

October 30, 2014

How IT, Including the Cloud and IOT, Can Drive Canadian Economic Growth

Dr. Robert D. Atkinson,
President, ITIF



@RobAtkinsonITIF

The Information Technology and Innovation Foundation is a Washington, D.C.-based think tank at the cutting edge of designing innovation policies and exploring how innovation will boost growth quality of life around the globe. ITIF focuses on:

- Innovation processes, policy, and metrics,
- Internet, big data and IT policy,
- IT and economic productivity,
- Science and tech policy, and
- Innovation and trade policy.

■ Today's Presentation

1

Cloud and Other IT Technologies Driving Change

2

IT-Related Causes of the Canada-US Productivity Gap

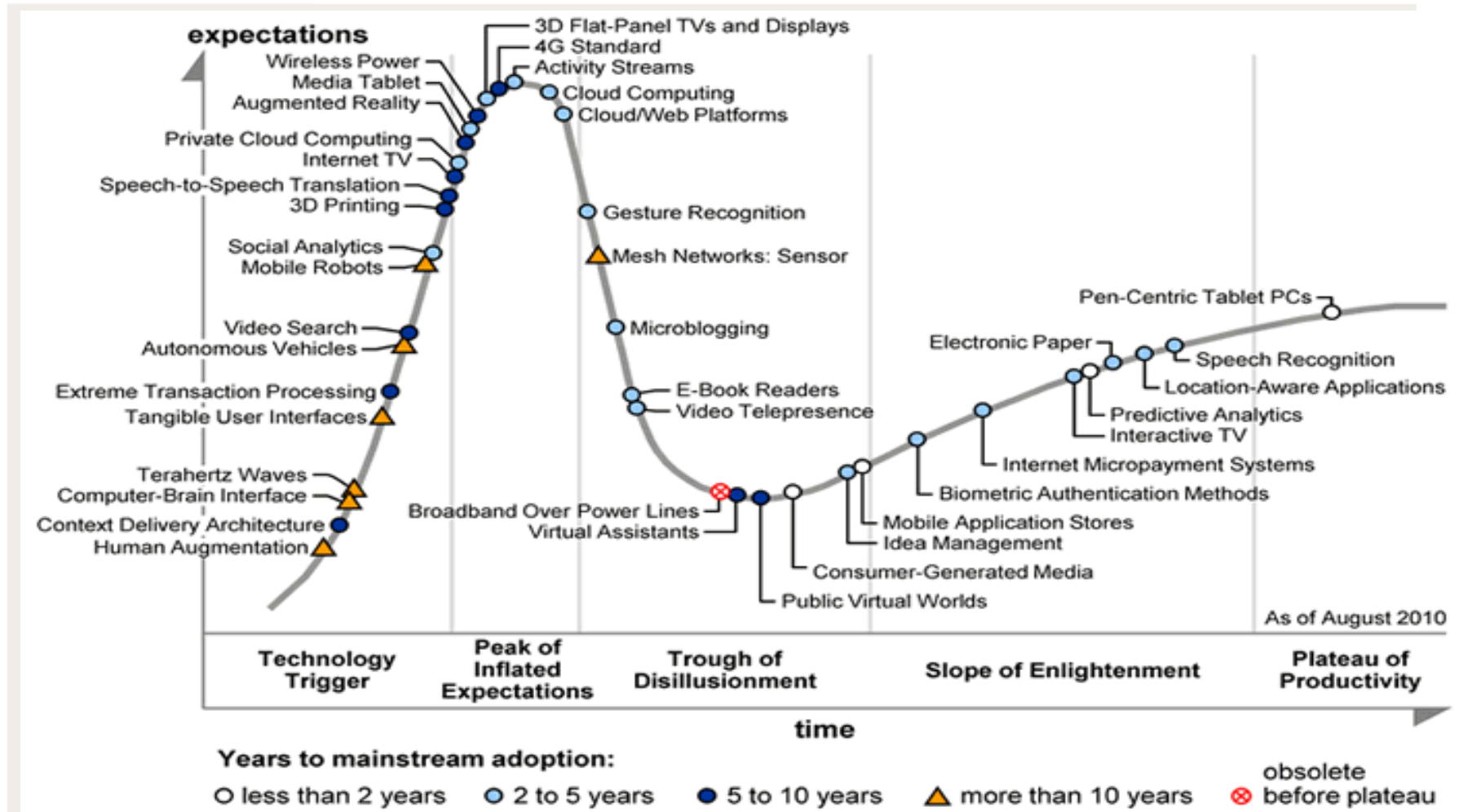
3

Some Thoughts on Next Steps For Government

■ Cloud Computing: Latest Buzzword or Next New Thing?

