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**SOFTWARE COMPANY FINANCING IN CANADA:
PAVING THE ENTREPRENEURIAL ROAD**

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PAVING THE ENTREPRENEURIAL ROAD**

RESULTS OF THE DECEMBER 4, 5, & 6 1988

JOINT MEETING ON SOFTWARE INDUSTRY FINANCING

**Information Technologies Industry Branch
Industry, Science and Technology Canada**

December, 1988

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Nota Bene:

This report does not reflect the position of the Government of Canada. It has been prepared solely for the purpose of promoting discussion.

CHAPTER 1: INTRODUCTION AND ISSUES

1.1 BACKGROUND

On December 4th to 6th, 1988, a meeting of parties interested in the welfare and future of the software industry was held in Toronto. Participants included representatives from the software industry, banking institutions, venture capital companies, and the federal government (see Appendix 7.1 for the list of participants). The stated objective of the Software Industry Financing Work Session was to provide the participants with a forum to identify issues, solve problems, make decisions, and plan for the future of software development and investment in Canada. An additional objective was to achieve consensus between the players present at the session.

The content of this session dealt with software development financing in Canada, and difficulties of communication between the various players. The latter are made up of entrepreneurs who may or may not have business experience, venture capitalists who may be somewhat shy to invest due to past unhappy ventures, bankers who form the traditional cadre of funding sources, and government, who have the opportunity to act as facilitators to benefit the entire industry.

1.2 ISSUES

The following constitutes the participants' brainstorming of some of the issues the software industry in Canada is currently facing:

- 1.2.1 The software industry is one of rapid change, high uncertainty and risk. There is barely a window of six months to get a product developed and to market. This requires investment dollars quickly; traditional lenders base their investments on assets, and need some form of personal guarantee, e.g. a general security agreement and/or some kind of acceptable collateral. Rarely will a software industry entrepreneur find a sympathetic bank manager; often enough, other sources of funding will be necessary.

Why are the traditional lenders (the banks) reluctant to become involved? It's basically a profit/loss viewpoint. On a profit margin of 0.75% return on assets basis for investment, if a bank has 1 loss out of 125 proposals, it finds itself in an overall loss position. There is a high loss probability in software investment.

- 1.2.2 Venture capitalists come in at the end and provide the very best deal if the investment looks good. A key issue is that venture capital is not readily available in Canada for the software industry. The entrepreneur will always need to "bootstrap", i.e. work up from nothing using his own resources, in order to establish a base financial level from which meaningful investment can take place.
- 1.2.3 It is realistic for people bootstrapping to put as much as they can into their enterprise. It is not wise, however, with current expenses attached to the development of software, to have an individual carry the entire financial load. Moreover, some participants in the industry have no idea of what risk is, nor have they learned to bootstrap their enterprise.
- 1.2.4 The industry is too mature to have cottage-style enterprises, where the principal player is working out of the home basement, is unfunded, may have another job, and will take the software to market himself. On the other hand, the software industry is not mature enough to survive unless it can overcome the issue of capitalization.
- 1.2.5 There is a gap between senior debt financing and equity financing. People looking outside of senior debt financing are not going to be successful in finding the funds required to get the software enterprise off the ground. There is a second gap which has opened in the last year between pre-venture capitalists and venture capitalists.
- 1.2.6 There is a perception that young enterprises do not seem to be willing to give up equity to get financing. The perception gets generalized to include the notion that technology-based companies don't seem to understand the business basis of their product. Some of the product produced by these companies are prototypal; their originators don't seem to have any idea of other business elements such as marketing, or that software development is the same as any business, involving producing the product to hit the market at the right time.
- 1.2.7 In the software industry, one can recognize two distinct types of people: developer and publisher. The developer gets royalties, and the publisher gets revenue from sales. The developer doesn't think about the cost of publishing, which involves producing the product, marketing it through distribution channels, and actual sales.

