



The Issue: **Building Stronger Tech Companies in Canada**

Perhaps, due to our geography and the persistent need to share information over the vast distances that Canadian nation-building has required, Canada has always punched above its weight in information and communications technology innovation and enterprise. From Alexander Graham Bell's first long distance call to the invention of the BlackBerry, Canadian ingenuity has made its mark on global ICT.

Technology companies have contributed to the Canadian economy for well over a century. (ITAC – the Information Technology Association of Canada - itself has existed for over sixty years.) But the last half of the 21st century saw the most significant growth in home-grown Canadian technology enterprises. With the emergence of Nortel in the Ottawa area starting the 1950s and Research in Motion in Waterloo in the 1980s, tech entrepreneurs had local access to supply chain arrangements that could propel their products all around the world. They also had vivid role models and very strong evidence of the fortunes to be made in tech before them. Nortel famously spawned over 300 companies, many of which continue to anchor the Ottawa tech cluster today. Waterloo is home to over 800 tech ventures. While these clusters are significant, they aren't the only sites of technology enterprise. Innovative technology enterprises exist in every region of the country.

Tech entrepreneurs are clearly alive and well in Canada. But while we create a lot of new technology start-ups, we do not get many of these companies to a size that has the potential to anchor a new cluster or to impact the economy in a major way. For a variety of reasons including bankruptcy, liquidation, merger and acquisition, many of the start-ups launched in Canada disappear. Many companies with aspirations and business plans to grow into global enterprises see their growth trajectory halted against their will. It has always been challenging to grow a technology venture.

There are many hurdles a Canadian entrepreneur must overcome.

Access to Market

First of these is the relatively small size of the Canadian market, which is roughly the equivalent of one American state - California. This means that any emerging technology venture must be exportready from the outset. But gaining access to the global markets can be expensive, risky and frustrating for small emerging technology companies.

Access to Capital

Because knowledge-based companies are R&D intensive and frequently require many years of development prior to revenue or profit, risk capital is critical to their growth. Canada has smaller pools of risk capital than other countries. What capital we have is currently at a historic low. And, generally speaking, Canadian capital is highly risk averse more comfortable in the resource sector and the manufacturing sector than in the frequently abstract world of ICT.

Access to Talent

Talent is also a critical component in the growth of technology ventures. The technology industry faces chronic shortages of talent at all levels. But C-suite talent - seasoned chief financial officers, chief marketing officers and CIOs with sound experience taking a company from start-up to \$100M global enterprise - are in particularly short supply. Anchor companies are generally viewed as the best resource for this level of talent, underscoring yet again the importance of large Canadian ICT firms.

Too frequently the result of these factors is that many promising companies with market-leading innovations are acquired at a very early stage in their evolution. But they aren't the only tech ventures vulnerable to acquisition. Increasingly, many large publicly-traded ICT firms are being acquired at an accelerating rate. Many of these recent acquisitions have been in the \$500M to \$1B range – companies best poised to become major players or even anchors in a technology cluster.

Mergers and acquisitions, of course, are part of the normal flow of business in a free market economy. Generally speaking, most participants in a free market economy – ITAC included – view M&As, including those undertaken by foreign investors, as positive. They are frequently the fulfillment of a founder's exit strategy or a validation of the integrity of the Canadian product. They are also a mechanism for launching Canadian ingenuity into a global market.

ITAC is fundamentally a free-market organization and will never advocate protectionist measures. However, many leaders in our industry are coming to conclude there is risk in maintaining an entirely uncritical view of the current pace of M&A activity. For one thing, we must consider that virtually every research-based tech venture in Canada receives some form of direct or indirect government support. Whether through indirect measures, such as SR&ED credits, or direct measures, such as IRAP funding, Canadian taxpayers contribute to the positive outcomes - jobs, innovations and wealth that these enterprises produce. It is entirely appropriate, therefore, to analyse whether these public investments are returning the benefits anticipated.

