



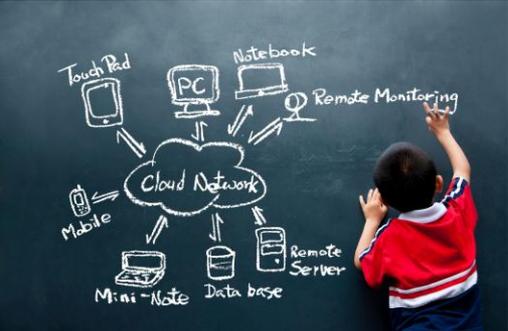
A Strategic Investment Framework for Economic Development in the ICT Sector:

Cisco Systems Canada – A Case Study

Ontario Ministry of Economic Development, Employment & Infrastructure

April 29, 2015

Agenda

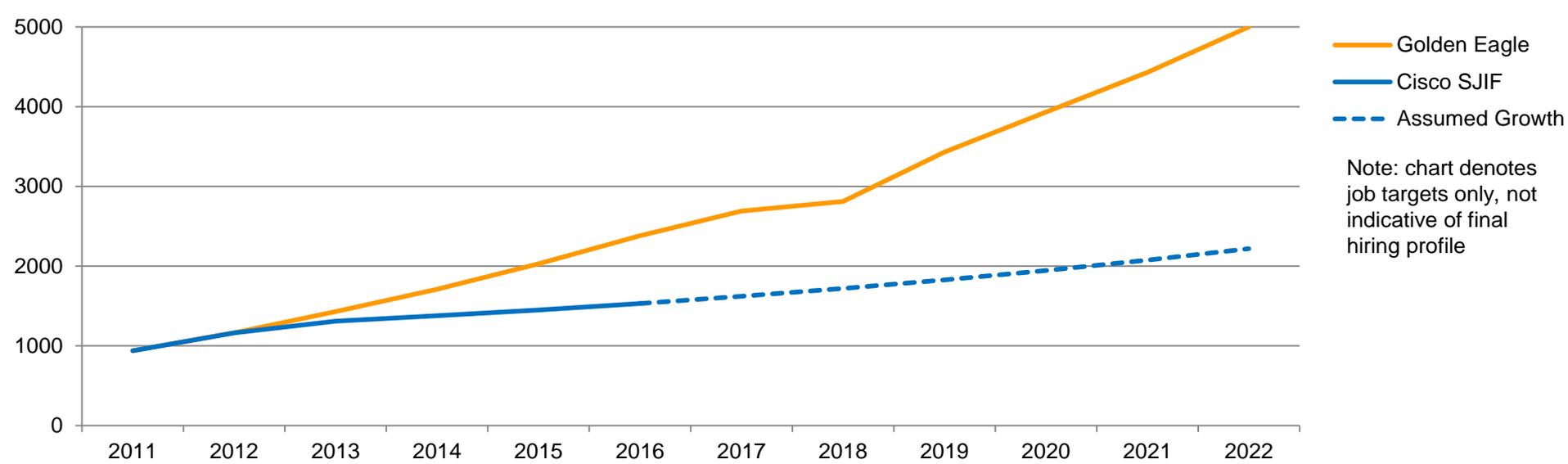


- Executive Summary
- Opportunity Overview
- Cisco in Ontario and Canada
- Ontario – Cisco MOU
- Strategic Framework
- Revitalizing Ottawa
- Additional Benefits
- What does this mean for Economic Development?

- Cisco, a US-based multinational and global ICT leader, enables voice, video and data across small networks (e.g. enterprise, home) and large carrier networks (e.g. Bell, Telus) through its hardware, software and services, generating \$46B in revenues in 2012 with over 66,000 employees.
- This landmark investment opportunity aligns to the MEDEI's strategic growth drivers for the ICT industry in Ontario.
- Through two phases this investment would retain 1,300 jobs and directly create up to 3,700 new high-value positions (70% R&D related) in Ontario by 2023 through a direct investment of up to \$4B, creating a new anchor tenant in Ontario's ICT industry.
- Ontario's strong ICT talent base, leading educational institutions, research infrastructure and transformative landscape successfully moved Ontario through a competitive process to be in final competition with another jurisdiction for the landmark R&D expansion opportunity.
- Globally, Cisco is rebalancing its worldwide R&D assets towards a common-platform R&D strategy and is trying to mitigate geopolitical, economic and natural disaster risk.