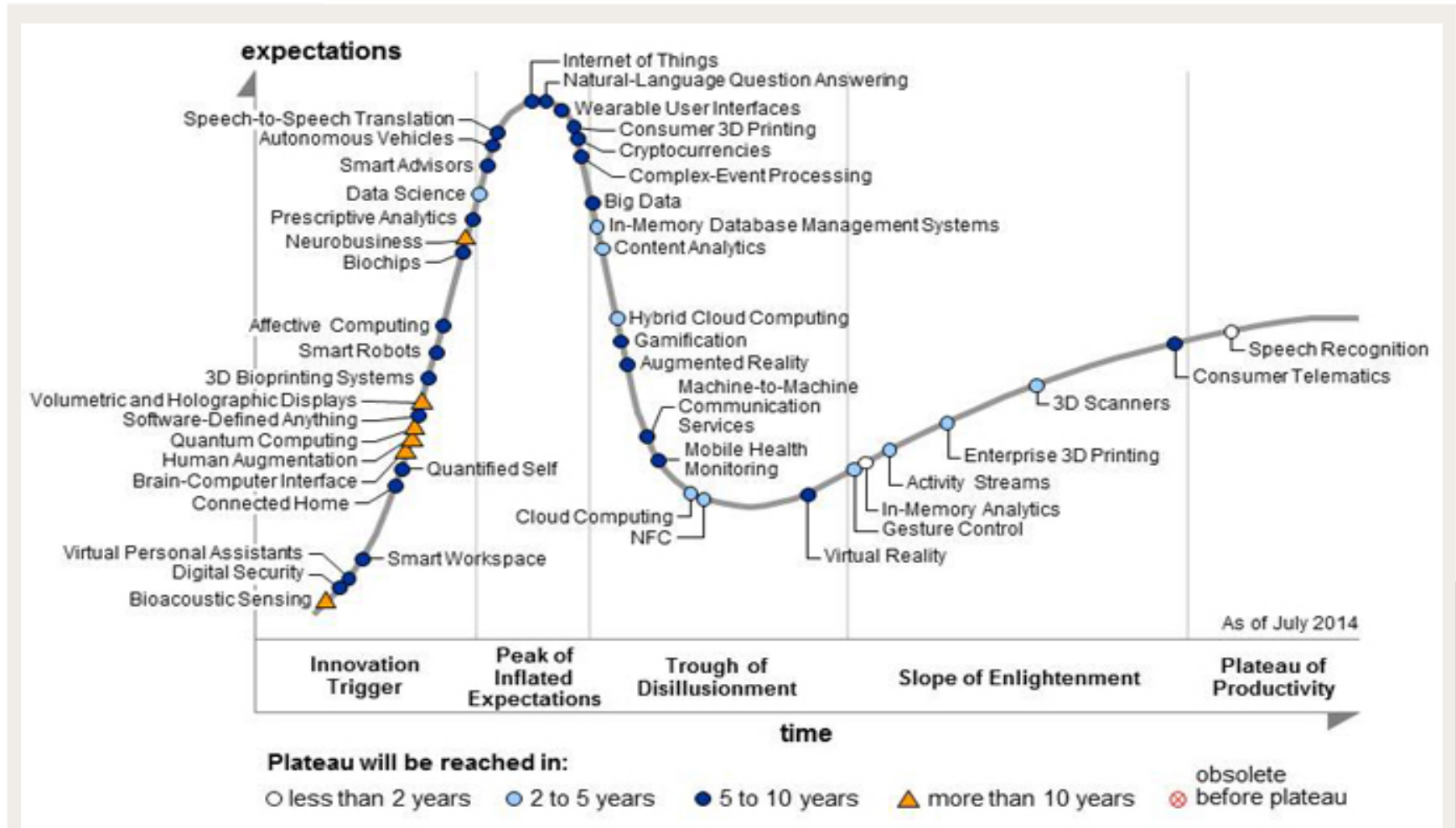


Cloud “Hype” Peaked in 2010



Source: Gartner's Technology Hype Cycle

Now Cloud is Ready for the “Slope of Enlightenment”