There is no question that acquisitions can produce excellent outcomes. They provide global reach for Canadian technology, speedier commercialization of R&D and the validation of a global board. They also produce liquidity for founders and investors who have labored long and hard at the enterprise. And there are many examples in Canadian technology of a foreign acquisition propelling Canadian technology into global markets and providing the financial support necessary to keep the innovation cycles of the acquired company going. However, there are also outcomes that are less salutary.

Writing in 2004, Denzil Doyle, one of the deans of the Ottawa technology cluster observed:

"Although Canada has a good infrastructure in place for creating high-tech companies and growing them to a reasonable size (\$10M to \$20M in annual sales), very few of them become large multinational companies (sales in excess of \$100M) with their corporate headquarters in Canada. One of the reasons is that many of them are purchased by foreign buyers (mainly U.S.) at an early stage and merged into their worldwide corporate structures. It is becoming very common for such buyers to leave only the R&D function in Canada along with an administrative support function and carry out all other functions (selling, marketing, operations, etc.) elsewhere in their corporate structures.

Canada should not place impediments in the way of such takeovers but should aggressively pursue policies that would encourage Canadian buyers to play a stronger takeover role, not just in Canada but around the world, particularly in the Unites States."

Doyle based his conclusions on a study of 72 technology companies acquired between 1993 and 2003. The phenomenon he observed and identified as "truncated companies" (or simply R&D branch plant) persists today. The key characteristic of a company like this is that it is stripped of its business talent – its marketing expertise, its financial capability – all the previously mentioned C-suite talent that is in such short supply in Canada. This fate, of course, is not the worst possible outcome. Any number of companies are strategically acquired with the acquirer's full intention of shutting down a market rival. It cases like this, not even the R&D functions remain.

Canadian companies are particularly vulnerable to these pressures because they face greater challenges achieving strong valuations for their firms. Many Canadian executives report that in spite of strong products and excellent performance metrics, they confront competitors from other jurisdictions with mysteriously stronger valuations. A recent analysis by Byron capital Markets suggests that this under valuation is systemic across the tech sector not merely company specific. Byron did a comparison of Canadian and U.S. mid cap (\$75 million to \$1.5 billion) technology companies using the following criteria: long term EPS growth, P/E ratios and EBIT margin. They concluded that on average Canadian tech

¹ "Building World-Class Canadian High Tech Companies," by Denzil Doyle et al, April 2004, page 5.

companies are valued at a 23% discount in the software sector and a 34% discount in the hardware sector, while having higher EBIT margins and EPS growth.²

Canadian technology companies are an excellent bargain. This has clearly not escaped the attention of foreign technology companies and investors. The acute irony is that Canadian capital markets seem to be mysteriously unaware of the good value domestic tech companies may afford to investors.

Canadian securities regulations compound the vulnerability of our tech companies. In Canada, securities regulations are implemented at the provincial level so there may be variations across the country. With respect to Ontario, the Ontario Securities Commission has jurisdiction. Their policy is that shareholders have the exclusive rights to make the decision concerning the sale of the company. There is no allowance for the Board of Directors to exercise their fiduciary duty as it relates to the long term benefit to the company. Thus the most important decision in the history of the company is taken out of the hands of the Board and also Management. The result is that, for a public company, we have tied the hands of the group that best understands the opportunity and challenges of a sale.

In clear contrast, U.S.-based companies facing an acquisition have the sufficient defence mechanisms built into their regulatory system to enable the board and the management team to effectively 'just say no and thereby stop a hostile takeover. In Canada, if a company is put in play or receives notice of acquisition intention, it has virtually no defence mechanisms. The sale of the company is virtually inevitable.

The range of options for action before us is unfortunately not extensive. One measure for consideration is the modification of our securities regulations to better equip Canadian executives and boards from takeover. For example, a shareholder rights plan – or "poison pill" – is a mechanism by which a company can be given the authority to issue new shares in such a way as to dilute the ability of a hostile bidder to acquire the company. In Canada, this is put in place at the time of an impending bid. It is limited in time (usually 50 days) and can be appealed to the securities

commission. This has the effect of giving the company a very limited amount of time to find alternatives to the bidder at hopefully a better price, but it will not stop the transaction and does not provide sufficient time to delineate all possible alternatives.