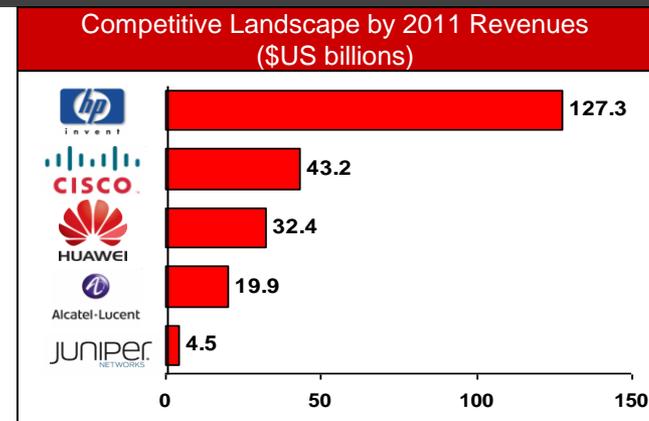
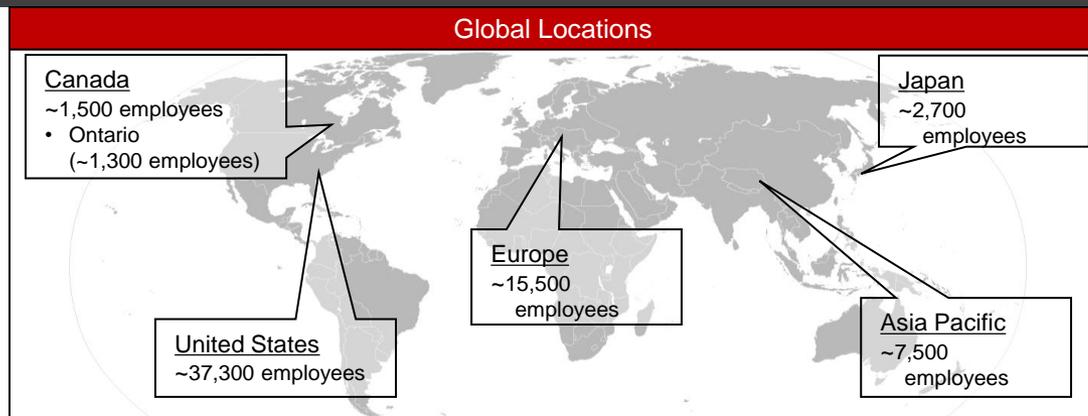
Today:

- Cisco indicated that its Strategic Jobs & Investment Fund (SJIF) project, already underway, positioned the firm to organically grow its Ontario R&D operations at approximately 10% growth per year after the current SJIF commitment period concludes.
 - Ontario's SJIF program supports investment in high-value Ontario jobs, cluster development, and leading-edge innovation to increase the global competitiveness of strategic Ontario firms.



Opportunity for Tomorrow:

- The single largest R&D expansion project in Ontario since BlackBerry and Nortel.



- **Cisco counts Canada as an important market**
 - Canada is Cisco's 3rd largest customer base in the world.
 - In Canada, Cisco is currently training over 18,000 IT professionals at 244 Cisco Networking Academies.
- **Cisco currently has over 1,300 employees (600 in R&D) in Ontario across London, Ottawa & Toronto**
 - Cisco developed its industry-leading CRS-3 carrier routing system at its Ottawa R&D lab.
- **In August 2011, Ontario provided Cisco with \$25M in SJIF support**
 - Cisco's investment of \$454 million in R&D over 5 years is creating 300 new jobs and retaining 300 in Ontario.
- **Cisco has established local partnerships with:**
 - Toronto's waterfront high-speed broadband project, and as technology sponsor to the 2015 Pan-Am Games.
 - University of Waterloo to open an incubation & research centre and provide \$1M for a new Smart Grid Chair.
 - McMaster University to collaborate on digital innovation in health research.
- **Cisco has partnered with Ontario through the Ontario-Cisco Memorandum of Understanding**

