

High-tech export key to survival

By Deborah Read

Manitoba's computer firms are unlikely to ever rival multi-national electronic giants like IBM or Data General, even though they sell their products world-wide.

This province is still "pretty small potatoes on the world scene," said Michael Clarke, manager of electrical and mechanical industries for Manitoba's department of economic development and tourism.

There are 55 electronic companies in Manitoba, making a variety of electronic units, including computers, but "about 10 per cent account for 70 per cent of the employment (in the industry), and very few of those are locally owned and controlled," said Clarke.

Since the domestic market is not large enough to be the sole support of a Canadian electronics industry, more than 75 per cent of these companies depend heavily on exports. Half of them make the majority of their sales outside the country.

"The markets available to us are as remote from here as any place else in the world, so there's no market restrictions. Our competition is other countries, not other provinces," said Clarke.



Computers are rapidly becoming a tangible presence in our work lives, our schoolrooms, and even our homes. An entire generation of children are growing up for whom the computer is the television set of the 80's — a luxury that is fast becoming a necessity. This four-part series looks at the effects of the new computer age.

For instance, France is now working on a semi-conductor that may make possible a system superior to Canada's Telidon videotext system, he said. "If they attack us in the world marketplace, will we make it? I can only hope we will, and be able to get our fair share of that business."

The provincial government wants to encourage industry here to move into high technology; it's been official policy for several years. It uses a combination of "moral suasion" and government assistance programs to that end, said Clarke.

But most Canadians identify "Silicon Valley North" — the Ottawa Valley — as the Canadian home of microelectronics. It receives the most publicity because many of its companies are Canadian-owned and controlled, said Clarke. "That's what makes them interesting and exciting."

Here in Winnipeg, although two of the largest microelectronics firms are U.S.-based Sperry-Univac and Burroughs, the biggest is still home-grown Northern Telecom Canada Ltd. But, "if you take Northern Telecom out of the statistics, there's not much left," said Clarke.

Few of the Manitoba electronic firms are involved in the burgeoning, and over-crowded, home computer market. "We're talking about an industry that didn't exist five years ago," said Clarke. "There are some reports now that the home computer market is saturated. The logical extension is to move into small business computers, but then you start to rub up against the establishment; companies that were strong in the 60s and are even stronger now."

Winnipeg's half-dozen computer firms such as Patrick Computer Systems usually concentrate

Business

on a specialty line. For example, Kraus Industries Ltd. makes a computer for industrial application, and Homestead Computer Services Ltd. for agri-business. "No one (here) is pretending to be in the Apple or Commodore business," said Clarke. "The people who tackle the big market are asking for big competition."

World seller

All Winnipeg firms sell their electronic equipment outside Canada. "None of these firms exist on the local market; you would never survive," said Clarke.

Northern Telecom, which manufactures electronic telecommunications equipment, sells its equipment in Canada, the U.S., Japan, and South Korea, among others. "We're bidding on a few others," said plant manager Klaus Floch.

"The business volume that one can get in Canada forms a good base; you can certainly stay viable on a small scale. But you'd have some difficulty expanding in the Canadian market."

A naval defence systems computer made at the Sperry-Univac plant on Saulteaux Cr. is also a world-seller.

Sixty-five assemblers at the plant spend their days on the painstaking, eye-straining work of assembling some 23 different units, including the micro-computer.

One circuit board assembly alone, "we build about 1,000 to 1,200 a week and send them to the U.S. Navy," said engineering manager John Westergren.

The computer — called the UYK-502 — is currently used in Canada, the U.S., Great Britain, Japan, Australia and Malaysia. Ten to 15 other countries, mostly NATO members and countries in southeast Asia, buy other Sperry-Univac electronic items manufactured in Winnipeg.

The naval defence computers are used to control combat systems, air traffic, gunfire, radars, sonars, data processing and message processing, among other duties, said Westergren.

U.S. market needed

"The Department of National Defence here in Canada cannot support a defence system industry; that's why we sell to the U.S. and other friendly countries," said Westergren. Restrictions from both Canadian External Affairs and the U.S. State Department — since Sperry is a U.S.-based company — determine who may buy, but "our markets are governments," said Westergren. The company also sells to other computer companies which have contracts to supply either the Department of National Defence in Canada, or foreign users.

Sperry-Univac, which came to Winnipeg in 1977, employs 130 people here. A second Canadian factory is in Dorval, Que.

"We find the people we need are right here in Winnipeg," said Westergren. The engineers are University of Manitoba graduates, the technician force from Red River Community College. Others received on-the-job training, he said. "We are very satisfied with the Winnipeg area."

Sperry-Univac not only makes computers, it depends on them to run its business. The 23 computer terminals at the Winnipeg factory are tied in a main computer in St. Paul, Minnesota, which monitors the four North American factories producing naval defence systems — in Clearwater, Fla.; Salt Lake City, Utah; St. Paul and Winnipeg — and co-ordinates their efforts.

The system keeps track of everything in the building. Management can

determine in seconds where any component is in the manufacturing process, how long it will take, and the exact cost of producing it to date. Inventory, personnel information, filed documents, data stored on microfilm, and other information on the four factories is all available instantly.

