



The Evidence Network (TEN)



TEN is an independent third-party assessment firm



We focus exclusively on impact assessments of organizations and programs that support business innovation



Rigor of academics; practicality of industry



Born Global







ECONOMIC IMPACT

COMPANY GROWTH

REVENUE GROWTH

\$178.5[§]

of \$299.5 Million Total Revenue

INVESTMENTS RECEIVED

\$150.6[§]

CREATED

610g

of 2,310 Total Jobs



YOUR ORGANIZATION IMPACT

REVENUES

\$9.4 ▮

INVESTMENTS RECEIVED

\$8.8§

CREATED

58岁

PORTION OF COMPANY
GROWTH ATTRIBUTED
TO YOUR ORGANIZATION





What questions am I addressing?

Q: What is the impact of your incubator/accelerator on companies and the economy?

A: Impact is manifested in terms of:

- Improving companies' capacity to perform
- Improving companies' market performance
- Impact on the economy

Q: What is your incubator/accelerator's performance relative to others?

A: Benchmark using impact measures





Benefits of Robust Impact Assessments

Robust assessments of impact on companies enables you to:

- Provide evidence of impact to get funding and make good spending decisions
- Increase your impact
- Attract the best companies
- Be accountable for results to Funders, Boards of Directors, and Advisory Committees
- Link incubator activities to the economy
- Communicate your impact to stakeholders









Avoid This!!

News / investigations

Tuesday, August 26, 2014 10:43 AM EDT INVESTIGATIONS





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Crime

Star finds taxpayer-funded MaRS' math doesn't quite add up

Star investigation. Public agency cites confidentiality agreements when asked to back up numbers, keeps names of most clients secret, as CEO who earns more than half a million dollars a year disagrees with Star's conclusions



"The \$3-billion impact figure is based on analysis so flimsy that it wouldn't pass the test of a Grade 10 science student, which is ironic for an institution charged with commercializing research by some of Canada's top universities," said Mark McQueen, CEO of Wellington Financial, a Toronto-based firm that provides debt to venture capital-backed innovation companies across North America.



Impact by 'Association'

Example 1:

Battelle estimates 'the total employment impact of all research parks in the US and Canada to be more than 750,000 jobs.'

Characteristics and Trends in North American Research Parks, 2007,
Battelle Technology Partnership Practice

Example 2:

'A top listed incubator generates 2.4 times higher number of jobs per client per year.'

UBI Index 2013

'Be careful how you spin it!'
Meredith Erlewine
Measuring your Business
Incubator's
Economic Impact
NBIA (2007)



Impact by 'Association'

Example 3 – Surviving firms:

'...the facility has assisted more than XXX tenants and graduates, with YYY percent of firms surviving five or more years'

Example 4 – Financing raised:

'...XXX companies have benefitted from participating in YYY programs and raised more than \$ZZZ billion in funding'



MAKING A

DIFFERENCE?



What characterizes best practice methods?

 Best practice methods distinguish the 'treatment' effects (impact of incubator support) from the 'selection' effects (would the companies have performed better anyway?)







Best Practices – Methods, Data, and Reliability

Reliability of Impact results

Non **Experimental**

Best Practice Approaches

Expert judgment of attributed impact

- Regression with controls
- Qualitative case studies; descriptive analyses
- Economic impact analyses
- Success stories (biased by design)

Quasi **Experimental**

- Selection models with instrumental variables
- Difference in differences
- Matched samples

