



# 20th session of the United Nations Commission on Science and Technology for Development (CSTD)

Geneva May, 2017 Pablo Bello Arellano Executive Director

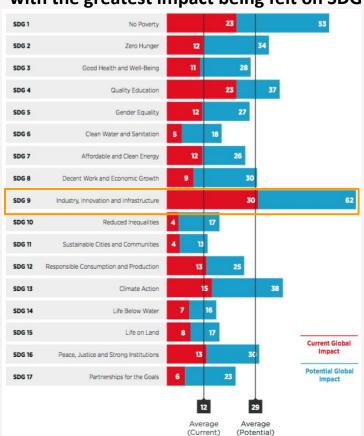
Potential of ICTs for industrialization and innovation in the Latin American context



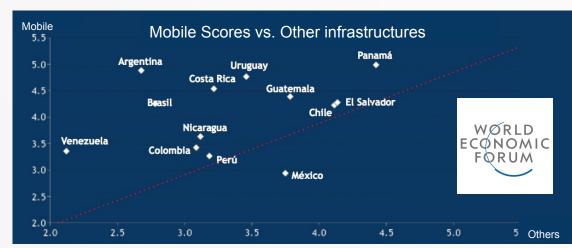




## All SDGs are impacted by the telecom industry, with the greatest impact being felt on SDG 9



## The Telecommunications infrastructure is the best one in Latin America

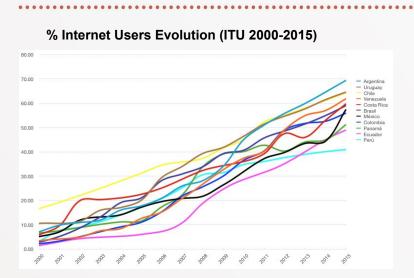


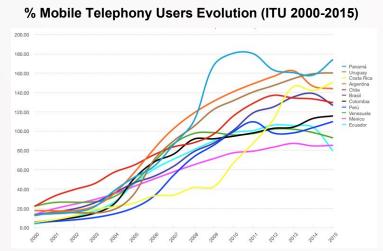
Source: GSMA 2016



# Making it possible for Latin America to live a digital revolution

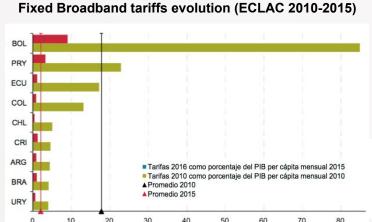


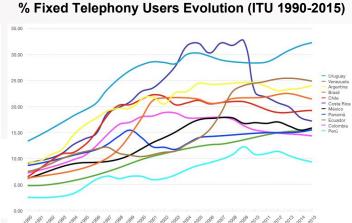






- Democratization in access to telephony
- More bandwidth: Average connection speed + 118% since 2010 (Akamai)
- Falling access prices 2010-2015 (ECLAC)
- USD 330.000
   Millions.
   Cumulative
   investment
   (1996-2014)
- 900.000 Jobs / year derived from digitization





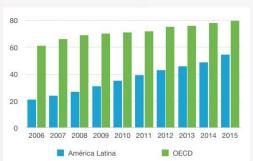
Source: World Bank and TAS (2015)

# However, we have great challenges ahead...

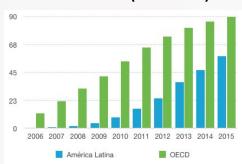


### We are closing gaps

Internet Adoption Evolution LA Vs. OECD (2006-2015)



Mobile Broadband Evolution LA Vs. OECD (2006-2015)



Source: Own elaboration based on ECLAC and OECD data (2016)

### There is still much to do

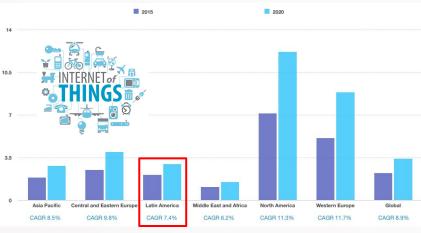
Latin America

Source: ITU (2016)

53% people don't use Internet 66% households don't have Internet

### And new ones are arising

Connected devices per capita 2015 - 2020



Source: Own elaboration based on Cisco VNI data (2016)

This widening gap may point to important differences in how societies benefit from the positive externalities of the Internet and the new generations of digital transition (M2M).