"We try to have as much automated work as possible," said Westergren.

In that respect, Sperry-Univac is only one example of how North American manufacturing is learning to decentralize.

Good for economy

"You walk through plants now and more and more you find computer terminals on people's desks," said Clarke.

With the aid of computers, the massive factories of the past are ceasing to exist. Communities will not be dependant on the payroll of one huge company, and the companies in turn will not be paralysed by a single strike.

"I think all major companies spread their operations around like that," said Westergren.

Northern Telecom also uses computers extensively to control production.

"When I think back to what we were doing five or six years ago, I would say the application of computers has increased tremendously in manufacturing technology," said Floch. The computers allow better control of the manufacturing process, resulting in higher productivity and lower costs, he said.

The company uses computers, "to be able to stay competitive," he said.

"One of our largest competitors is the Japanese, and that's how they do it."

Last of a series.



John Westergren shows a finished computer board at Sperry Univac's plant in Winnipeg. The company manufactures components used in naval defence systems.

Newsline

Lift lid on growth, ECC urges

The Economic Council of Canada will urge the federal government to loosen the lid it has slammed on the Canadian economy, says council chairman David Slater.

The council's annual economic review and forecast, to be released Sept. 30, will recommend "restrictive pressures" on the economy — such as high interest rates and facets of the National Energy Program — be eased to encourage renewed growth.

Slater told a news conference in Calgary the council will argue that inflation is gradually coming under control and that the federal government must look ahead and oil the wheels of growth.

Government handouts to deserving and undeserving companies have brought Canada to the brink of bankruptcy, says Henry Knowles, chairman of the Ontario Securities Commission.

The government is too involved in the basic workings of the country's business community, Knowles told a panel discussion at the annual conference of the Canadian Institute of Chartered Accountants in Calgary.

The private sector, he said, is as much to blame for government involvement in business as are the much-maligned bureaucrats in Ottawa.

Various governments, Knowles said, have used "overt assistance" from a number of professions to "develop ever-increasing restraints on business and taxes on those who are productive."

Brandon-based Intronics Ltd. reports sales of \$4.4 million in 1981, a 40 per cent increase over 1980. However, net income decreased from \$268,000 to \$125,000 because of greater interest payments and increased product development costs.

The company will be listed on the Toronto Stock Exchange within the next few months.

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Glenn Ponomarenko, Manager of the Charleswood-River Heights Branch (1824 Grant Ave.) is pleased to announce that TRUDY JOHNSON has joined his LePage sales team of professionals.

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SALE BY TENDER

Sealed tenders, clearly marked "Tender, Gibb Farms Ltd." will be received by the undersigned until 2:00 o'clock in the afternoon on Friday, October 8, 1982 for the purchase, individually or en bloc, of the following assets:

Lot 1 - 1975 Ford F-350 1 Ton Truck

Lot 2 - Case 1945 Series Front End Loader

Lot 3 - Truck Cap

Lot 4 - 26' Fertilizer Tank Trailer; c/w 3 - 1,000 gal. Spherical Fibreglass Tanks and Modifications, License 91ES

Lot 5 - 24' Fertilizer Tank Trailer; c/w 3 - 1,000 gal. Spherical Fibreglass Tanks and Modifications, License 453AX

Lot 6 - Flat Dock Trailer 24' - Fruehauf

Lot 7 - Fertilizer

Lot 8 - Chemicals - Tropeolox, Bonnier Plus, Stampede, etc.

Lot 9 - Seed - Sunflower and Rapeseed.

Tenders must be submitted on the forms provided. The tender information package, which includes the form, conditions of sale, and detailed asset information may be obtained from the Receiver and Manager.

The assets may be viewed at Farmland Services, Elm Creek, Manitoba on Wednesday, October 6, 1982 between the hours of 8:30 a.m. and 12 noon.

Dated at Winnipeg, Manitoba, this 24th day of September, 1982.

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WESTCOAST TRANSMISSION COMPANY LIMITED

Notice of Partial Redemption

To the Holders of First Mortgage Pipe Line Bonds 5 1/2% Convertible Series (Series E)

NOTICE IS HEREBY GIVEN that pursuant to the provisions of the Eighteenth Supplemental Indenture dated as of September 1, 1964 to the Deed of Trust and Mortgage dated as of June 1, 1956 between Westcoast Transmission Company Limited (herein referred to as the "Company") and Montreal Trust Company (herein referred to as the "Trustee"), as Trustee, providing for the creation of and issue of First Mortgage Pipe Line Bonds of the Company, \$531,000 principal amount of First Mortgage Pipe Line Bonds 5 1/2% Convertible Series (Series E) due November 1, 1984 of the Company bearing the undermentioned distinguishing letters and numbers and in the respective undermentioned principal amounts, namely:

Coupon Bonds for \$1,000 each bearing the distinguishing prefix ECM:

No.	Amount										
00113	\$ 1,000	02615	\$ 1,000	04860	\$ 1,000	05921	\$ 1,000	07546	\$ 1,000	08805	\$ 1,000
00119	\$ 1,000	02707	\$ 1,000	05010	\$ 1,000	06120	\$ 1,000	07856	\$ 1,000	09400	\$ 1,000
00290	\$ 1,000	04030	\$ 1,000	05234	\$ 1,000	06531	\$ 1,000	07879	\$ 1,000	09098	\$ 1,000
00294	\$ 1,000	03140	\$ 1,000	04301	\$ 1,000	05470	\$ 1,000	06661	\$ 1,000	08169	\$ 1,000
01194	\$ 1,000	03331	\$ 1,000	04397	\$ 1,000	05672	\$ 1,000	07233	\$ 1,000	08211	\$ 1,000
01830	\$ 1,000	03493	\$ 1,000	04633	\$ 1,000	05884	\$ 1,000	07416	\$ 1,000	08465	\$ 1,000
02301	\$ 1,000	03651	\$ 1,000	04702	\$ 1,000	05858	\$ 1,000	07146	\$ 1,000	08100	\$ 1,000
00085	\$ 1,000	01473	\$ 1,000	02498	\$ 1,000	04024	\$ 1,000	05466	\$ 1,000	06838	\$ 1,000
00428	\$ 1,000	01479	\$ 1,000	02519	\$ 1,000	04034	\$ 1,000	05662	\$ 1,000	06939	\$ 1,000
00547	\$ 1,000	01511	\$ 1,000	02523	\$ 1,000	04132	\$ 1,000	05759	\$ 1,000	06840	\$ 1,000
00709	\$ 1,000	01664	\$ 1,000	02557	\$ 1,000	04139	\$ 1,000	05800	\$ 1,000	06841	\$ 1,000
00718	\$ 1,000	01785	\$ 1,000	02592	\$ 1,000	04266	\$ 1,000	05831	\$ 1,000	06843	\$ 1,000
10116	\$ 1,000	01806	\$ 1,000	02608	\$ 1,000	04301	\$ 1,000	05843	\$ 1,000	06845	\$ 1,000
10531	\$ 1,000	01909	\$ 1,000	02612	\$ 1,000	04338	\$ 1,000	05850	\$ 1,000	06846	\$ 1,000
11103	\$ 1,000	01981	\$ 1,000	02633	\$ 1,000	04361	\$ 1,000	05855	\$ 1,000	06847	\$ 1,000
12009	\$ 1,000	02104	\$ 1,000	03138	\$ 1,000	05035	\$ 1,000	05856	\$ 1,000	06848	\$ 1,000
12411	\$ 1,000	02302	\$ 1,000	03259	\$ 1,000	05056	\$ 1,000	05857	\$ 1,000	06849	\$ 1,000
13421	\$ 1,000	02445	\$ 1,000	03374	\$ 1,000	05155	\$ 1,000	05832	\$ 1,000	06850	\$ 1,000
13563	\$ 1,000	02445	\$ 1,000	03378	\$ 1,000	05156	\$ 1,000	05834	\$ 1,000	06851	\$ 1,000
14441	\$ 1,000	02495	\$ 1,000	03536	\$ 1,000	05436	\$ 1,000	05835	\$ 1,000	06852	\$ 1,000
14461	\$ 1,000	02496	\$ 1,000	03546	\$ 1,000	05457	\$ 1,000	05836	\$ 1,000	06853	\$ 1,000
14665	\$ 1,000	02497	\$ 1,000	03580	\$ 1,000	05521	\$ 1,000	05837	\$ 1,000	06854	\$ 1,000

have been selected by lot or pro rata by the Trustee for redemption on the 1st day of November, 1982 for Sinking Fund purposes only and that such Bonds of the respective portions of the principal amount thereof selected will therefore be redeemed on the 1st day of November, 1982 in lawful money of Canada, at the principal amount thereof, upon presentation and surrender of the said Bonds (accompanied, in the case of Bonds not registered as to both principal and interest, by the interest coupons appertaining thereto which mature after November 1, 1982) at the option of the holder, at any branch in Canada of The Royal Bank of Canada, from the Bonds before presentation and should be cashed by the holder in the usual way. Interest on Bonds registered as to both principal and interest will be forwarded in the usual manner, in the case of any Bond of which part only of the principal amount thereof is hereby called for redemption, the holder thereof shall, upon presentation and surrender of such Bond, be entitled to receive (in addition to said monies payable to him by reason of such redemption), and the Trustee shall forthwith, without expense to such holder, certify and deliver to such holder one or more new First Mortgage Pipe Line Bonds 5 1/2% Convertible Series (Series E) due November 1, 1984 of the Company in aggregate principal amount equal to the unredeemed portion of the principal amount of the Bond so surrendered.

NOTICE IS ALSO HEREBY GIVEN that, in accordance with the terms of the said Supplemental Indenture, all interest on the Bonds so called for redemption or on the portion thereof to be redeemed shall cease from and after the said 1st day of November, 1982 and coupons for interest to accrue after such date upon said Bonds shall become and be void.

DATED AT VANCOUVER this 20th day of September, 1982

WESTCOAST TRANSMISSION COMPANY LIMITED
G.W. Lede, Secretary