- On August 17, 2011, the Ontario Government and Cisco Systems Canada signed a Memorandum of Understanding that provides the framework for an ongoing partnership focused on economic development, job retention and creation, research and development, long term investment and commercialization projects in the province.
- Ontario is one of only five jurisdictions to have signed a Memorandum of Understanding with the company. The other four jurisdictions are India, China, Russia and Mexico.
- Under the MOU Discovery Process, Ontario and Cisco Identified many potential initiatives to work on. In order to shortlist the initiatives, the following criteria were used:
 1. Initiative must be manageable to accomplish in a short time frame.
 2. Potential to involve other multiple Ministries to build momentum for broader goals.
 3. Encompass the broader themes of Economic Development, Creating New Markets and Address Multiple Programs or Issues facing Cisco/Ontario.

Ontario - Cisco MOU initiatives

Focus area	Business as usual	Policy Driver	Outcome
Healthcare (MOHLTC, MAA, MEDEI)			
	Palliative care with Champlain LHIN	Telehealth; quality health care	Remote telehealth pilot; cost efficiency
		Life sciences strategy	Bioinformatics medical hub at McMaster
Energy (ENERGY, MEDEI)			
	Solution Innovation Centre in Toronto	Long Term Energy Plan	Smart buildings, energy efficiency
Smart Cities + Smart Grid (ENERGY, MNDM, MEDEI)			
	Current electricity grid	Smart grid/smart infrastructure	Data centre strategy

***They have a great education system, and a predictable tax system.
– John Chambers, interview with All Things Digital, Nov 13, 2012***



- The investment project aligns with the ICT Strategic Investment Framework and strengthens Ontario's technology clusters for sustainable growth over the next 10 years.

Sustain Ontario's leadership position in ICT

Bridge the commercialization gap

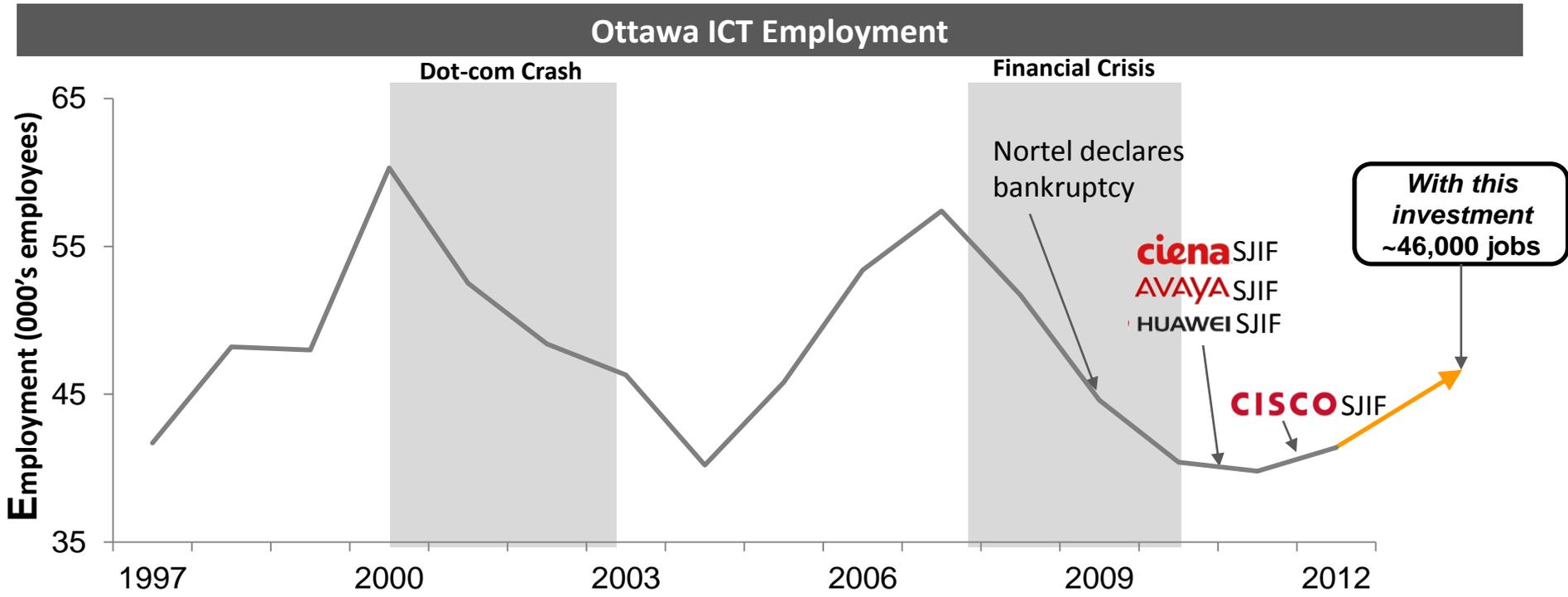
Develop, grow & attract highly-skilled talent