In the United States, a rights plan can be voted in at any time (usually an Annual General Meeting) and does not have a fixed end point. It supports the concept that the fiduciary duty of the directors and management is to act in the best interests of the company and all its stakeholders, not just the shareholders. These ground rules have the effect of creating a longer and more onerous process to make a bid and of highlighting the need for a strategic rationale in moving ahead rather than just an opportunistic financial sortie.

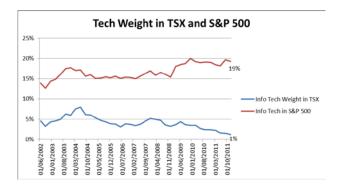
In Canada, the time has come to consider mechanisms like this. We need to find a measure that restores the decision-making power of Canadian companies facing takeover to the executives of the company and their boards, who need to weigh the benefit for all the stakeholders.

Technology companies by their nature are volatile. Shifts in technology, change in markets or competition can at times blindside event the best management teams. Being a Canadian technology executive, especially if you serve a publicly traded company, is not for the faint of heart. We must take the appropriate measures to ensure that more Canadian firms grow to sufficient size to anchor strong clusters, build strong supply chains that thrive on Canadian ingenuity and ultimately become acquirers of companies themselves. So for a variety of reasons, we are seeing an increase in the rate of acquisition of Canadian technology companies. The Branham Group has tracked the growth of Canadian technology firms since 2004. It has also tracked the disposition of Canadian companies bought and sold over that period. They have provided the table found in Appendix A listing M&A activity over the past ten years. The list, at 164 entries, is considerably longer than the one Denzil Dovle produced in 2004 and it shows marked acceleration in the rate of activity in 2011 and 2012. And there is a clear sense in the industry that we are selling companies more quickly than we are growing replacements.

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² "The Canuck Tech Discount Exists," Capital Markets Research paper, February 1, 2012.

This acceleration of M&A activity has impacts beyond the participants in the deal for the larger technology industry and its ecosystem. One particularly disturbing development is the shrinkage in the weight of technology ventures on one stock exchange. The chart below, again courtesy of Bryon Capital Markets, illustrates that the information technology sector listed on the TSX is currently 1.2% of the index. This is an alarming number. The dissemination of tech weight from 8% in 2004 sets a vicious cycle in motion. Canadian capital markets, which as previously stated, are risk averse and uncomfortable with technology are unlikely to retain the analytic expertise necessary to make investments in the sector. Fewer analysts mean less expertise in assessing the value of tech firms which continues to contribute to investor disinterest. This in turn fees the cycle of lower valuations and accelerate M&A activity. Clearly Canada's technology industry has an obligation to raise these issues and take action to improve conditions in the ecosystem in which Canadian firms operate.



Conclusion and Recommendations

ITAC recommends action on four fronts.

- We must improve the quantity and quality of risk capital in Canada. There is a clear communication opportunity between our industry and the investment community to develop a clearer picture of the value of technology companies.
- We need to strengthen both the culture of entrepreneurship and the talent to ensure a strong cadre of technology enterprises and their growth.
- We must examine the regulatory framework in Canada to ensure a balanced approach that seeks to foster the growth of companies while protecting investors.

 Finally, we need a policy framework and program infrastructure to assist companies in finding their way to success in the global marketplace early in their corporate evolution.

Karna Gupta
President and CEO
Information Technology Association of Canada

Appendix: Canadian Companies Acquired February 2004 - March 2012 Courtesy Branham Group Inc.