# The complexity of the challenge: Closing the digital divide



### **Strong income restriction of families:**

Despite the reduction in prices, the Internet is still inaccessible for the poorer ones



#### **Need of investments:**

In networks to close the coverage gap and increase capacity and quality

### **ASIET 2020 challenge**

Required investments to close the digital divide

# +10% on trend growth \$ 400 billion in 8 years

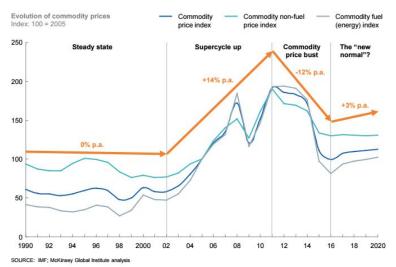




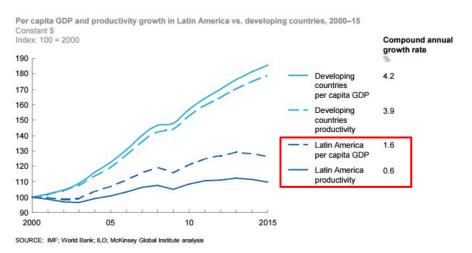
## Where will Latin America's growth come from? Industrial Internet: Towards a more productive Latin America



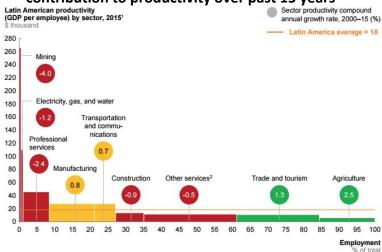
#### In a context of the end of the commodity supercycle



#### Slow productivity growth is the main challenge

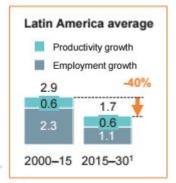


LA most productive sectors made a negative contribution to productivity over past 15 years



- Despite the economic growth of the last decade, labor productivity in Latin America is modest if compared to other countries or regions. (20% since 2000).
- It is necessary for Latin America to modify its productive structure towards schemes with greater added value.
- Increasing levels of connectivity is critical, but not sufficient.
   The challenge lies in the uses of such access.

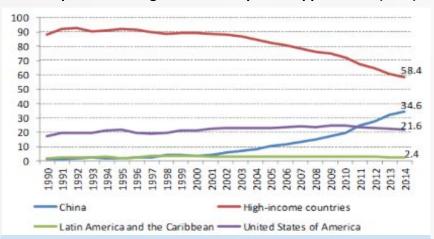
Risk: Without improved productivity growth, the rate of GDP growth could decline by 40% to 50% over the next 15 years in most economies.



## The innovation challenge is also critical



#### Participation in the global total of patent applications (WEF)

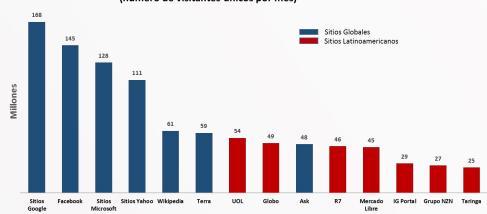


The adoption and use of internet opens the possibility for firms to increase its innovation activity (Czernich et al, 2011; Forman and Zeebroeck, 2010):

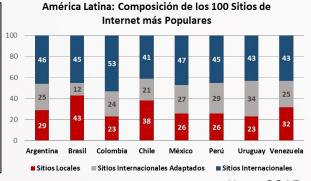
- Knowledge is crucial for economic activity, the potential of internet to generate more efficient external links promotes creation of new knowledge
- Better and cheaper communication channels with suppliers, clients, other firms, prompts knowledge spillovers
- Internet development can contribute to lower entry barriers fostering competition and development of new products, processes and business models
- Adoption of broadband by a company in Latin America increases by 23% the probability that it introduces a product innovation, and a 27% its chance of introducing an innovation in processes (Grazzi and Jung, 2016).

#### Situation that keeps correlate with the digital world

América Latina: Sitios de Internet más Importantes 2014 (número de visitantes únicos por mes)



Of the 100 most popular Internet sites in LA only 26 correspond to local content



Katz, 2015



### Making a way



# Objective: to promote the development of the Latin American digital ecosystem

- Development of infrastructures
  - Transnational networks integration
  - IXPs promotion
  - Spectrum policies harmonization
- Facilitate electronic commerce of goods and services
  - Facilitate cross border flows of information
  - Consumers rights protection
  - Regional payment mechanisms
  - Tax compliance for digital business and services
  - Eliminate tariffs and double taxation
  - Resolve jurisdictional issues
- Audiovisual contents
  - Compatible copyright rules
- Facilitate telecommuting



	Population
Latin America	> 600 million
Hispanics	> 515 million





and something magical just happens?"

## Thank you! @asiet\_lat @latam\_digital

