

The Internet Economy and Policies to Grow It

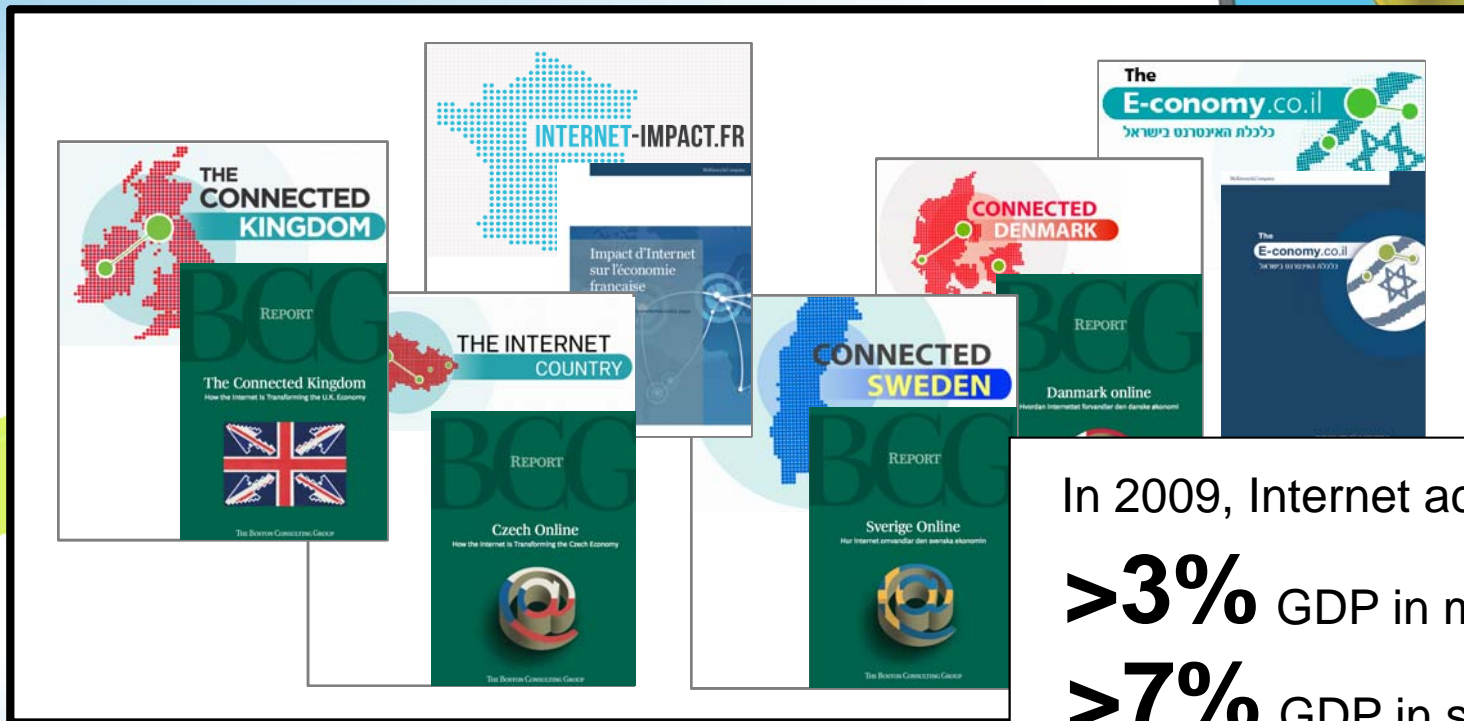
Patrick Ryan, PhD



The internet platform is a key driver of economic growth
(emphasis on platform)