Traditional Approaches

Experimental

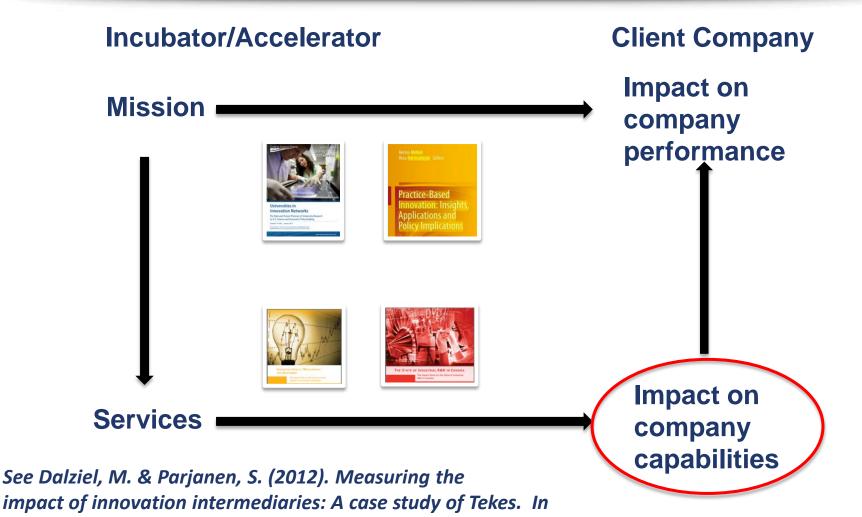
- Randomized controlled trials
- Regression discontinuity design

Data Requirements

Adapted from Jaffe (2002), Dept. Trade and Industry, UK (2006), and **Council of Canadian Academies (2013)**



How do incubators REALLY impact companies?





Melkas, H. & Harmaakorpi, V. (eds.) "Practice-based innovation:

Insights, applications and policy implications", Springer.



Uses of Expert Judgment - Examples

- Design of aircraft engine controls
- Assessment of software quality
- Assessment of health care counseling
- Cost estimation
- Project planning
- Predicting future events
- Innovation impact assessments (The Evidence Network)



Impact on companies attributed by expert judgment of companies





TEN's Impact Assessment Methodology

PURPOSE

- National competitiveness
- Regional economic development
- Industry strength
- New ventures

ASSESSMENT DIMENSIONS

INPUTS

OUTPUTS

OUTCOMES - IMPACT



Companies w/improved resources & capabilities

Companies w/improved performance

Socioeconomic benefits

- Knowledge, expertise
- Promotion
- Business linkages
- Research linkages
- Technology capabilities
- Financial capabilities
- Complementary business capabilities

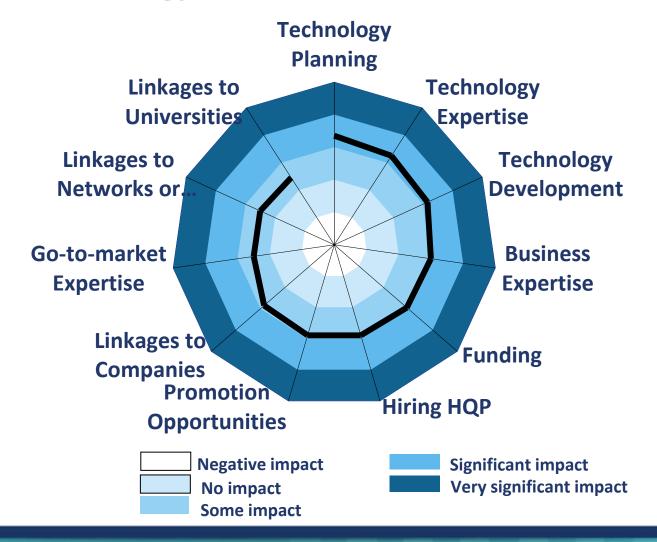
- Increased Revenues
- Increased Employment
- New products, services
- Time to market
- Increased Market share
- Environmental impact
- Increased Valuation
- Increased Investment





