


INTRINSYC Accelerate Your Vision



APEGBC Presentation
“Being a P.Eng in the tech sector”

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Presentation Topics

- The dual roles of innovation and entrepreneurship
- BC and Canada’s position in the world at large
- An introduction to Intrinsyc, lessons learned
- The parallels between Professional Engineering and being an Entrepreneur
- The key issues confronting P.Eng’s in the technology sector
- What it takes to found and operate a high tech company, especially in today’s market
- The future for Engineers in general

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Innovation and Entrepreneurship

- Innovation is “recognized as the single most important ingredient in any modern economy – accounting for more than half of economic growth in America and Britain” – *The Economist, 2002*
- However, in order to support this critical economic driver, a means must exist to establish and foster relevant connections amongst entrepreneurs, university researchers, government agencies, mentors, service providers, angel investors and other financiers, with the goal of turning innovative ideas into successful new companies.

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The situation in BC today

Economic Indicators

- BC ranks #4 (4th place) with \$25K GDP per capita in Canada (AB #1 @ with \$35K, ON #2 @ \$33K) – Canada ranks #7 in the world overall.
- BC ranks #5 in productivity, well below the national average (AB #1, ON #2)
- BC ranks #5 in disposable income @ \$16K (ON #1 @ \$20K, AB #2 @ \$18K)
- BC ranks in #4 in public debt @ 13% of GDP (AB #1 @ 0%, Canadian average of 61%)

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The situation in BC today

Business Environment Indicators

- BC ranks #5 in new business starts @ 680 per 100K (PE #1 @ 1300, ON #10 at 500)
- BC ranks #8 in corporate and top marginal tax rates

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The situation in BC today

Financial Indicators

- BC ranks #3 in investment activity per capita @ \$110 (ON #1 @ \$255)
- BC attracts 9% of national VC investment capital and 10% of foreign investment capital
- BC ranks #6 in business capital investment, being the only province to have a net negative rate over the last 10 years

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The situation in BC today

Innovation Indicators

- BC ranks #7 in general R&D spending
- BC ranks #5 in inventiveness – number of patents filed per capita, Canada ranks #18 in the world (OECD)

The situation in BC today

Labour Force Indicators

- BC ranks #5 in unemployment @ 8.3%, vs 7.6% nationally, Canada ranks #20 in the world (OECD)
- BC ranks #9 in post-secondary education enrollment @ 25%, vs 35% nationally
- BC ranks #9 in engineering and computer science graduates per capita, 1/2 of ON

The situation in BC today

Quality of Life Indicators

- BC ranks #8 @ 1,300 per 100,000 in violent crimes (*ON #1 @ 852, 955 national average*)
- BC ranks #10 @ 6,800 per 100,000 in property crimes (*ON #2 at 3,600, 4,300 national average*)

The situation in Canada today

- Canada's depreciated dollar has helped to boost export sales revenue, but it has also dramatically impacted our innovativeness by cushioning Canadian industry from competitive pressures that businesses in other countries have faced, thus removing an important incentive for Canadian firms to innovate.
- **Canada's excellence gap – last place in the G7** industrial competitiveness ratings at only 62% vs ideal (US ranks #1 at 94%). **For R&D, Canada scores at only 5% of ideal**, for skills and training Canada scores 18%, **for commercialization of new technologies and products, Canada scores 19%.**

A re-cap on where we are in BC today

- In real growth in GDP, **BC scores 6%** vs. 22% for California, 24% for Ontario, and 28% for Alberta
- **BC industry spends on average 0.8% of GDP on R&D**, vs. 2.1% in Ontario, 3.2% in California and 3.9% in Washington State

Founding of Intrinsyc

- A long road that started with growing up as the son of a P.Eng who is also an entrepreneur and who has run his own businesses for 40 years
- Concrete maturity meters from 1981-1986
- 4 failed business plans
- PCS Wireless, rags to riches to rags
- 3 investments in local firms – ITC was one
- Reverse takeover of ITC into Intrinsyc
- \$60M in financings and \$35M in revenues later . . .

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Intrinsyc Corporate Overview

"Intrinsyc creates, networks and manages specialized, intelligent devices for Global 1000 companies."



"Accelerate Your Vision."

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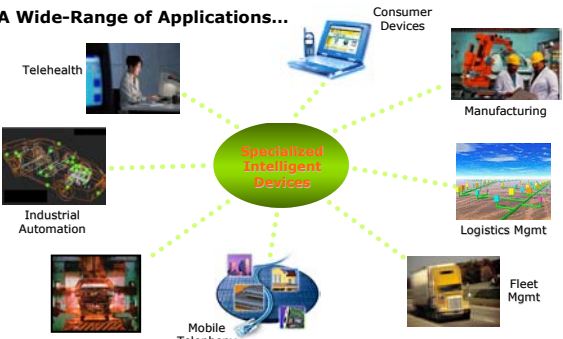
Global Customers



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A Wide-Range of Applications...



Specialized Intelligent Devices

- Telehealth
- Consumer Devices
- Manufacturing
- Logistics Mgmt
- Fleet Mgmt
- Mobile Telephony
- Telematics
- Industrial Automation

... In Large, Expanding Markets.

