Entrepreneurs, Scale-ups and the Evolution of Toronto's ICT Cluster: Insights and Lessons Learned

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Key research questions & findings

Key questions:

- 1) What are the factors driving the transformation of Toronto's ICT cluster from consisting mostly of MNE flagships into an increasingly dynamic ecosystem for local startups?

- 2) Are startups successfully scaling?

Method:

- 116 interviews over 2 years (2016-2018)
  - innovation-based technology firms (Canadian owned start-ups, scale-ups, and large firms);
  - government (federal and provincial);
  - industry associations; and
  - consulting groups
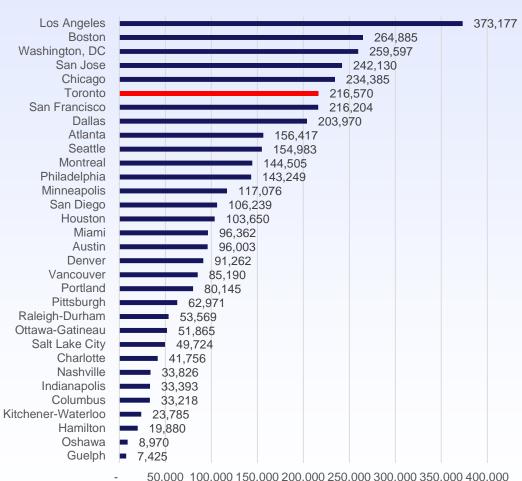- Findings supported by large-n datasets

Key findings

- Similar to other major metropolitan areas, Toronto's business environment is ideal to launch and commercialize technology startups

- Toronto has the 6th largest concentration of tech talent relative to major metropolitan areas in North America

- However, the research on Toronto startups indicates that they are not succeeding

THE REALIZATION: Toronto doesn't have a startup problem, we are not supporting the companies that are already succeeding – the *Scale-ups*.
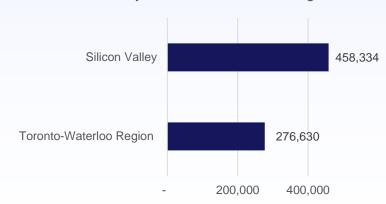
Tech Input: Talent

Total Employment
Tech Industry (2016) BII+E Definition

City	Employment
Los Angeles	373,177
Boston	264,885
Washington, DC	259,597
San Jose	242,130
Chicago	234,385
Toronto	216,570
San Francisco	216,204
Dallas	203,970
Atlanta	156,417
Seattle	154,983
Montreal	144,505
Philadelphia	143,249
Minneapolis	117,076
San Diego	106,239
Houston	103,650
Miami	96,362
Austin	96,003
Denver	91,262
Vancouver	85,190
Portland	80,145
Pittsburgh	62,971
Raleigh-Durham	53,569
Ottawa-Gatineau	51,865
Salt Lake City	49,724
Charlotte	41,756
Nashville	33,826
Indianapolis	33,393
Columbus	33,218
Kitchener-Waterloo	23,785
Hamilton	19,880
Oshawa	8,970
Guelph	7,425

Toronto ranks #6 among most populous cities in North America in terms of employment in technology industries, but the Toronto-Waterloo region is 40% less than Silicon Valley in terms of tech employment.
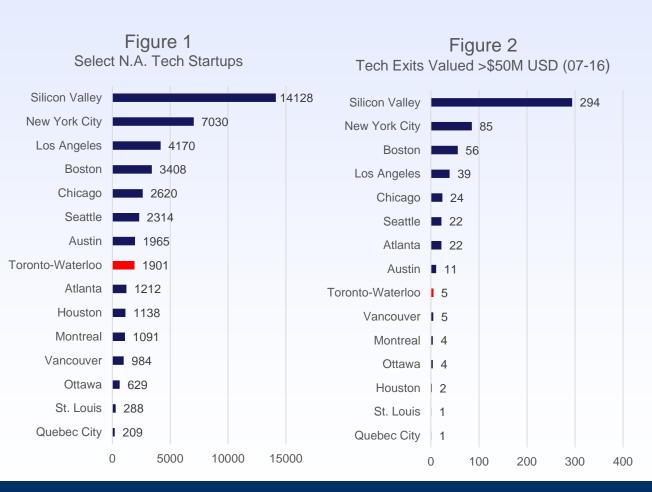
Silicon Valley vs. Toronto-Waterloo Region

Region	Employment
Silicon Valley	458,334
Toronto-Waterloo Region	276,630

Source: Statistics Canada, Bureau of Labor Statistics

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Tech Performance: Failure to Scale

Figure 1
Select N.A. Tech Startups

City	Startups
Silicon Valley	14128
New York City	7030
Los Angeles	4170
Boston	3408
Chicago	2620
Seattle	2314
Austin	1965
Toronto-Waterloo	1901
Atlanta	1212
Houston	1138
Montreal	1091
Vancouver	984
Ottawa	629
St. Louis	288
Quebec City	209

Figure 2
Tech Exits Valued >$50M USD (07-16)

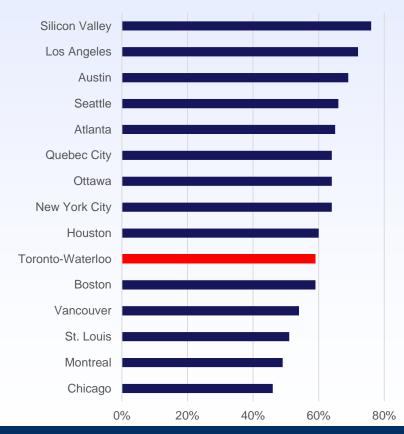| City	Exits
Silicon Valley	294
New York City	85
Boston	56
Los Angeles	39
Chicago	24
Seattle	22
Atlanta	22
Austin	11
Toronto-Waterloo	5
Vancouver	5
Montreal	4
Ottawa	4
Houston	2
St. Louis	1
Quebec City	1

Little data specifically on the actual number of scale-ups in Toronto; Number of exits over $50M USD is an indicator that most companies are not scaling and few are reaching their potential

Source: Startup Genome, 2016 data

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Ingredients to Scale: Talent and Capital

Figure 1
% Experienced Growth Employees

- Experienced Scale-up Talent is an indicator of the number of scaling firms

- The % of experienced scale-up talent in the Toronto-Waterloo corridor is underdeveloped

- This indicates that scaling companies are struggling to find the talent to help them scale

Source: Startup Genome, 2016 data

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What Does this Mean for Canada's Digital Opportunity?

Canada's Digital Opportunity

- To focus on better understanding of the Canadian scale-up ecosystem, support the companies that are already scaling globally, and develop policy to encourage them to grow and remain Canadian

Policy Imperatives and Implications

- Define the scale-up ecosystem so that policy-makers can understand and properly identify scale-ups
- Shift the policy discourse from its current focus on start-ups to companies already scaling
- Use direct and firm-specific policy instruments to effectively support Canadian scale-ups competing in a global market
- Develop policies to attract and retain talent with scaling experience while improving access to capital for scaling companies

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