- 1.2.8 There are very few software publishers in the Canadian software industry, and a general lack of software distribution channels.
- 1.2.9 Hence, three elements have to come together:
- a. The development of the product
 - b. The financial package
 - c. The various kinds of people, including those with business knowledge and skills.
- 1.2.10 There is a stated lack of skilled technical people (i.e. people able to identify market and produce software). An exceptionally important lack is the skill required to market, a function which defines the product requirement for engineering. It is worth noting that investors don't generally look at a software company per se, but at a company with a comprehensive plan, which will include divestment.
- 1.2.11 Internationally, Canada doesn't seem to "have anything" in the way of a software industry, i.e. it does not have a presence abroad. The exhibition format for Canadian exhibitors in international trade shows is not likely to highlight the industry: there aren't enough dollars going into it.
- 1.2.12 The software industry has different segments of product requiring specific market definition and product streams. In project management, for example, a dedicated market is needed.
- 1.2.13 There is a perception, which is perhaps false, that the US market is more highly favorable to the entrepreneur. It might be worth finding out what creates the perception of synergy in the US between the venture capitalists, the software industry and the marketing people.
- 1.2.14 There is a perception that the government is subsidizing on the one hand and buying foreign goods on the other. Government buyers pick heavily from the American software "Hit Parade", rather than taking the time to purchase Canadian products.
- 1.2.15 A venture capital company may use a set of "success" criteria by which to judge an investment opportunity. For example, a venture company might consider that a \$10M sales enterprise doesn't allow the venture capitalist to sell its investment (it's difficult to take a company public at the \$10M mark), and that a \$50M sales level is a key target for an investment company, in order to achieve divestment. In other words, start-up investment is considered a value but the investment needs to have the potential to grow to the saleable level (e.g. a given software is strategically critical to the dedicated market being sold to). Also, venture capitalists may not have the expertise to judge a particular opportunity dealing with software, due to the highly technical nature of the product.

CHAPTER 2: PROBLEMS AND OPPORTUNITIES

The following constitutes a more orderly listing of the problems and opportunities of the software industry in Canada as identified by the session participants:

- 2.1 The software industry has a reputation of high risk among investors/lenders; there is a perception of poor return associated with software investment. In addition, the barriers are low for entry into the software industry.
- 2.2 There is general failure of effectively marketing the software industry, and a lack of understanding of the technical point of view. There is no association of marketing with the technical point of view.
- 2.3 Many technical people involved in software development do not have business acumen (e.g. to prepare an overall business plan including dealing with investment and divestment).
- 2.4 There is a general lack of successful publishing houses in Canada.
- 2.5 Canadians (including governments and banks) are reluctant to be the first client for new software from this country.
- 2.6 Banks are not receptive to financing software enterprises in the \$250K to \$2.5M of sales range without suitable alternate collateral/security, as companies at this stage are typically not well established, with many still in the startup phase.
- 2.7 Venture capital companies often don't have the technical expertise to judge the value of the software investment.
- 2.8 There is a lack of venture capital companies in the Canadian marketplace for the software industry.
- 2.9 There is a perception (which may be false) of the U.S. as an "easier" environment in which to obtain financing. Regardless, Canadian companies are moving to where the expertise is perceived to be (eg: Personal Software, a company originally based in Toronto).
- 2.10 Venture capital companies are moving downstream (i.e. to lower risk investments) due to a robust economy.
- 2.11 The software industry isn't large enough to show presence in the marketplace either at home or abroad.
- 2.12 There is lack of understanding among small software companies of what the venture capitalist needs to see in the way of information and business know-how.

- 2.13 Entrepreneurs at early start-up (at roughly the \$250K sales level) are having difficulty getting the financing; this may cause a tendency to "ramp up", i.e. say you'll do something you have no intention of doing just to get the bucks.
- 2.14 There is a tendency to finance the asset rather than cashflow; and software is heavily slanted to cashflow. "Pull through" financing (i.e. stem to stern) constitutes a substantial risk.
- 2.15 There is reluctance on the part of entrepreneurs to give up equity in their enterprise. The issue is one of control.
- 2.16 The entrepreneur sometimes get a negative perception of the venture capitalists (perception of "vulture" capital), and the problem of the venture capitalist understanding the technical specifications of the product becomes one of timing. The venture capitalists may have trouble understanding how crucial timing is.
- 2.17 The software industry is suffering from a self-fulfilling prophecy: venture capital companies back off from investing in the software industry because of high risk or lack of understanding of the product; backing off means low industry development and presence.
- 2.18 The Canadian software industry is not perceived as an important international player.
- 2.19 There is a direct link between capitalization and the industry: no risk capital, no software industry.

