Canada’s High-Tech Micro-Multinationals in Asia’s Innovation Economy
What is the CDO data set?

- Based on CanAsia Map
  http://munkschool.utoronto.ca/canasiafootprint/
- CDO subset of high tech firms
- 199 companies in 627 locations
  - 48 Large Firms (> or equal to 500 employees)
  - 151 SMEs (< 500 employees)
  - 120 firms with locations in USA and/or EU of which 89 SMEs
CDO Mapping
CDO Asia: classification by tech sector

CDO Asia: Number of locations by sector and market group

- Telecommunications and Wireless Technology
- Software
- Services and Analytics
- Mobile, Web, and Cloud integration
- Life Sciences
- Energy and Clean technology
- Electronics and Peripherals
- Digital and Media
- Advanced Manufacturing

Legend:
- ASEAN
- China/HK
- India
- Japan
- South Korea
- Taiwan
CDO Asia: breakdown by size
CDO Asia: Software dominates among SMEs

CDO Asia: Comparison of SMEs and Large Firms by sector

Telecommunications and Wireless Technology
Advanced Manufacturing
Digital and Media
Electronics and Peripherals
Energy and Clean technology
Life Sciences
Services and Analytics
Mobile, Web, and Cloud integration
Software

SMEs
Large Firms
CDO Asia: China/HK dominant in locations

CDO: Percentage of locations by market group

- ASEAN: 15%
- China/HK: 37%
- India: 15%
- Japan: 3%
- South Korea: 4%
- Taiwan: 29%

CDO Asia: China/HK dominant in locations
CDO Asia: Companies by sector and province

CDO Asia: Number of locations by market group and province HQ

- ASEAN
- China/HK
- India
- Japan
- South Korea
- Taiwan
CDO Asia: Mapping innovation - breakdown by province

CDO Asia: Sectors by Province HQ for BC, ON, QC

- Advanced Manufacturing (20%)
- Digital and Media
- Electronics and Peripherals
- Energy and Clean technology
- Life Sciences
- Mobile, Web, and Cloud integration
- Software
- Services and Analytics
- Telecommunications and Wireless Technology

Provinces:
- ON
- BC
- QC
Ontario leads: High tech companies in Asia
Locations in Asia for top three provinces

CDO Asia: Percentage of locations in Asia by selected province

- ASEAN
- China/HK
- India
- Japan
- South Korea
- Taiwan
Multinationals and Micro-Multinationals

**Micro-Multi: Employee composition by sector**

- **Telecommunications and Wireless Technology**
- **Software**
- **Services and Analytics**
- **Mobile, Web, and Cloud integration**
- **Life Sciences**
- **Energy and Clean technology**
- **Electronics and Peripherals**
- **Digital and Media**
- **Advanced Manufacturing**

Dark red: 1-50
Brown: 51-200
Light orange: 201-500
Light yellow: 501-1000
Light blue: 1000+
Micro-multinationals: First Entry location

Micro-Multi: SME First Entry Location

- Advanced Manufacturing 10%
- Digital and Media 8%
- Electronics and Peripherals 6%
- Energy and Clean technology 4%
- Life Sciences 2%
- Mobile, Web, and Cloud integration 0%
- Services and Analytics
- Telecommunications and Wireless Technology

Micro-Multi: Large Firm First Entry Location

- Advanced Manufacturing 20%
- Digital and Media 15%
- Electronics and Peripherals 10%
- Energy and Clean technology 5%
- Life Sciences 0%
- Mobile, Web, and Cloud integration
- Services and Analytics
- Telecommunications and Wireless Technology
Asia First: Average entry year by sector - SME vs Large

SME

Large
Asia First: Sectoral Differences

Asia First: Sector composition by Market Group

- ASEAN
- China/HK
- Japan
- India
- South Korea

- Advanced Manufacturing
- Electronics and Peripherals
- Energy and Clean Technology
- Life Sciences
- Telecommunications and Wireless Technology
- Services and Analytics
- Digital and Media
- Mobile, Web, and Cloud Integration
- Software
Why Asia First?
Thank You

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