

May 3, 2002

THE CANADIAN SOFTWARE INDUSTRY

A TRADE PERSPECTIVE

Since the Canadian software industry emerged in the minicomputer era, successful software products companies have followed a well established strategy to open markets and build sales.

Startup

The shrewd Canadian high tech entrepreneur treats the United States as the domestic market. It is the biggest software and computer services market in the world. It is the most dynamic market, populated by potential customers who are not afraid to take risks, to take a chance on new technology and new suppliers. All of the company's scarce money and talent are focused on finding those customers and building revenues as rapidly as possible. Companies often locate their vice-presidents of marketing and sales in the U.S., right in the market. Any Canadian sales arising from overflow of the American sales campaign are regarded as a bonus.

Initial Overseas Markets

Only after the software is well established in the U.S. do companies begin to look overseas for additional markets. It is not unusual for the first "foreign" clients to be attracted by the U.S. marketing, as the buyers' U.S. operations discover the software there. Canadian companies usually turn to European markets first, with the U.K. often the initial target. Quebec companies may seek markets in France, while some on the west coast head for Asia.

Rather than selling direct, the initial foray of domestic software companies into foreign markets is typically by way of local distributors, who have an established business and customer base in the particular market. The price of appointing distributors and establishing market presence is often a hefty 50-60% slice of revenue to the distributor.

Mature Foreign Markets

Once revenues in a country reach a certain size, or if a direct local presence is demanded or unavoidable, companies begin to think in terms of establishing a direct sales model in a country. Acquiring the local distributor is a common strategy. The alternative is to establish and staff a local subsidiary. As the scope and breadth of a company's sales expand, so does its sales force and sales offices. Cognos, for example, has offices in sixteen countries. Entrust Technologies, a younger, smaller company, has offices in six.

Product Delivery Methods

Most people, when they think of software packages/products, think in terms of floppy discs or CD-ROM's. While "out of the box" software is suitable for home PC applications, very few Canadian software companies are in that business. They sell business software, to large enterprises with multiple locations and thousands of employees. A sophisticated sales and marketing program is required to effect sales. Furthermore, while essentially pre-programmed, these products do not operate out of the box. Installation of the software on a server computer (via CD's or download) is only the beginning of the implementation of the software at the enterprise level. Considerable pre- and post-installation service must be carried out to ensure that the software functions effectively in the customer's existing and future hardware and software environment. As well, most customers purchase ongoing support which provides problem resolution and upgrades as they are released. Most worldwide companies have multilingual 24/7 support service coverage from multiple locations around the world, which is allocated by sophisticated call centre software.

In order to effectively use software, customers must be educated and trained in its operation, and updated on technical developments. Software companies offer a host of training options. Education and training are delivered in the traditional manner at the company's or the customer's location. Increasingly, in addition to training videos and CD-ROM's, companies are delivering training and technical updates via the Internet.

Currently, enterprise software is delivered on CD-ROM media for installation on servers. Bug fixes and maintenance releases are increasingly being delivered by Internet download. In the near future, more and more Internet delivery of the product itself will be effected by download, subject only to bandwidth considerations.

Trade Implications

Software products are classified as goods, subject to the General Agreement on Tariffs and Trade, and enjoy largely global free trade. The software industry has major concerns about moving software to the GATS.

The GATS has two primary principles for trade liberalisation. The first is "national treatment", which requires foreign service suppliers to be treated the same as domestic ones. The second is "market access", which aims to reduce barriers that arise from quantitative restrictions, such as quotas on the number of suppliers. Each of these must be negotiated for the four modes of delivery (Mode 1 - Cross Border Delivery; Mode 2 - Consumption Abroad; Mode 3 - Commercial Presence; and Mode 4 - Movement of Natural Persons) with all 142 member countries of the WTO. The scope for mischief is enormous.

There is no shortage of obstacles that can be put in the way of trade. For example, under GATT, national treatment is automatic. Under GATS it is not, which allows countries to withhold it to protect or support their local industry. To quote a noted authority:

“Governments can also limit their commitments to one or more of the four “modes of supply” through which services are traded. For instance, they might allow cross-border software trade, but prevent a foreign software company from setting up shop in their domestic market.” - Michael Moore, Director General of the WTO, *The Globe & Mail*, February 21, 2001

Similarly, because GATS is a bottom up negotiation, countries are able to carve software up into different sections. For example, Europe is musing about educational software being an educational service, not software.

The GATS negotiations will be prolonged, five years often being cited as the likely duration. While they are underway there will be considerable uncertainty, which will discourage investment in the industry and slow its growth.

Potential Impact

If software products are reclassified as services, the growth rate of the industry will be sharply reduced. There may be only a few countries which try to prevent the import of software entirely, with Mode 1 restrictions. Mode 2 is not a major issue. The problem is Modes 3 and 4, where restrictions will be devastating to the future growth prospects of software companies.

How big will the damage be? The Branham Group's *100 Top Canadian Software Companies* had total revenues in 2001 of \$4.9 billion. Their foreign revenues were \$4.4 billion, 90 percent of the total. A huge volume of business, with its attendant exports, high quality jobs, multiplier effects on the economy and tax payments, is at risk here. It will not vanish overnight, but trade restrictions of any variety will crimp the growth of one of the fastest growing sectors of the Canadian economy. The impact will be particularly devastating for emerging companies, the next generation of software successes, which do not already have offshore offices. Companies like 3dOnThe.Net and Cloakware, included in Branham's 2002 *25 Up and Comers* list, will be hard pressed to match the success of the *Top 100* if they are faced with such barriers.

Recommendation

The software industry is looking to the Government of Canada to state as a first principle of trade negotiations that treatment as good or better than that received today is its objective. Keeping most of what we have today is not good enough. Software delivered by different methods cannot be treated differently.