Economic impact research

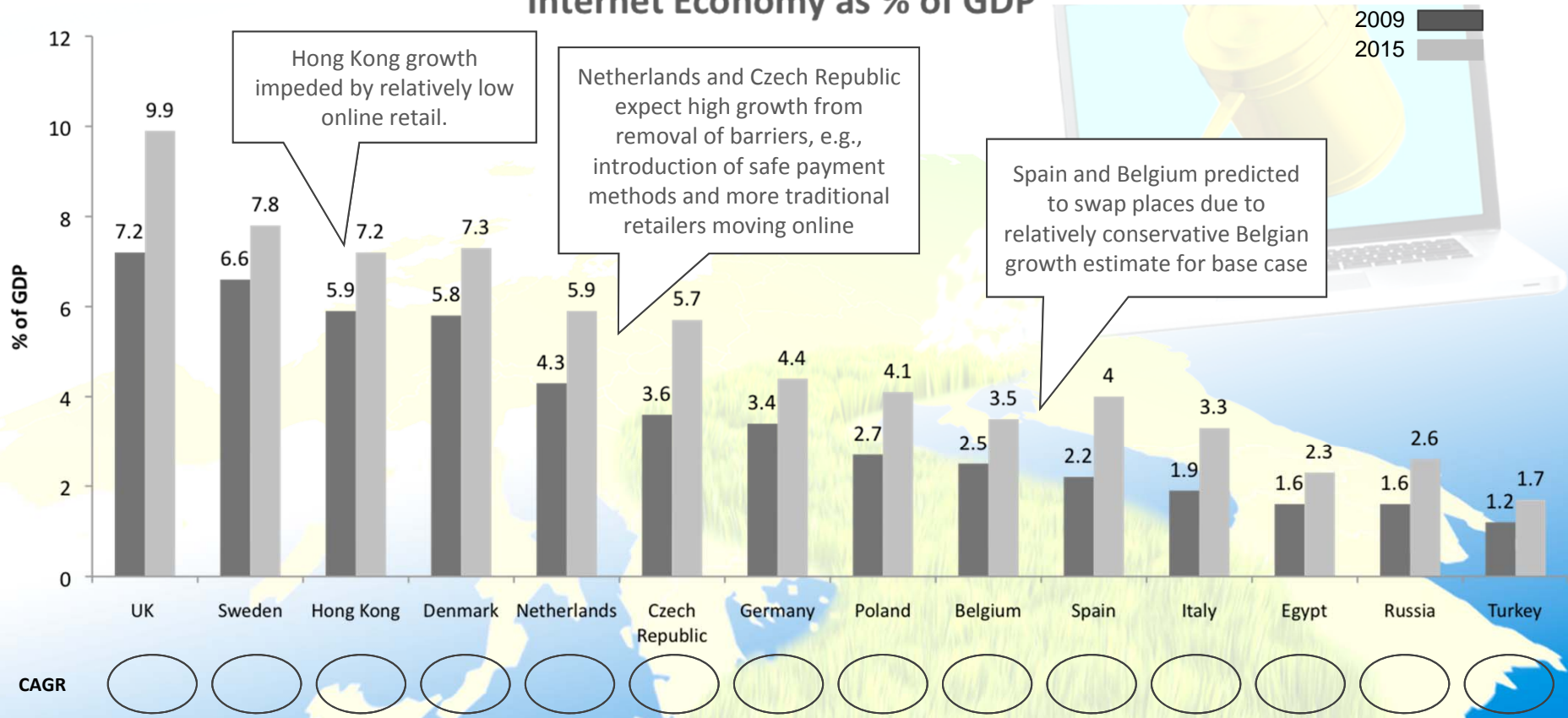


In 2009, Internet accounted for
>3% GDP in most markets
>7% GDP in some markets


Internet economies are growing—but there is work to do everywhere

Significant growth observed in all countries but relative order is mostly unchanged in 2015

Internet Economy as % of GDP



Econ impact: www.valueoftheweb.com



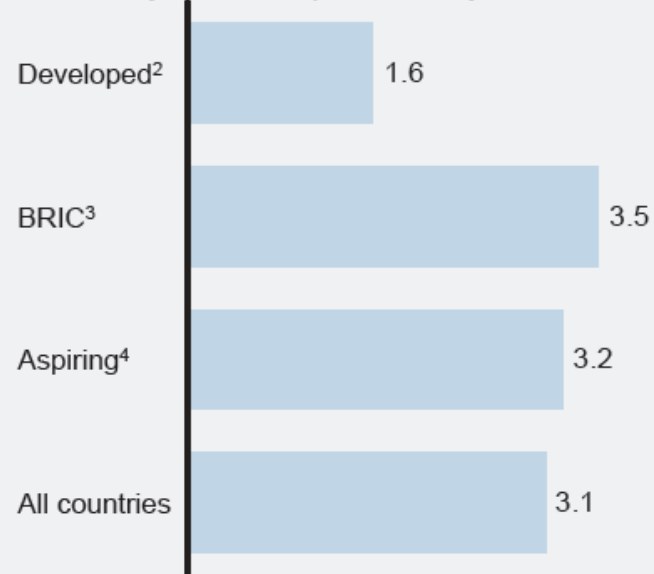
2 billion Internet users worldwide
3.4% of GDP in 13 countries
21% GDP Growth in last 5 years
2.6 jobs created for every 1 lost

1.6 jobs vs. 3.2 in developing economies

The Internet globally creates more SME jobs than it destroys, with the greatest impact in BRIC economies and aspiring countries

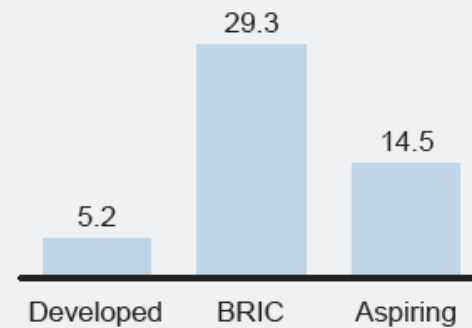
Jobs created/jobs reduced due to the Internet¹