Source: Gartner's Technology Hype Cycle

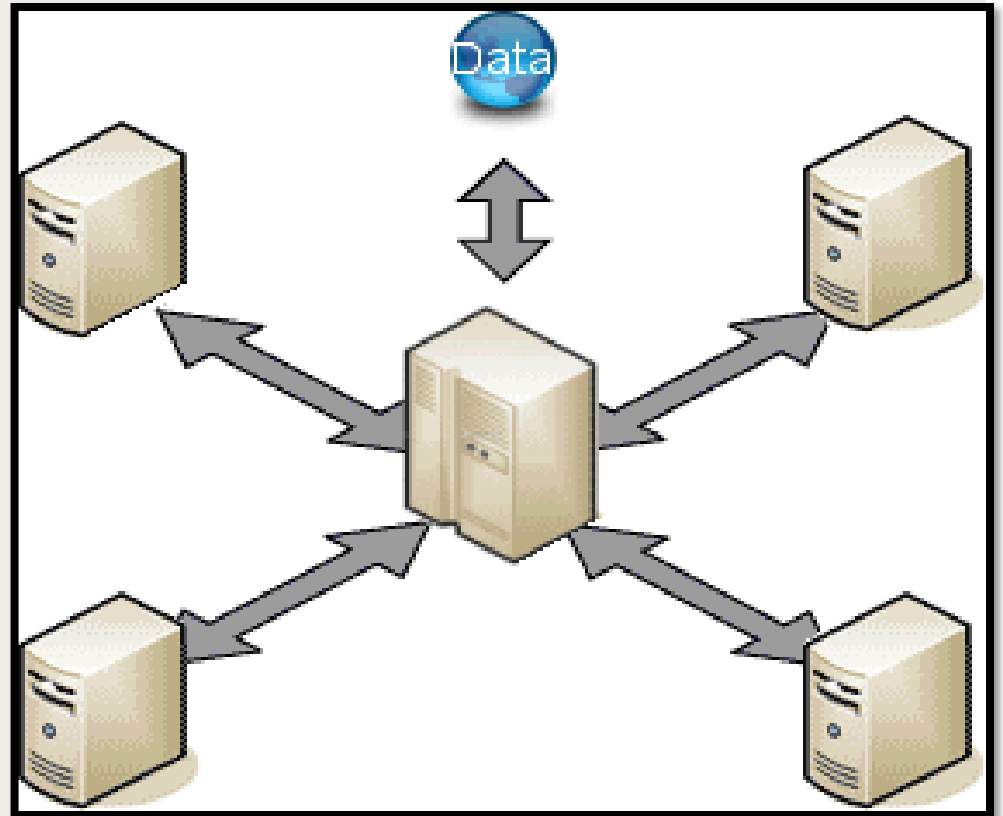
■ Why Cloud?

- Computing used to look like this:



■ Why Cloud?

- Then it looked like this:



■ Why Cloud?

- Now it is looking more like this:



■ Reasons for Using the Cloud

According to McKinsey:

- Increased business flexibility by 70%
- Ability to scale up to meet changing needs by 55%
- Lowered unit cost of by IT by 29%
- Disaster recovery and business continuity increased by 22%

- But its more than Cloud, It's “SMIOTACK”