CHAPTER 3: GENERAL AND SPECIFIC RECOMMENDATION

3.1 GENERAL RECOMMENDATIONS

The participants in the work session sought to provide some general recommendations regarding the problems and opportunities outlined above. They are:

- 3.1.1 That the success of Canadian software companies be publicized in a well structured public relations campaign.
- 3.1.2 That the software industry in Canada organize an effective software industry association to promote the industry to its constituents, and to forge better relations among themselves.
- 3.1.3 That more visible and aggressive means be found to finance the Canadian software industry at the start-up end of the scale.
- 3.1.4 That Canadian representation on the international scene be broadened, e.g. by increasing the quality of representation at international trade shows, and by ensuring that it is the product which is promoted, not Canada.
- 3.1.5 That a broad spectrum of training be designed for all players in the software industry, including coverage of expectations of venture capitalists and business planning, in order to create a dialogue among those players; that such training include the education of financial institutions of the distinctions between developers and publishers and the possibility of strategic alliances, and that of venture capital companies in the merits of investing in the software industry.
- 3.1.6 That the means be found for structuring joint ventures between the small players in the software industry and the large well-established players.
- 3.1.7 That it be recognized that governments at all levels need to be the first client and ombudsman of Canadian software.
- 3.1.8 That the government sponsor "trade shows" to inform clients of Canadian products.
- 3.1.9 That the software investment risk be lowered for the more traditional lending institutions, via, for example, government guarantees especially at the working capital level.
- 3.1.10 That the software industry be designated as a strategic industry with an effective program to match (e.g.: the federal government as a buyer through "Preferred Purchasing Practices").
- 3.1.11 That the Innovation Ontario Corp. buy-back feature with reference to equity be considered as a possible approach for investing.
- 3.1.12 That the venture capital companies, government and industry work more together in understanding/flushing out the problems of the industry.

3.2 SPECIFIC RECOMMENDATIONS

- 3.2.1 That the Federal Business Development Bank's Venture Capital Division's priority accorded to the \$250K to \$2.5M software entrepreneurs be improved.
- 3.2.2 That the Small Businesses Loans Act program be expanded to cover working capital, the amount of loans available under the program be increased, and the level of guarantee be critically examined.
- 3.2.3 That a form of accelerated payment for tax credits arising out of software research and development be provided.
- 3.2.4 That foreign investors seeking Canadian citizenship be provided with a lower investment threshold if they invest in the Canadian software industry.
- 3.2.5 That the federal sales tax discrimination against the Canadian manufacturer be eliminated.
- 3.2.6 That incentives be provided for public employees to purchase Canadian software.
- 3.2.7 That privately driven publishing companies be encouraged to promote small software developers.
- 3.2.8 That a sponsor organization be identified to champion the concept of a software publishing company and the financial means for that sponsor to initiate action.
- 3.2.9 That a National Software Industry Association be organized, focusing on small business, that front-end seed funding to start up the association be identified, e.g. through governments, bankers, venture capitalists and industry; that a champion be identified to organize the NSIA, and that the NSIA work with provincial and federal governments in structuring programs beneficial to the software industry.
- 3.2.10 That the industry be profiled in order to determine its size and scope, that the type of software development venture capitalists are likely to be interested in be profiled, that a historical data base for investment in software in Canada (i.e. success/failures) be provided, and that statistics demonstrating industry benefits in the community be made available.
- 3.2.11 That a national information package be established for use of the small software industry in establishing an effective set of management practices.
- 3.2.12. That the industry be encouraged to present itself via an effective program of public relations.
- 3.2.13 That an educational liaison package be established for the financial community (eg: Canadian Bankers Association, Association of Canadian Venture Capital Companies) aimed at awareness re. the size, scope, viability of the industry.

- 3.2.14 That External Affairs be encouraged to improve trade promotion practices (eg: trade shows, missions, Program for Export Market Development) for software small business, and that international trade show booths reflect more adequately the scope of Canadian software development.
- 3.2.15 That Industry, Science and Technology Canada sponsor trade shows aimed at the promotion of the Canadian software industry.
- 3.2.16 That Industry, Science and Technology Canada be encouraged to design simple and effective programs benefitting the software industry.
- 3.2.17 That improved liaison be encouraged among the players in the software industries, e.g., problem-solving meetings held annually to track progress made.