ISIF

Project

ISIF	Project
1. Reinforce Ontario's technology clusters to ensure their continued global leadership in the ICT sector	Cisco has a presence in all three of Ontario's major technology clusters, and intends to increase its investments and footprint in Ottawa and potentially Waterloo.
2. Promote and market Ontario's high-tech corridor as a leading global ICT jurisdiction	The project would place Cisco's Ontario R&D facilities in the top 5 of Cisco's R&D operations worldwide.
3. Identify next-generation technologies and markets where Ontario can gain a first mover advantage globally	Cisco focuses on 4 technology areas: <ul style="list-style-type: none"> • Routing & Switching and Data Centres provide the fundamental infrastructure that underpins the internet • Video and Collaboration are the fastest growing workloads for the internet
4. Bridge the gaps between grassroots research and market commercialization	The project would expand and cement the existing Cisco investments in research chairs with Ontario universities.
5. Increased access to risk capital	Cisco confirmed it will create a Canada-specific venture capital fund.
6. Expand the talent base in Ontario by attracting foreign talent, cultivating local talent base and nurturing entrepreneurship	The project would require deep relationships in local talent bases to recruit, train, and retain new employees. Cisco confirmed that select senior leaders may need to be relocated to Ontario to support this investment.

- In late 2009, Nortel sold its key assets to Avaya, Ciena, Ericsson, and Genband.
- Through SJIF, MEDEI anchored Avaya and Ciena in Ottawa through retained job commitments and by supporting the companies for future investments into their Ottawa R&D operations.
 - Ciena: \$25 M towards a \$900 M project, creating 353 jobs and retaining 967 existing jobs
 - Avaya: \$5 M towards a \$165 M project, retaining 350 jobs
 - Huawei: \$6.5 M towards a \$67 M project, creating 164 new jobs and retaining 56 existing jobs
- As of 2011, Ottawa's ICT sector directly employed ~43,000 people working at 2,800 different establishments and has the 2nd highest concentration of scientists & engineers in the western hemisphere.



Youth employment

- Initiatives aligned with Ontario's Youth Jobs Strategy.
- Cisco to hire 50% of new jobs from recent (within 5 years) post-secondary graduates.

Academic partnerships

- Cisco to sponsor existing and new Ontario university research chairs over the project term. Existing Cisco-supported research chairs include: McMaster, Ryerson, Toronto, Waterloo, York.

Commercialization

- Cisco to support research commercialization through expanded initiatives with existing incubators and establishing new incubation centres in Ontario technology clusters.

Risk capital

- Cisco to expand on Ontario-based venture capital activities through a dedicated Canadian VC fund.

MOU enablement

- Cisco to devote resources to support pilot projects across the broader public sector to drive outcomes under the Cisco-Ontario MOU.

Supply-chain

- Cisco to improve local/domestic supplier linkages building primarily on R&D mandates in digital media and Internet of Things.

1. Jurisdictional tournaments

- Every jurisdiction is utilizing the full toolkit of economic development supports to attract knowledge working industries.

2. Incent growth not size

- In an uncertain economic climate, broad-based growth can be elusive; firms that are ambitious to expand their reach are firms that can be used to underpin an economic renewal.

3. Planning for failure ensures success

- An economic development project that anchors jobs and investment and reaches its targets is an unqualified success. However, an economic development project which cultivates local champions, creates network linkages, and allows innovation & experimentation but does not reach its contracted targets can still be a qualified success.