The Digital Economy

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The Internet is no Longer Discretionary

From academia …

… to ubiquity

… to commerce and entertainment …
An economy that is based on digital computing technologies. It is sometimes called the Internet Economy, the New Economy, or Web Economy. Increasingly, the “digital economy” is intertwined with the traditional economy making a clear delineation harder.
Components of the Digital Economy

- Supporting infrastructure (hardware, software, telecoms, networks, etc.),
- e-business (how business is conducted, any process that an organization conducts over computer-mediated networks),
- e-commerce (transfer of goods online).

New components are being introduced such as Social Media, Internet Search, and others.
Rate of Change in Digital Evolution 2008-2013

Source: Digital Evolution Index, The Fletcher School at Tufts University
The Benefits of a “One Internet”

Expands Trade

30% Global GDP

Today world trade represents about 30% of global GDP, up from 20% form the early days of the Internet*

*Source: BCG, 2014

Grows Business

75% Internet Benefits

Most of the economic value the Internet creates falls outside of the technology sector: companies in more traditional industries capture 75 percent of the benefits*


Reaches Billions

51% Internet Penetration

By 2019, there will be about 3.9 billion Internet users, or 51 percent of the world’s projected population of 7.6 billion*

*Source: Cisco, 2015
Internet Users, Traffic, & International Capacity

Global Internet Users (Billion)
- 2000 → 0.50
- 2014 → 3.00
- 2020 → 5.00

Monthly Internet Traffic per User
- 2000 → 10 MB
- 2013 → 5 GB
- 2018 → 14 GB

International Bandwidth Capacity
- 2008 → 14 Tbps
- 2014 → 137 Tbps

Academic Tool ➔ Entertainment and Commerce ➔ Critical Ubiquity
A Pervasive and Growing Economic Force

Internet economy (Trillion USD)

- 2010:
  - Developed: 2.3
  - Developing: 0.5
  - 4.1% of GDP

- 2016:
  - Developed: 2.8
  - Developing: 1.4
  - 5.3% of GDP

CAGR:
- Developed: 8%
- Developing: 18%

Change: +10.8%
The internet contributes $18 billion to the African economy today. If the Internet were to achieve impact on the same scale as mobile telephony in Africa, the internet contribution to the GDP or iGDP could account for as much as 10% of total GDP, or $300 billion, by 2025.

According to preliminary measurements carried out by ECLAC using 2008 data, the digital economy represents an average of 3.2% of the economy of four of the region's countries (Argentina, Brazil, Chile and Mexico).

Europe
The digital economy could add at least 4% to EU GDP by 2020

Asia/Australia/Pacific Islands
The mobile industry contributed US$1.1 trillion to the Asia Pacific economy in 2014, equivalent to 4.7 percent of the region's GDP.
The Internet Economy is Not Frictionless

"Is there network coverage?"
"Do I have an access device?"
"How much is this going to cost me?"
"No connectivity ….."

"I don't speak Thai!"
"Will my bid go through in time?"
"Can I trust Online payments?"
"Can it be delivered here?"
Greasing the Wheels of the Internet Economy

- ICANN Commissioned the Boston Consulting Group (BCG) to conduct this study in 2014

- Digitally-driven economic growth continues to be one of the few bright spots in a sluggish global economy
Main Sources of E-Friction

- **Infrastructure**
  - Weighted 3/6
  - Frictions reducing opportunities to access the Internet
- **Industry**
  - Weighted 1/6
  - Frictions holding back companies from adopting the Internet
- **Information**
  - Weighted 1/6
  - Frictions related to the availability of content
- **Individual**
  - Weighted 1/6
  - Frictions deterring consumers from online activity
... cont. (The BCG e-Friction Index)
Significant Positive Economic Impact

2013 digital economy\(^1\) as % of GDP (est.)

\(R^2=0.60\)

> 3.2 B unconnected people

Equivalent to 2.5 pts of the overall economy

Bottom quintile e-Friction

Top quintile e-Friction

\(\)
The Internet and SMEs

Past three years
Cumulative revenue growth

% 45 42 39 36 33 30 27 24 21 18 15 12 9 6 3 0 -3

Higher e-Friction

Heavy web use +18%

Med / light web use +11%

Lower e-Friction

Average
E-Friction Score vs. GDP Per Capita

The chart illustrates the relationship between BCG e-Friction score and GDP per capita across various countries. The countries are categorized into different groups based on their e-Friction score and GDP per capita levels:

- **Developing rural**: Countries like Kenya, India, Morocco, Pakistan, and Vietnam are grouped here, indicating lower e-Friction scores and lower GDP per capita.
- **Middle-income rural**: Countries like China, Peru, and Brazil are positioned here, showing medium e-Friction scores.
- **Middle-income urban aspirants**: Countries like Argentina, Mexico, and Venezuela are in this category, indicating an aspiration for higher income but current lower e-Friction scores.
- **High-income urban aspirants**: Countries like South Africa, Turkey, and Russia are in this group, with higher e-Friction scores but potential for higher GDP.
- **High-income overachievers**: Countries like China, Turkey, and Russia are categorized here, showing higher than expected GDP given their e-Friction score.
- **All-rounders**: Countries like the United States, Japan, and Singapore are grouped here, indicating high GDP per capita and relatively high e-Friction scores.
- **Well-oiled nations**: Countries like Saudi Arabia, the United Arab Emirates, and Qatar are in this category, indicating the highest GDP per capita and high e-Friction scores.

GDP per capita is shown in US $ thousands on a log scale.
The Way Forward

- Many levers exist to reduce e-Friction, whatever the level of GDP currently is.
- Population density and large rural populations make infrastructure deployment more challenging, requiring important policy choices and technological experimentation.
- Basic literacy and ICT skills all help reduce e-Friction.
- Local content in local languages drives usage, requiring encouragement of local ecosystems, including e-government services.
- SMEs that use the Internet intensively grow faster, employ more people than those that don’t, and trade more internationally.
- Encourage multistakeholder policy making.
Where to Find the Report?

http://goo.gl/lmBDtr

and

https://goo.gl/20BlSy
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