CHAPTER 4: ACTIONS

The following actions constitute those areas where the participants felt significant progress could be made:

SPECIFIC ACTION	WHO	WHEN
1. ITIB* recommends to ISTC management revisions to FBDB*	DG* level (branch initiative)	31 Mar 89
2. ITIB recommends to ISTC management revisions to SBLA*	"	31 Mar 89
3. ISTC recommends to Revenue Canada Taxation the creation of a form of accelerated payment for tax credits for the software industry to Ministerial Level	DG level (branch initiative)	TBD
4. ISTC recommends to CEIC & provinces a lower threshold for immigrants on software industry investment	DG level (branch initiative)	31 Mar 89
5. Investigate funding for the development of a major Canadian software publishing company and action accordingly	M. Doyle D. Bennie	15 Jan 89
6. Investigate the front-end of organizing the NSIA*	M. Doyle J. Koenig J. Meinzer	25 Dec 88
7. Establish the criteria which venture capitalists use to judge the merit of a particular software investment and circulate to appropriate clientele	D. Paterson	30 June 89

*ITIB: Information Technologies Industry Branch

*FBDB: Federal Business Development Bank

*SBLA: Small Business Loans Act

*NSIA: National Software Industry Association

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| 8. | Publicize statistical data on the software industry | D. Paterson | 31 Mar 89 |
| 9. | Establish a marketing liaison package to represent the size, scope and viability of the software industry | Nat'l SW Working Com.
(D.Paterson) | 31 Mar 90 |
| 10. | Charge the NSWC and Software Ind. Liaison Com. with the task of preparing a submission to External Affairs re: focus, format, participation of trade show initiatives Canadian software | D. Paterson
B. Rand | 16 Jan 89
(NSCW)
16 Feb 89
(SILC) |
| 11. | Pursue the concept of Canadian capabilities expositions | K. Parsonage | 31 Mar 89 |
| 12. | Hold a follow-up meeting to track progress made on recommendations and identify additional opportunities | D. Paterson | 31 Dec 89 |

CHAPTER 5: OVERALL CONCLUSIONS

The participants drew the following overall conclusions:

- 5.1 There is little short term hope for the software entrepreneur at the start-up stage of financing.
- 5.2 There is little financial support available both for development and marketing of Canadian software in the short term; this fact seriously prejudices the future of the software industry in Canada.
- 5.3 There is a role to be played by all levels of government in supporting the development of the software industry.
- 5.4 There is a need for a clear understanding of the role of the venture capitalists in the development of the software industry.
- 5.5 As presently structured, there is a limited role for traditional bank financing.
- 5.6 There is a distinct need for promotion of the industry, preferably through the creation of a national association.
- 5.7 There is a need to better identify the profile of the industry including the risks and opportunities.
- 5.8 There is a need to structure the Canadian software industry into a recognizable shape and size (critical mass) allowing for its overall viability.
- 5.9 There is an imperative requirement for a Canadian market channel to facilitate movement from software development to markets.

CHAPTER 6: WISHFUL THINKING

In the best of worlds, and if all constraints were removed, the participants would:

1. Change government funding programs from asset to operationally based, to provide working capital.
2. Like to see an equivalent of MITI (from Japan) which brings all the parts together with the authority to make it happen.
3. Give every entrepreneur who gives his financial all, a tax credit such as 1% of the income tax of his employees.
4. Have banks set aside a certain amount of money for venture capital investments.
5. Have a government program specifically developed to meet the needs of the software industry.
6. Set up a distribution channel: a major Canadian software publishing company through which the small entrepreneur could market his product; and this channel would be the chosen vehicle for venture capitalists involved in funding.
7. Like to see more universal application of the Quebec Stock Savings Plan (employees buying shares in the companies they work for).
8. Get rid of gaps in the investment continuum: i.e. a logical sequence: pure research, pre-venture capitalists, venture capitalists, mezzanine financing, bank financing, public placement.
9. Eliminate the Capital Gains Tax; there has been political movement back and forth on the Capital Gains Tax.
10. Provide tax incentives for hardware manufacturers to invest in software companies.
11. Provide organizations with financial incentives (tax credits, direct grants) to enter into joint ventures of software development.

CHAPTER 7: APPENDIX

7.1 PARTICIPANTS TO THE SESSION

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DATE DUE - DATE DE RETOUR

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