Number of jobs created per reduced job



Growth in broadband subscribers suggests similar findings⁵

CAGR, 2007–09



Check these studies out online!

www.valueoftheweb.com

Policy Recommendations

- There is a lot of work that needs to happen here, it's important to be specific.
- In the time, I'll address just two:
 - IXPs, from our paper, Google “Patrick Ryan IXP”
 - ROW issues
 - (Spectrum is also top three, Paul will cover)

What is an IXP?

- *It's an exchange.* It helps exchange local traffic
- *Seems simplistic* but is crucial to keeping costs down and enabling content for users—and new industries (example: online security)
- *The beauty:* IXPs DO NOT need to be complicated, but regulators need to understand the basics.

Many IXP models

IXP Model	Advantages	Disadvantages	Common Regions
Voluntary IXPs	Good stepping stone to later development; easy to set up; low cost and low maintenance	More limited functional potential; unlikely to have established leadership	developing countries
Commercial IXPs	Able to afford expenses; able to expand IXP reach easily	May compete with ISPs; difficult to retain neutrality	America
Cooperatives	Sensitivity to member needs	Possibility of weak leadership	Europe
Managed Non-profits	Customers cannot veto IXP policies	A strong non-profit institution needs to provide IXP oversight	Europe

What to take away?

- IXPs are important for local content
- Regulators can help by breaking down barriers
- Resources:
 - Our paper on SSRN (search “Patrick Ryan IXP”)
 - The GREAT Analysis Mason piece, Kende (see below)
 - Video, if you don’t have time <http://www.youtube.com/watch?v=s8FdD9ra>

ROW Policy

People often misunderstand the value of the ROW and poles within it.

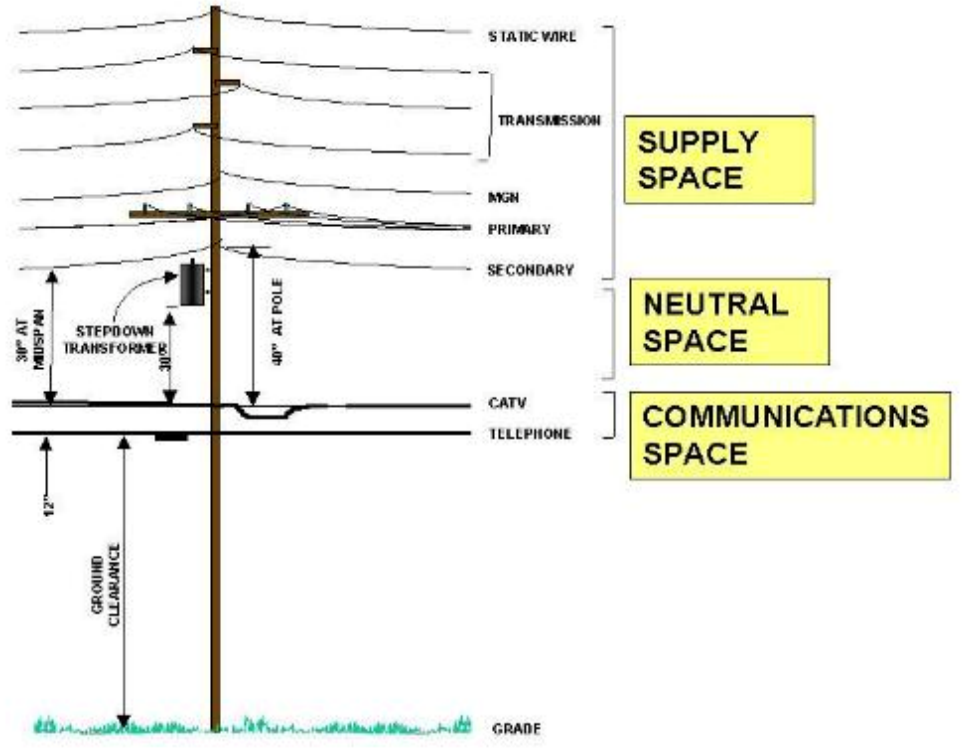
Yes, incumbents installed the infrastructure .

..

... But new entrants depend on it.



Organization can help



Take aways

- Internet can really help the economy, we knew that, now we're quantifying it;
- There are VERY SPECIFIC policies and best practices that can help promote growth.
- Just TWO examples are IXPs and ROW/Pole sharing.
- Spectrum is also a big one . . . coming next!

Let's keep in touch!

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Questions?

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