Impact on Company Capabilities

Example 1: Technology Accelerator

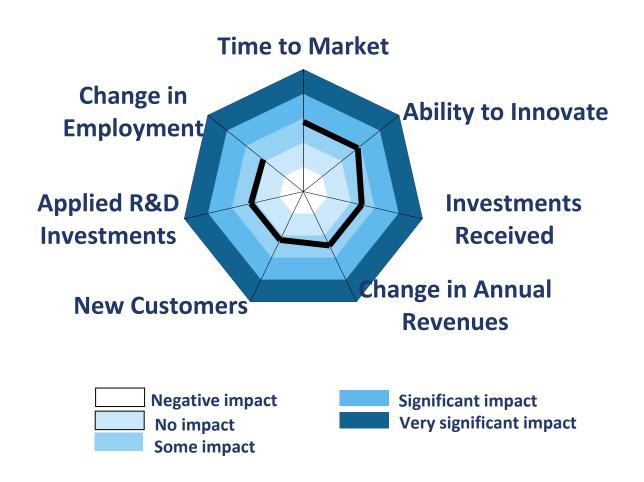






Impact on Company Performance

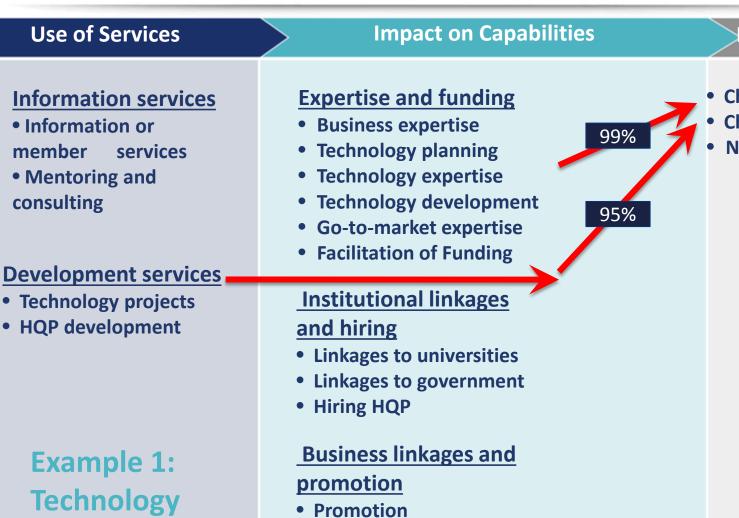
Example 1: Technology Accelerator







Best Practices Achieve Impact



opportunities

Linkages to companies



- Change in revenues
- **Change in employment**
- **New customers**

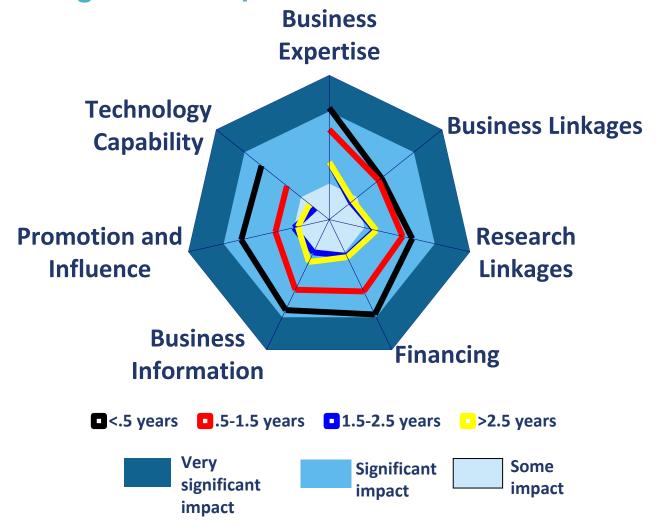


Accelerator