- Social

- Mobile

- Internet of Things

- Analytics

- Cloud

- Kiosks

■ Today's Presentation

1

Cloud and Other IT Technologies Driving Change

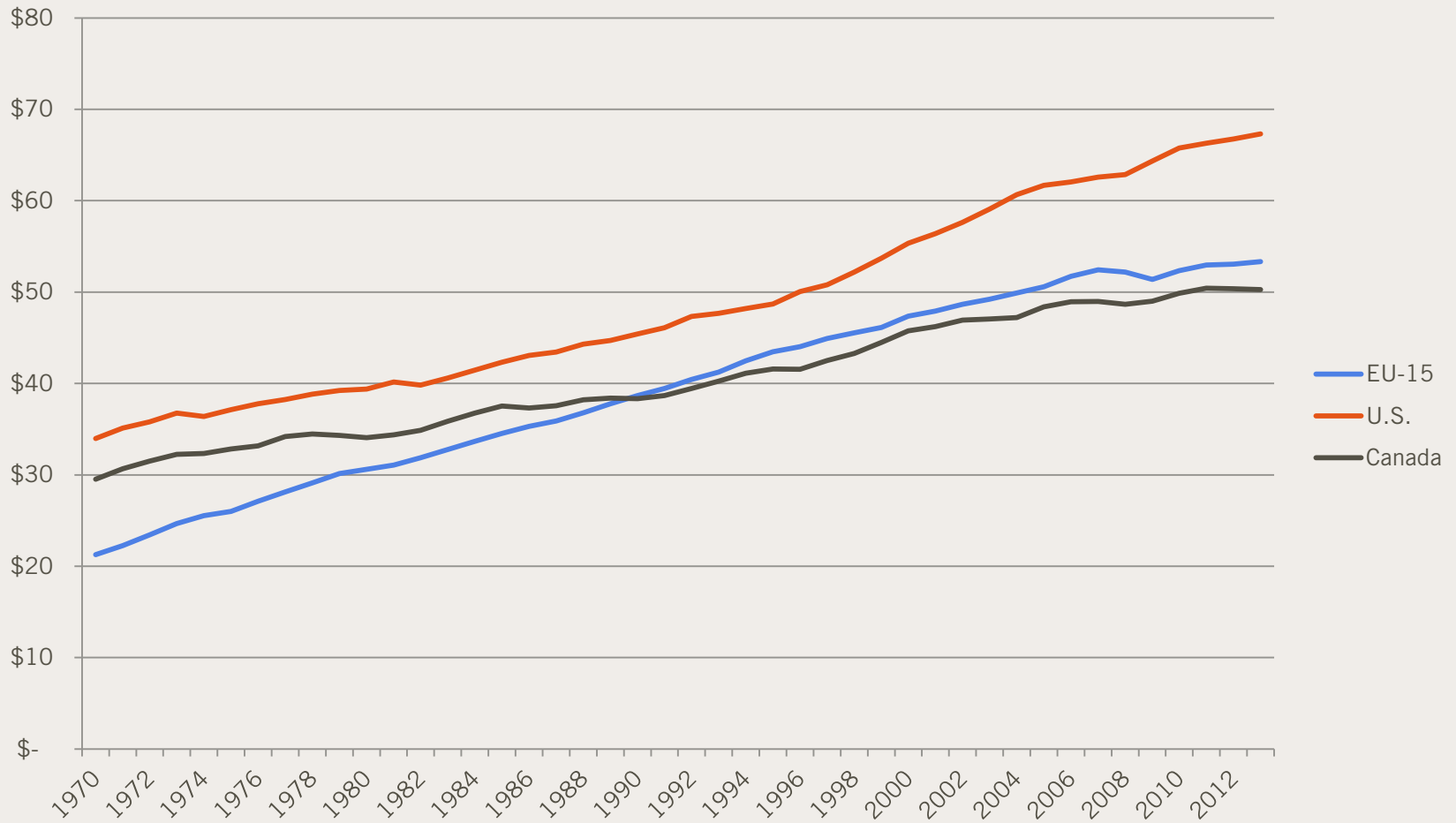
2

IT-Related Causes of the Canada-US Productivity Gap

3

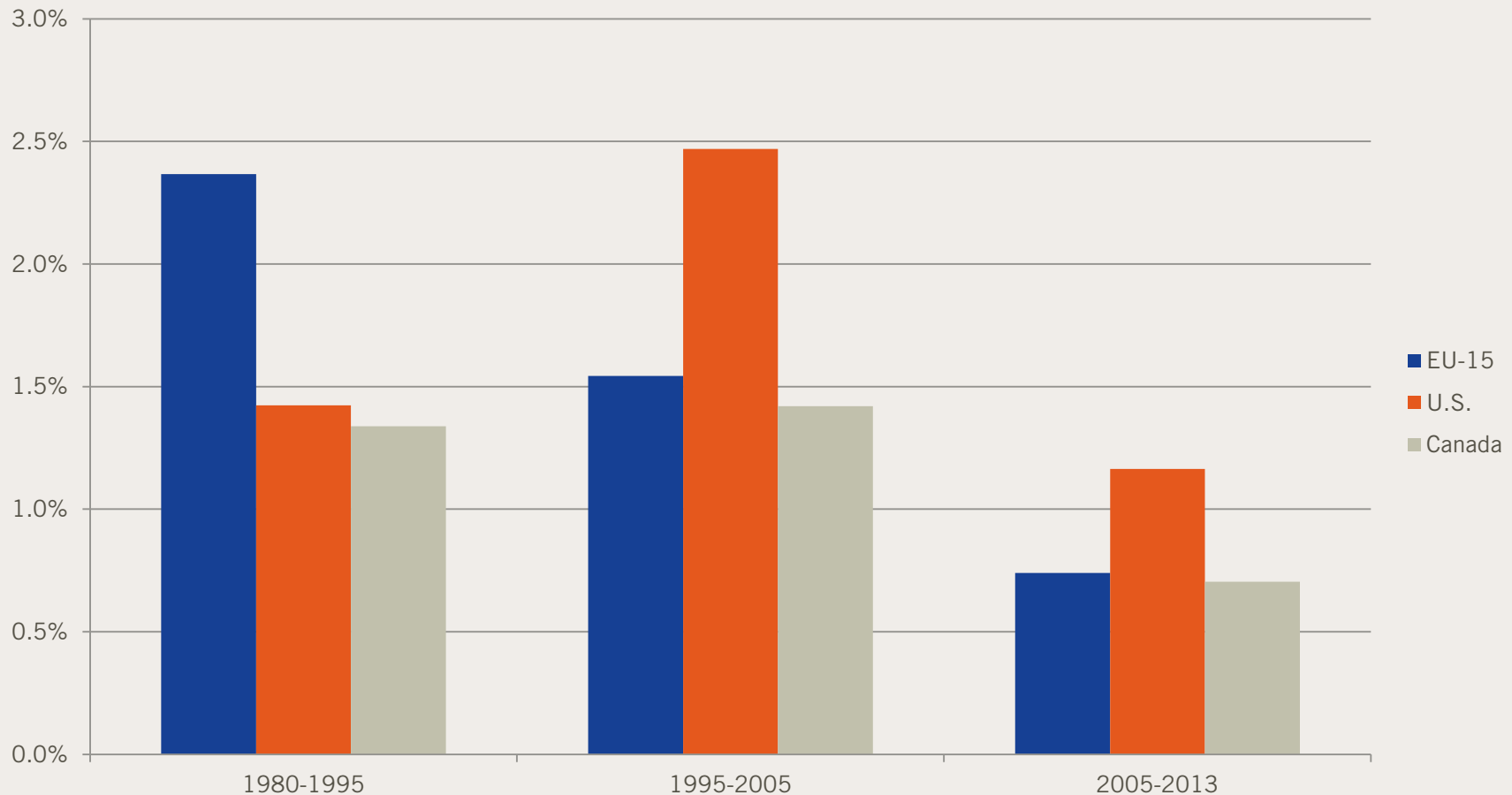
Some Thoughts on Next Steps For Government