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Intel: Reference Design Kit

Wireless Handheld PDA



- Next-generation voice, camera, Internet, multi-media, data-enabled wireless device
- Supports Smartphone
- Multiple applications - any market where handhelds and mobility vital
- Cross Operating Systems

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Philips: Global Multimedia Platform



- Multiple contracts
- Multi-media infotainment platform
- Intrinsyc is 'Go To' global technology partner
- Engineering, development, hardware, software licensing
- Complete product suite

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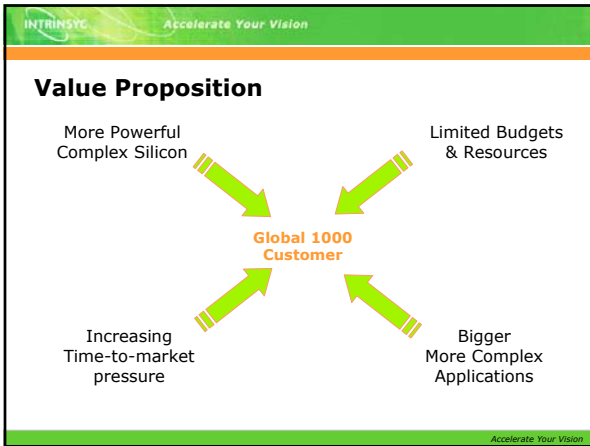
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Driving Market Forces

Catalysts:

- **The need for real-time, on-site information**
- **Market Externalities**
 - Price points are dropping
 - Faster, more powerful processors
 - Evolution of devices to standard, open operating systems
 - Feature-rich end-user applications
- **Critical Mass**
 - ROI - Replace existing application and solutions
 - Infrastructure has arrived
 - Power Processors, Open standard OSs, Wireless Broadband, Internet Pervasiveness

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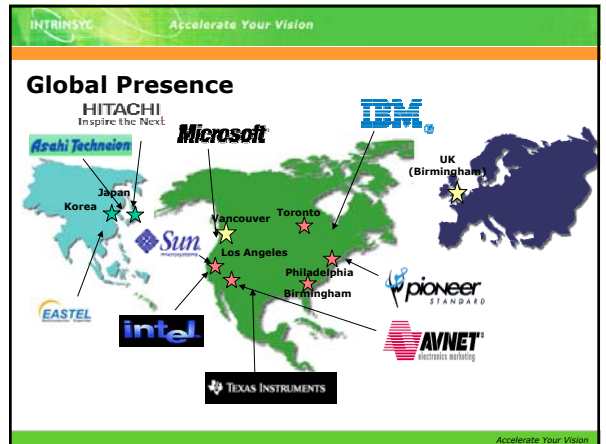
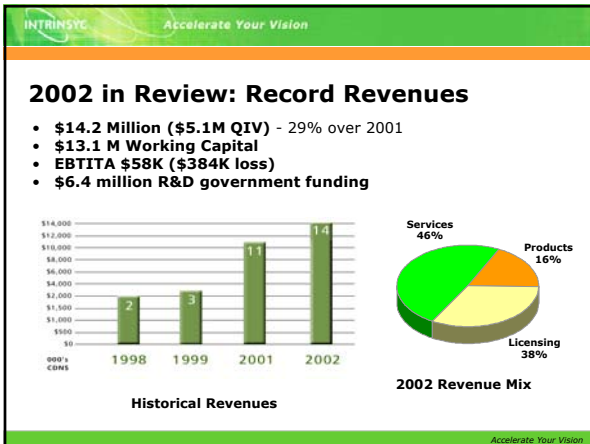


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Intrinsyc is a Leading Player

- **Global 1000 Customers & Alliances**
 - Microsoft, Intel, Sun
- **Strategic Technology Partner**
 - Philips, Microsoft, IBM, Symbol
- **Complete End-To-End Solutions**
 - Devices → Enterprise
 - Cross OS and Processor Platforms
 - Licensable IP
- **Longevity with Depth of Experience**
 - Competition is consolidating

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October 20th, 2002 Award

Microsoft® Windows® Embedded 2002 Partner

PARTNER OF THE YEAR

Systems Integrator

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Lessons Learned

- High tech is high risk
- Mixed with public company status, that means a tight-rope ROI proposition – dramatic growth in volatile markets
- Money = power and influence, with opportunities for greed and corruption (the games people play)
- We made it because we had strong financial backers and very good adaptation skills
- We shifted at the right time from development focus to sales and marketing focus

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P.Eng / Entrepreneurship Parallels

- Many P.Eng's are consulting Engineers, organized into partnerships, flat org-structures, high average employee education and experience credentials
- Marketplace competition, business development, finance, admin, R&D, design work
- Many hybrid business models – Architecture/P.Eng
- Moving into the Internet/computing realms with advanced simulation/modeling, client interactions
- The only major difference between this type of entrepreneurialism and pure tech is the expected rate of growth, ROI expectations, and accepted risks

Key issues for P.Eng's in the tech sector

- Bridging the gap in accepted risk and innovation which requires a flexible mindset and culture of "acceptance of failure"
- Willingness to become an outspoken self promoter
- Extension of skill sets and interest and focus into non technical areas (more marketing oriented with supporting "anticipatory" development strategies)
- Dealing with "money" issues, confronting and managing others in the food chain who don't think like you and don't care about technology or professional excellence

Founding a tech company today

- Revisiting the ".com" era – is it really such a bad thing that those days are behind us?
- Money finds value – bad deals won't get funded now but good ones will
- Efficiency in the system is now back which is good for everyone who actually provides value
- This is bad news for all of the free loaders and dreamers who were hoping to hitch a ride
- The pendulum swings back and forth – we're coming back around to "normalcy" by 2005

The future for Engineers in society

- "Applied Science" – a pretty wide-ranging mandate to build a profession on
- Since the invention of the microprocessor 25 years ago a lot has changed
- Other professions seem to attract people who are less afraid to promote their value to society, to fight for their share of the pie
- There is an ever increasing pie out there and Engineers within the context of the engineering profession can and should leverage that to maximum advantage – its our upside opportunity



Thank you