Canadian Company Acquired	HQ- Province	Acquirer	HQ-Country	Date
Varicent	ON	IBM	US	13-Apr-12
Belair Networks	ON	Ericsson	Sweden	02-Apr-12
Rugged.Com	ON	Siemens	Germany	15-Mar-12
Gennum	ON	Semtech	USA	14-Mar-12
TestFlight	AB	Burstly	USA	05-Mar-12
Blaze Software	ON	Akamai	USA	08-Feb-12
Dayforce	ON	Ceridian	USA	07-Feb-12
Tynt	AB	33Across	USA	24-Jan-12
Summify	ВС	Twitter	USA	19-Jan-12
Anomalous Networks	QC	Tangoe	USA	17-Jan-12
Platform Computing	ON	IBM	USA	06-Jan-12
Dyaptive Systems	ВС	JDS Uniphase	USA	05-Jan-12
LaserNetworks	ON	Xerox	USA	04-Jan-12
MOSAID Technologies	ON	Sterling Partners	USA	23-Dec-11
Enomaly	ON	Virtustream	USA	15-Dec-11
Rypple	ON	Salesforce.com	USA	15-Dec-11
March Networks	ON	Infinova	USA	09-Dec-11
Trellia Networks	QC	Wyse Technology	USA	21-Nov-11
EISI	MB	Zywave	USA	10-Nov-11
Kobo	ON	Rakuten	Japan	08-Nov-11
Grip Entertainment	QC	Autodesk	USA	07-Nov-11
AdParlor	ON	AdKnowledge	USA	01-Nov-11
Algorithmics	ON	IBM	USA	21-Oct-11
Zarlink Semiconductor	ON	Microsemi	USA	13-Oct-11
SocialGrapple	ON	Google	USA	11-Oct-11
ClearVision Technologies	ВС	Valco Melton	USA	27-Sep-11
Superclick Networks	QC	AT&T	USA	26-Sep-11
OpenCal	ВС	Groupon	USA	15-Sep-11
Techneos	ВС	Confirmit	Norway	07-Sep-11
Cactus Commerce	QC	Ascentium	USA	06-Sep-11
Zite	ВС	CNN	USA	30-Aug-11
Bright Games	PE	Electronic Arts	USA	22-Aug-11
Bridgewater Systems	ON	Amdocs	USA	17-Aug-11
Five Mobile	ON	Zynga	USA	08-Jul-11
BackType	ON	Twitter	USA	05-Jul-11
Veridae	ВС	Tektronix	USA	05-Jul-11
Subserveo	ВС	DST Systems	USA	20-Jun-11
MXI Security	QC	Imation	USA	06-Jun-11
PostRank	ON	Google	USA	03-Jun-11
		The Product		
MKS	ON	Development Company	USA	31-May-11
SiGe Semiconductor	ON	Skyworks Solutions	USA	17-May-11

