



Retooling High Tech

Who will be the Champions ?

By
Denzil J. Doyle, Chairman
Doyletech Corporation



The Ottawa Region Has Had Two Major Technology Waves

- The Defence Wave: **1948-1968**
- The Communications Wave: **1962-2000**
 - Both had federal champions.
 - DND for defence.
 - DND / DOC / IC for communications.
 - DND owned DRTE which was the predecessor of CRC.
 - Then DOC owned it and now IC.

DRTE / CRC was Mostly Satellite and Wireless

- But its pool of expertise was a major factor in Northern Electric's (now Nortel) decision to move its major R&D facility here in 1962.
- That lab was eventually responsible for Mitel, Mosaid, and many others.
- DRTE launched Alouette 1 in 1962 and this put Canada in the satellite communications business.
- RCA became its major instrumentation supplier but pulled out of the business in the mid-seventies.
- This resulted in many spin-offs (e.g. ComDev).
- DRTE also spawned Telesat as well as companies like Gandalf, AIT, MDI, CAL (now EMS), and Miller (now Calian).

But Times They are a Changing

- Pressure on the labs for cost recovery.
- This is often incompatible with new company formation.
- Partnerships don't come for free and SMEs can't afford them.
- Labs are classifying their technology as either being for ***applications*** (policy making, international commitments, etc.) or for ***commercialization*** (new company formation, etc.) and there are a lot of people who know a lot more about the former than about the latter.
- Nevertheless, the classification is a positive step.

What Does this mean for Envirotech?

- The Environment portfolio is all about policy and regulations and it seems reasonable to assume that most of Environment Canada's R&D will be focused in that direction.
- That does not mean that it will not be commercializable.
- It will just be more difficult to find.
- It will probably present more service opportunities than product opportunities (e.g. test procedures, laboratory standards, project management).

A Final Thought

- Why not do a scenario analysis of envirotech development in the region over the next decade?
- We should aim for 25% of our high tech activity being in envirotech by 2017.
- That translates into about \$5 billion in sales and about 20,000 employees.
- The employees and the business opportunities won't be the limiting factors.
- It will be the financing.
- It would require start-up funding (angels, IRAP, SREDS, etc.) of close to a billion dollars and second and third round funding of about twice that.
- Is that money out there?