Creating Digital Opportunity in Waterloo

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Why Is Waterloo a High Tech Hub?

• It’s not size. Small and medium-sized cities should struggle in high tech markets

• It’s not history. A center for mechanical engineering (and insurance), but not tech startups

• It’s not unusually close ties to the US. Or Toronto, which could accelerate brain drain

• It’s not a flagship firm. Predated RIM’s growth and resilient to the firm’s decline (will discuss)

• The University of Waterloo was a necessary condition (Bramwell and Wolfe 2008), but not a sufficient one (S. Breznitz 2014)
Answer: Collective Narratives

1. Accelerate the diffusion of new business models: WATCOM’s success diffused through the university, then the city of Waterloo, then the entire region.

2. Facilitate the exchange of knowledge: Little collaboration in doing business (supplier networks, IP generation, etc), but mentoring networks diffuse knowledge about “how to do business.”

3. Leverage external resources, attracting talent (UW students), capital (VC, FDI) and public funding (the University of Waterloo).
RIM versus Nokia (and Nortel)

1. Unlike Nokia, RIM did not construct a sprawling network of subcontractors in manufacturing, software, and R&D

2. Unlike Nokia, RIM did not “capture” the policymaking process, reorienting innovation policies around its strategic vision (it did dominate the local ecosystem, but few tools to influence)

3. Unlike Nokia (and Nortel), did not inspire other enterprises to follow its lead into telecommunications

May have limited the region’s ability to scale and knowledge spillovers from RIM, but the region was also more resilient to the firm’s collapse
Policy Implications

1. Federal and provincial governments can foster innovation (UW, NSERC, SRED). Can do more for Waterloo—e.g. Transit connections to Toronto

2. But local governments can also facilitate adjustment by focusing on ideas, developing associational infrastructure

3. Do NOT mobilize resources around a single enterprise. Foreign tech is a source of concern

4. Biggest challenge will be regions without a world-class university and a dense associational landscape. A role for feds and province in managing regional disparities