assist Institute members with concerns on exporting services to the U.S. Contact: Brian Anderson, 666-1414.

Marketplace for Consulting Services, January 21 & 22, Engineers Club, Vancouver. Breakfast meeting and opportunity for "one-on-one" meetings with Canadian Trade Commissioners from Santiago, Caracas, San Jose, Bridgetown, Bogota and Mexico City. (Latin America and Caribbean Regions) Contact: Del Bacon, 666-1437.

NEBS Apparel Representative Locator Mission, January 28-29, Seattle. An International Trade Centre Mission for B.C.-based apparel and accessory exporters under the NEBS (New Exporters to Borders States) program. The mission will meet with representatives in Seattle. Contact: Rick Stephenson, 666-1443.

Disaster/Business Resumption Seminar, January 30, Vancouver. A seminar on planning for business resumption in the aftermath of a major disaster (earthquake) or a more minor one (fire, flood, computer theft, etc). Jointly presented with the Vancouver Board of Trade. Contact: Lynda Peach, 666-1426.

Trade Shows Made Profitable, February 13-14, Vancouver. This seminar provides practical information on maximizing a business' dollars and resources invested in trade shows. Seminar leader is Barry Siskind. Contact: Rick Stephenson, 666-1443.

NEBS Giftware Mission, Feb 19-20, Seattle. An International Trade Centre Mission for B.C.-based manufacturers of giftware, toys and novelties. The mission will meet with representatives in Seattle. Contact: Rick Stephenson, 666-1443.

Europe 1992 Environmental Industries Seminar, February 26, SFU's Downtown Campus at Harbour Centre, Vancouver. This International Trade Centre seminar focuses on the potential that exists in Europe for Canadian firms in the field of environmental technology and services. Contact: Jacalin Crosfield, 666-1440.

Doing Business in Asia Seminar, February 27, Abbotsford. This seminar is designed to assist business people in B.C. communities who are interested in doing business with Asia. Contact: Don Cameron, 666-1436, or Lynda Peach, 666-1426.

NEXOS Clothing and Apparel Mission, March 10-13, Dusseldorf, Germany. External Affairs and International Trade Canada is recruiting clothing and apparel manufacturers across Canada for an initial foray into the European marketplace under the NEXOS (New Exporters Over Seas) program. Contact: Del Bacon, 666-1437.

This newsletter is published quarterly. For more information contact:

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