Impact on Company Capabilities

Example 2: Large incubator/accelerator

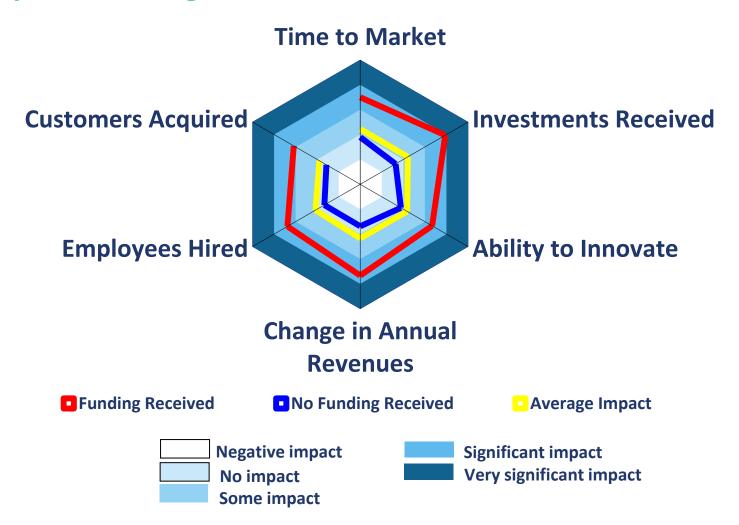






Impact on Company Performance

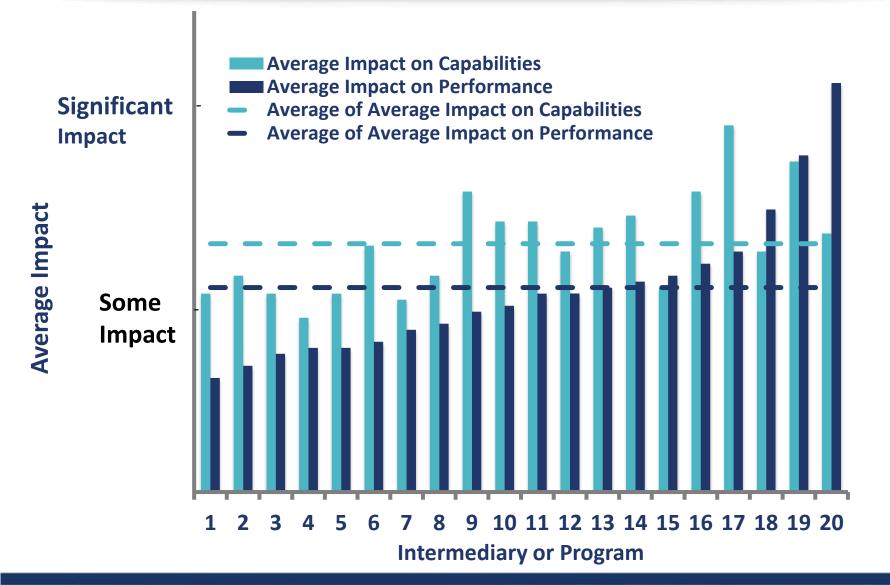
Example 3: Funding incubator/accelerator







How good is good? Benchmarking Impact

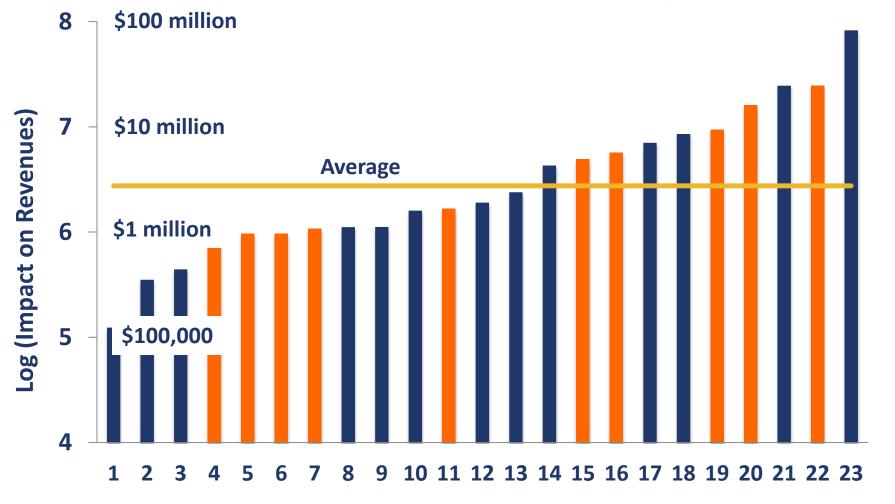






Attributed Impact on Revenues

These are the data to feed into economic impact estimators.