■ Divergence in Canada-US Productivity Since 1970



GDP per hour worked, Source: The Conference Board, Total Economy Database

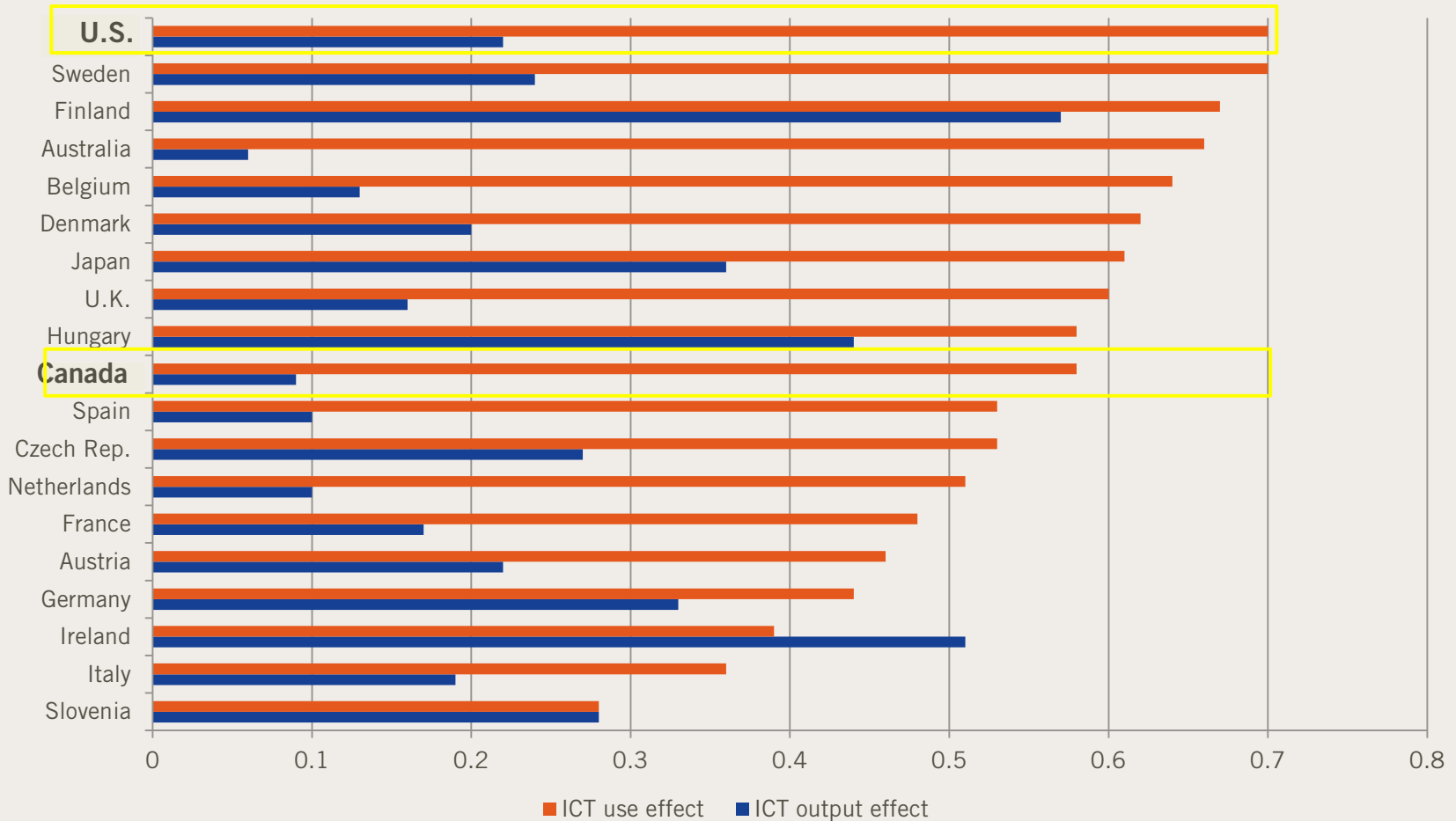
