

# City of Hamilton: Case Study Results

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# Background

Hamilton is perhaps the quintessential Canadian rustbelt city that has undergone the steady and protracted decline of its traditional manufacturing industries without a clear picture of what forms of economic activity will take hold to replace them.

# *Hamilton's Top 10 Employers*

- Hamilton Health Sciences
- City of Hamilton
- Stelco Inc.
- Dofasco Inc.
- McMaster University
- Government of Canada
- National Steel Car Ltd.
- St Josephs Healthcare Hamilton, St Josephs Hospital
- Mohawk College of Applied Arts and Technology
- Orlick Industries Ltd.

# Field Research

- A total of 42 of interviews have been completed.
- Sectors:
  - Materials & Manufacturing
  - Health Sciences
  - Arts

# Results: Issues Summary

- Emerging industrial sectors in Hamilton are not easy to identify
- Respondents are not clearly linked to each other through established community linkages e.g. Chamber of Commerce, MMRI.
- There is a gap between data sources. The CMA data include Burlington and a significant ICT sector that is not evident in the traditional City of Hamilton.
- Golden Horseshoe Biosciences Network and the Golden Horseshoe Manufacturing Network.

# Innovation: Manufacturing

- Labour: Many organizations identified a large pool of experienced individuals in all categories, including engineering, management and general labour.
- Logistics: Several interviewees noted that there are few better economic locations for any company than the Golden Horseshoe.
- Partnerships: Large Hamilton maintains a high concentration of manufacturing and steel companies and assets that serve as suppliers, customers, partners and service people

# Innovation: Arts

- Strong, growing and connected visual art scene. Seems better connected.
- Inexpensive space: Many artists were located in converted industrial buildings and downtown storefronts that would be unaffordable in larger cities.
- Inspirational Architecture: Many of the artists found the industrial architecture and gritty personality to be inspiring and more 'real' than other cities.
- Urban History: Hamilton's successful urban past gives it positive characteristics, including compact downtown, with many shops and services, and long tradition of major art institutions.

# Innovation: Health Science

- The health cluster in Hamilton appears to focus on testing and treatment
- Labour: Hamilton is home to medical professionals with a variety of backgrounds and specialties.
- Reputation: Hamilton is known as a centre for health sciences, which makes it easier for certain organizations to promote their services to an international audience.
- Special Assets:
  - Hamilton has a nuclear reactor.
  - Union members have generous medical benefits. Specialized medical services – designed orthotics – are often paid for.



# Innovation: Advanced Materials

Our investigations expected companies in advanced materials, such as different types of steel, plastics, polymers. There were small indications of the benefits of advanced materials. Among the recommended innovative firms, we did not find any materials manufacturers. So far, this is not an area that stands out as a core strength of Hamilton

# Talent Attraction and Retention

- **Genius/Academic:** This is common for those in the health field, a person who developed a high level of skill in expertise in a particular area and found that this expertise had commercial value, so they started their own business.
- **Entrepreneur:** The entrepreneur-type could be described as a person whose primary expertise is in their ability to run a business often a takeover of an existing business.
- **Professional/Company Person:** This role is typical of people interviewed in larger organizations, typically in manufacturing. Individuals often have a professional degree, such as engineering or human resources, they are hired to a large organization and then rise within it due to their high degree of skill.

# Talent Recruitment

- Most companies recruited talent locally. The prime benefit that was noted was that individuals living too far away in Southern Ontario will soon leave the company for somewhere more convenient. Most companies found a good pool of labour in Hamilton for general skills, but were required to look further afield for special skill sets.
- Some companies pointed to the ethnic diversity of the area as a plus in seeking out and keeping talented new immigrants. The city has a number of services to help newcomers adjust to Canada and gain employment.

# Urban/Suburban Split

- Urban: They typically worked and lived downtown felt strong passion for the city of Hamilton Examples from Arts community, as well as health-science field located close to McMaster.
- Suburban: The majority of managers interviewed however, and the majority of successful businesses, were located in suburban areas such as Ancaster, Burlington and Flamborough.
- Suburbanites tended to have stronger international networks, and little connection to the immediate area around their business.
- Urbanites by contrast seemed more embedded in their local community and more likely to cross-pollinate with other locals, including those from outside their industry.

# Inversion of Growth Poles ?

The success of the suburban areas may point to a trend in which economic growth in the city of Hamilton will go from the outside-in, with success in the suburban regions generating greater investment in the urban core - as opposed to the older model of major industries and population in the core radiating outwards.

# Knowledge Networks

The Jane Jacobs model of urban knowledge networks is that individuals in a vibrant and diverse urban environment interact with each other on a regular basis and help different types of companies improve the quality of their product and business processes. In the interviews we found that this was not necessarily the case. There were a variety of knowledge networks that were used to solve problems and develop new ideas. Those geographically local were often less relevant than many others.