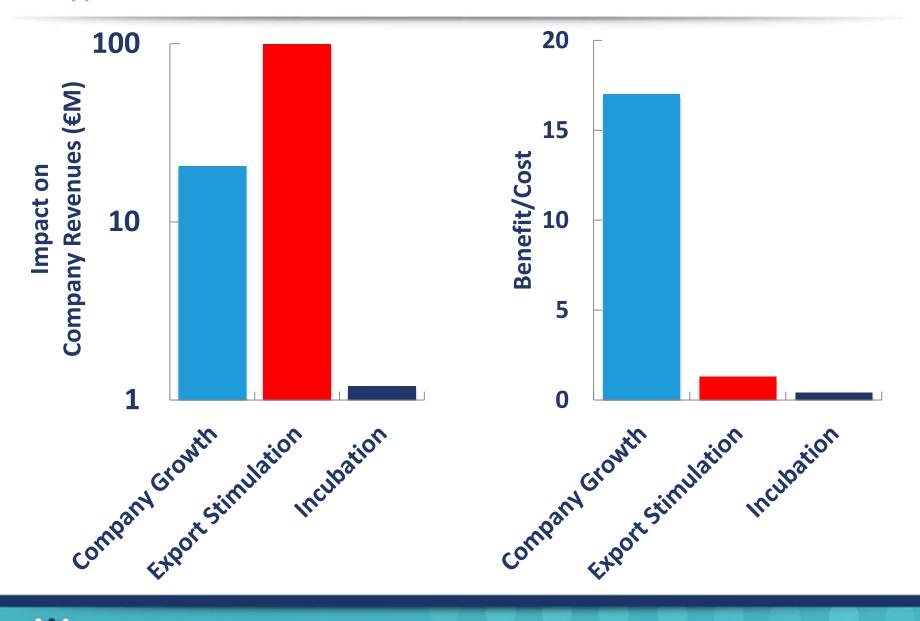


Intermediary or Program





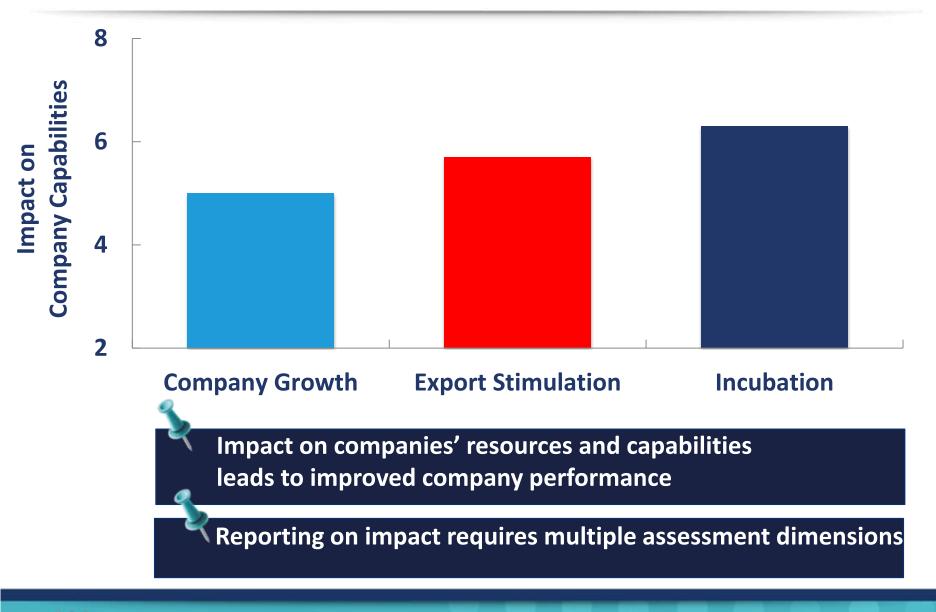
Best Performer? Which Benchmark?







Best Performer? Which Benchmark?





Conclusions

- Credible impact reporting distinguishes incubator impact from other factors affecting company performance
- Impacts attributed by companies to incubators can be used to identify best operations practices in support of:
 - Funding decisions
 - Performance improvements
 - Communications to stakeholders