Canada Has Been Falling Behind the U.S. in Labor Productivity



Annual Labor Productivity Growth

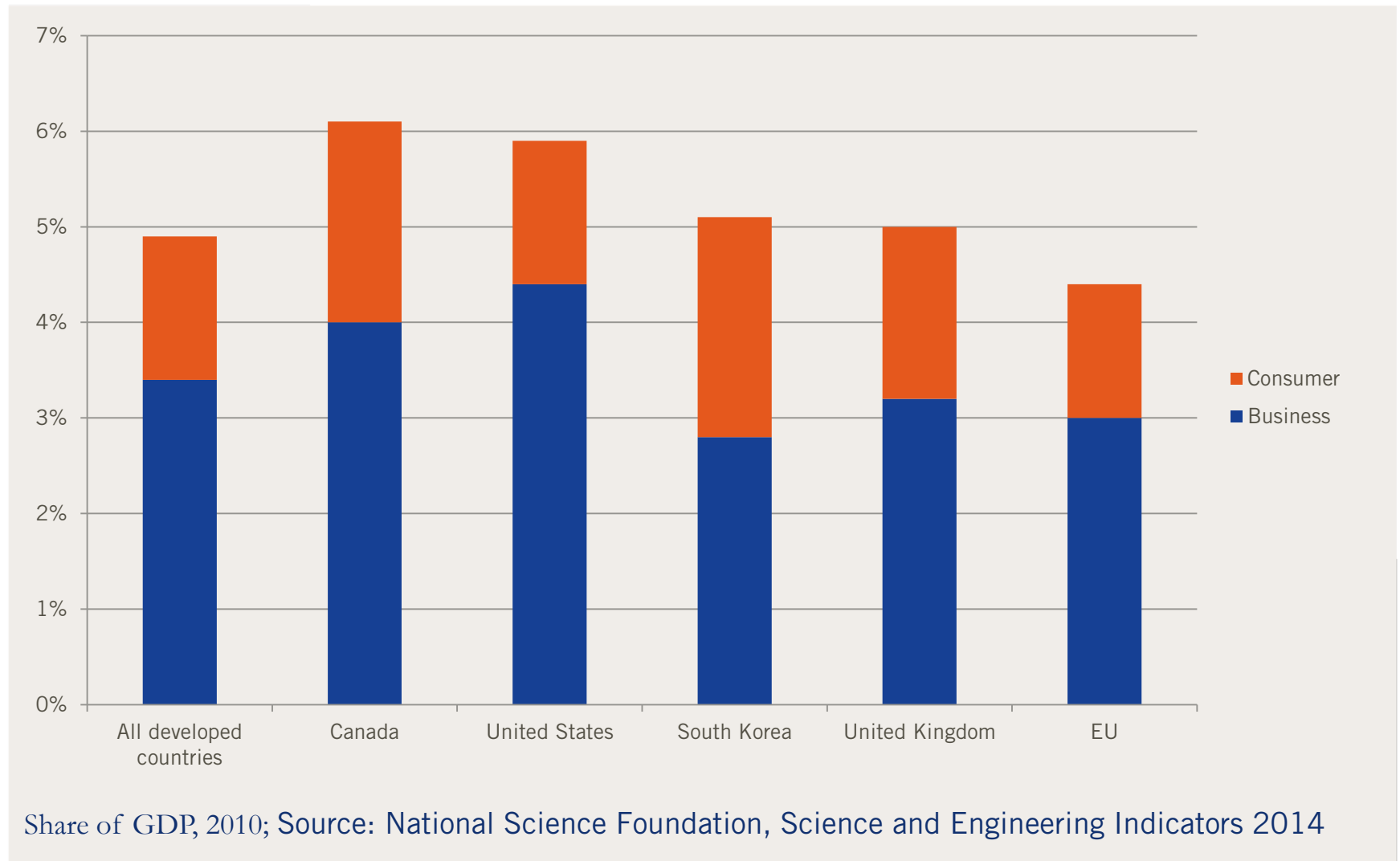
Source: The Conference Board, Total Economy Database