Labtronics	ON	PerkinElmer	USA	16-May-11
Conversition	ON	e-Rewards	USA	10-May-11
WellPoint Systems	AB	P2 Energy Solutions	USA	02-May-11
Coradiant	QC	BMC Software	USA	28-Apr-11
Dyadem	ON	IHS	USA	27-Apr-11
Adenyo	ON	Motricity	USA	14-Apr-11
PushLife	ON	Google	USA	08-Apr-11
Cytiva	ВС	Taleo	USA	01-Apr-11
Radian6	NB	Salesforce.com	USA	30-Mar-11
Bel Air Networks	ON	Ericsson	Sweden	05-Mar-11
CoverItLive	ON	Demand Media	USA	03-Mar-11
DALSA	ON	Teledyne	USA	14-Feb-11
MyThum Interactive	ON	OLSON	USA	08-Feb-11
, , , , , , , , , , , , , , , , , , , ,	_		United	
Optimal Payments	QC	Neovia	Kingdom	20-Jan-11
			United	
QuIC Financial Technologies	BC	Markit	Kingdom	12-Jan-11
Attassa	AB	YouSendIt	USA	05-Jan-11
Flock	BC	Zynga	USA	05-Jan-11
Zetawire	ON	Google	USA	15-Dec-10
		j2 Global		
Protus	ON	Communications	USA	06-Dec-10
Zeugma	ВС	Tellabs	USA	22-Nov-10
Cognovision	ON	Intel	USA	15-Nov-10
OmniRIM Solutions	BC	Archive Systems	USA	04-Nov-10
Clarity Systems	ON	IBM	USA	21-Oct-10
Airborne Mobile	QC	Cellfish Media	USA	05-Oct-10
Point2 Technologies	SK	Yardi Systems	USA	30-Sep-10
VisionFM	ON	Expesite	USA	24-Sep-10
Atrion International	QC	IHS	USA	22-Sep-10
Blue Castle Games	BC	Capcom	Japan	16-Sep-10
Backstage Technologies	BC	RealNetworks	USA	15-Sep-10
Cengea	BC	Trimble	USA	13-Sep-10
SocialDeck	ON	Google	USA	30-Aug-10
Accubid Systems	ON	Trimble	USA	12-Aug-10
LayerBoom	ВС	Joyent	USA	14-Jul-10
Poly9	QC	Apple	USA	14-Jul-10
Elluminate	AB	Blackboard	USA	08-Jul-10
Matrikon	AB	Honeywell	USA	28-Jun-10
Fusepoint Managed Services	ON	Savvis	USA	16-Jun-10
Dabble DB	ВС	Twitter	USA	10-Jun-10
Sitemasher	ВС	Salesforce.com	USA	28-May-10
xkoto	ON	Teradata	USA	26-May-10
Bump Technologies	ON	Google	USA	02-May-10
BreconRidge	ON	Sanmina-SCI	USA	27-Apr-10
Bycast	BC	NetApp	USA	07-Apr-10
Zeep Mobile	BC	Vibes Media	USA	24-Mar-10
<u> </u>			United	
Verus Mobile Technologies	ВС	PayPoint	Kingdom	09-Mar-10

Sirit	ON	Federal Signal	USA	05-Mar-10
Brainhunter	ON	Zylog	India	03-Feb-10
Tomoye	QC	Newsgator	USA	20-Jan-10
Versa Systems	ON	Iron Data	USA	07-Jan-10
Coretec	ON	DDi	USA	31-Dec-09
Opalis Software	ON	Microsoft	USA	11-Dec-09
Xenos Group	ON	Actuate	USA	08-Dec-09
		Corel Holdings (Vector		
Corel	ON	Capital)	USA	26-Nov-09
Mobivox	QC	SabSe Technologies	USA	24-Sep-09
NowPublic Technologies	BC	Clarity Media Group	USA	01-Sep-09
Nexient Learning	NS	Global Knowledge	USA	24-Aug-09
RapidMind	ON	Intel	USA	20-Aug-09
J2Play	ON	Electronic Arts	USA	05-Aug-09
Super Rewards	ВС	AdKnowledge	USA	29-Jul-09
Tundra Semiconductor	ON	IDT	USA	29-Jun-09
Neoteric Technology	BC	Haemonetics	USA	25-Jun-09
BigPark	ВС	Microsoft	USA	07-May-09
Zi	AB	Nuance	USA	09-Apr-09
Certicom	ON	RIM	Canada	23-Mar-09
Action Pants	вс	Ubisoft	Paris	03-Feb-09
Karabunga (Defensio)	QC	Websense	USA	27-Jan-09
3. (Technology Company		January
Nortel	ON	Consortium	USA	2009-Onward
Softimage	QC	Autodesk	USA	24-Oct-08
OZ Communications	QC	Nokia	Finland	30-Sep-08
Q9 Networks	ON	ABRY Partners	USA	24-Aug-08
		Nuance		
MultiVision Communications	ON	Communications	USA	31-Jul-08
		JMI Equity, The Carlyle		
0	DO.	Group and Pala	N. 1. A.	00 1 100
Gemcom Software International	BC	Investments Holdings	NA	23-Jul-08
YourTechOnline	BC	SupportSoft	USA	05-May-08
90 Degree Software	BC	Microsoft	USA	14-Mar-08
Bioscrypt	ON	L-1 Identity Solutions	USA	05-Mar-08
PlateSpin	ON	Novell	USA	25-Feb-08
NUVO Network Management	ON	Versata Enterprises	USA	22-Feb-08
Vantago Point Systems	ВС	Solarsoft Business	United	24 lon 00
VantagePoint Systems		Systems	Kingdom	24-Jan-08
Net Integration Technologies	ON	IBM	USA	18-Jan-08
Cognos	ON	IBM Adl/condodes	USA	03-Jan-08
O. de in	AB	AdKnowledge	USA	08-Dec-07
Cubix		Ampersand Ventures	USA	01-Nov-07
Cubix Rand Worldwide	ON	7 timporodina vontaree	l loite d	
Rand Worldwide		·	United	21 Oct 07
Rand Worldwide Blast Radius	ВС	WPP	Kingdom	21-Oct-07
Rand Worldwide Blast Radius BioWare	BC AB	WPP Electronic Arts	Kingdom USA	11-Oct-07
Rand Worldwide Blast Radius BioWare DataMirror	BC AB ON	WPP Electronic Arts IBM	Kingdom USA USA	11-Oct-07 04-Sep-07
Rand Worldwide Blast Radius BioWare	BC AB	WPP Electronic Arts	Kingdom USA	11-Oct-07