# Internal, International Networks (Large Organizations)

In large MNCs, individuals with a problem to deal with, or a new idea to develop, will typically turn to others in their own organization, often sourcing talent from the corporate head office and other locations around the world. In some cases, there are regular visits and meetings used to exchange ideas, see what others are doing and offer advice.

# External, International Networks

Individuals who are not part of a large organization may also consult an international network of contacts. These are often co-workers from past jobs, friends from school or colleagues met at a trade show, conference or professional organization. Often a quick phone call or email are enough to get a solution to an issue. The Internet is a vital tool in this.



# Local Informal Networks

Several questions in the interview guide prompt the interviewee for information on local, informal connections, with the idea that an organization benefits from cross pollination of ideas from many different sources. We found however, that there was much less of this sort of interaction than one might expect.

# Network Surprises

- The cluster for whom the local context was most important was the artistic community.
- In other clusters, where local knowledge was shared it was typically regarding how to better run the business: recruitment, finding land, and for small businesses, sales and marketing skills.

# Government Support and Local Organizations

- Many organizations initially responded by saying that the government played little beneficial role and had little involvement.
- Later, many described certain government programs as beneficial in a variety of ways, most notably in providing networking opportunities with other similar organizations. Product development was not the core benefit
- The goal was to learn how to run their business better.

# Professional Engineers

- Professional Engineers of Ontario (PEO) were useful places for professional development and support, with conversations on specific topics less common.
- Membership in the PEO may help engineers develop personal relationships that they may then call upon when a project issue arises

# The Internet

- Early on, two different interviewees identified questions on the role of the Internet to be something that was missing from the questionnaire.
- We subsequently discussed the Internet with all future subjects and virtually all identified it as an important problem solving tool.

# Finding Skills and Gadgets

- From a manufacturing perspective, projects occasionally require a skill, a tool, or a machine that the principal organization does not possess.
- The same holds true for finding companies with particular skill sets.

# Answering Questions

- Chat groups and knowledge databases exist for many technical specialties and sub fields.
- An engineer or researcher trying to solve a particular problem can post a specific, technical question that will be considered by potentially hundreds of peers and answered quite quickly.

# Expanding Ideas

- At least one interviewee suggested that “playing on the Internet” was a valuable process in and of itself, as a way of expanding the creative thinking abilities of employees.



# Trade Shows / Academic Conferences / Art Shows

- Health Science: academic conferences, where peer reviewed research was discussed and papers presented.
- Artists: galleries or theatre events that give an opportunity for socializing and inspiring new ideas.
- Manufacturers: trade shows - Hanover Industrial Fair - companies display new products. More valuable as opportunities to reinforce connections with distant personal contacts, to find potential collaborators

# Tim Horton's

- Tim's is a Labour Exchange:
  - The local Tim Horton's had been a fruitful recruiting ground.
  - While standing in line waiting for a coffee, people converse with others, mention a particular need, and learn that either the person that he was talking to was currently between jobs, or knew someone else who was available.
- Bar, church, softball team, art gallery

# Curious Questions Arising

We entered into this case study with a preconception: that the Hamilton economy represented a unique, almost textbook contrast of a 'community of practice/tacit knowledge network' based in materials/advanced manufacturing network along with an 'epistemic community' of Health Sciences/biotech new economy.

# Surprise 1

Materials/Advanced Manufacturing network. Interviewees had little sense of a knowledge/cluster network. The steel companies are there but beyond individual ad hoc company connections, little more.

# Surprise 2

- The McMaster Health Sciences complex is certainly an important focus on employment and intellectual activity. However, little by way of biotech spinoffs and entrepreneurial activity. The teaching model of McMaster may be a factor. There are startup companies but they are in testing (labs) and regulatory compliance domains, not hard science/discovery

# Policy Implications: MaRS NOT

- The MaRS model: analytic knowledge spinoffs from research universities in entrepreneurial gains - new company spinoffs and technology development. Perhaps this is wrong.
- Gertler's distinction between analytic and synthetic knowledge networks may be key to the difference.
- If McMaster Teaching Model is the anchor of the Hamilton health Sciences Network, then the creation of Medical Services spinoffs makes sense.

# New View of Hamilton

- Both Hamilton knowledge networks – material science/manufacturing (engineers) and Health Sciences/Medical Services (physicians) are more alike than different.  
Synthetic Knowledge
- The third wing may be the ICT concentration in Burlington.
- Further analysis.

# Government Innovation Policy

A daunting implication of our preliminary results is that Ontario's Innovation Policy where so much has been gambled on MaRS and so much else has been forced into that mould – may be headed in the wrong direction or is at least proceeding on a suspect premise.