■ Most U.S. Advantage Comes From IT Use

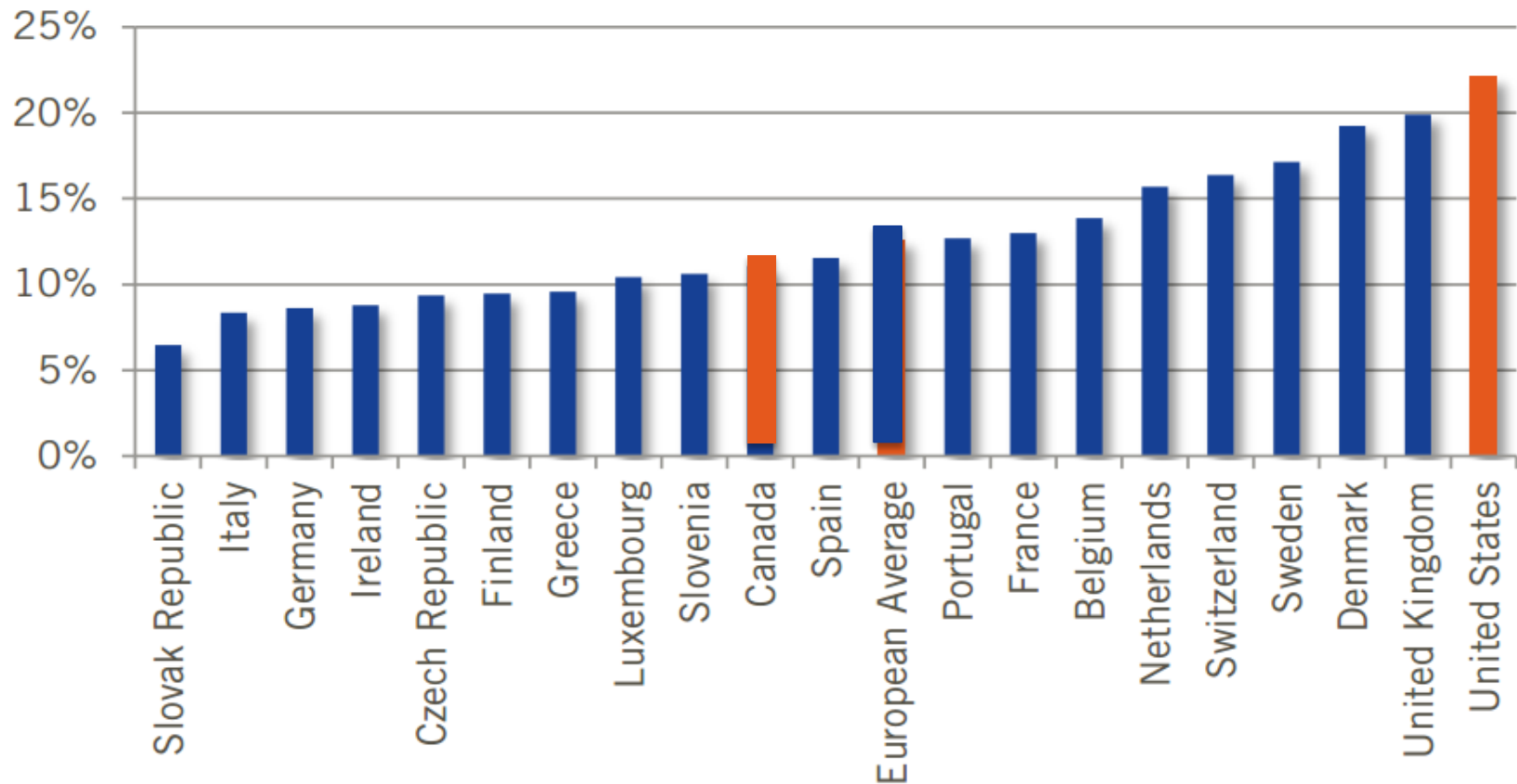


2000 to latest year, percentage points per annum. Source: Nicholas Oulton, "Long Term Implications of the ICT Revolution: Applying the Lessons of Growth Theory and Growth Accounting," *Economic Modelling* 29, no. 5 (2012)

■ U.S. Businesses Invest More in IT



■ US. Exceeds Canada in Share of Business Investment Going to IT



ICT assets as percentage gross fixed capital formation, 2011. Source: OECD, Science, Technology and Industry Scoreboard 2013

■ Today's Presentation

1

Cloud and Other IT Technologies Driving Change

2

IT-Related Causes of the Canada-US Productivity Gap

3

Some Thoughts on Next Steps For Government

■ Create “Cloud-Neutral” Policies

- Tech-neutral government access rules.
- Strengthen laws governing computer fraud and abuse.
- Avoid geographic restrictions on where providers can store data, use data security or privacy laws to disadvantage foreign firms.



■ Focus More on ICT *Use* by All Canadian Organizations

Work to be the global leader *use*, through PPPs:

- Smart Cities
- Health Analytics
- IOT Deployment in Government-Related Uses
- ITS Deployment
- Digital Cash
- Digital Signatures

Be the most friendly nation in the world for IT-driven business model disruption



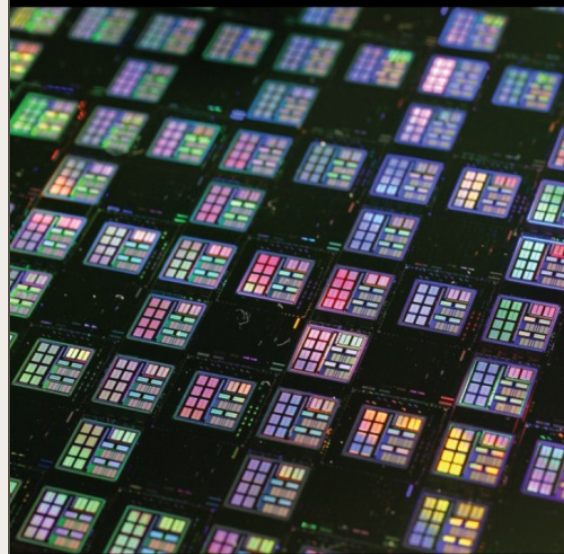
■ Reduce SME Preferences, Exemptions and Subsidies

- Scale matters
- Canadian firms are smaller than American.
 - The large-firm share of the services sector was 40.2% in Canada in 2008, compared with 52.8% in the United States.

Source; Statistics Canada

INNOVATION ECONOMICS

THE RACE FOR GLOBAL ADVANTAGE



Robert D. Atkinson and Stephen J. Ezell

www.globalinnovationrace.com

Thank You

Robert D. Atkinson

ratkinson@itif.org

Follow ITIF



www.itif.org



[@RobAtkinsonITIF](https://twitter.com/RobAtkinsonITIF)



www.innovationfiles.org



facebook.com/innovationpolicy



www.youtube.com/techpolicy