WatchFire	ON	IBM	USA	23-Jul-07
Workbrain	ON	Infor	USA	01-Jun-07
Evolved Digital Systems	QC	Shimadzu	Japan	05-Apr-07
GEOCOMtms	QC	RedPrairie	USA	21-Feb-07
Sierra Systems Canada	ВС	Golden Gate Capital	USA	05-Jan-07
ATI Technologies	ON	AMD	USA	25-Oct-06
DigitalConnexxions	ON	InfoUSA	USA	05-Oct-06
VoodooPC	AB	HP	USA	28-Sep-06
Hot Banana Software	ON	Lyris Technologies	USA	21-Aug-06
Minacs Worldwide	ON	TransWorks Information Services	India	16-Aug-06
Bridges Transitions	ВС	Хар	USA	21-Jul-06
QA Labs	ВС	UST	USA	11-Jul-06
CNC Global	ON	Vedior	Netherlands	10-May-06
AssetMetrix	ON	Microsoft	USA	26-Apr-06
Cybermation	ON	CA Technologies	USA	14-Apr-06
VoiceGenie Technologies	ON	Genesys	USA	05-Apr-06
<u> </u>		NeoMedia		·
BSD Software	AB	Technologies	USA	23-Mar-06
Farabi Technology	QC	Seagull Software	USA	20-Mar-06
GEAC Computing	ON	Golden Gate Capital	USA	14-Mar-06
		Kongsberg Defence &		
Gallium Software	ON	Aerospace	Norway	02-Dec-05
MDSI Mobile Data Solutions	BC	Vista Equity Partners	USA	22-Sep-05
Alacris	ON	Microsoft	USA	20-Sep-05
Nimcat Networks	ON	Avaya	USA	19-Sep-05
Triversity	ON	SAP	Germany	19-Sep-05
DWL	ON	IBM	USA	01-Sep-05
PureEdge Solutions	BC	IBM	USA	05-Aug-05
Reqwireless	ON	Google	USA	15-Jul-05
Creo	BC	Kodak	USA	16-Jun-05
Financial Models	ON	SS&C Technologies	USA	19-Apr-05
eXI Wireless	BC	Applied Digital	USA	01-Apr-05
Speedware	QC	Activant Solutions	USA	30-Mar-05
Radical Entertainment	BC	Vivendi Universal	France	23-Mar-05
Schemasoft	BC	Apple	USA	22-Mar-05
Cedara Software	ON	Merge Efilm	USA	18-Jan-05
AD OPT Technologies	QC	Kronos	USA	18-Nov-04
Boomerang Tracking	QC	LoJack	USA	29-Oct-04
Systemcorp ALG	QC	IBM	USA	12-Oct-04
Changepoint	ON	Compuware	USA	03-May-04
The Electric Mail Company	ВС	j2 Global Communications	USA	22-Mar-04
EDUCOM TS	ON	ZANTAZ	USA	18-Feb-04