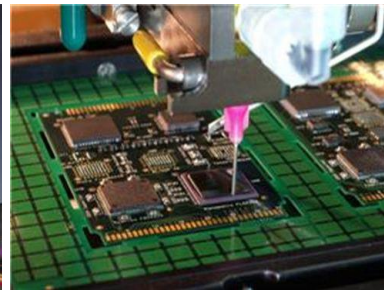


ICTs4SDGs

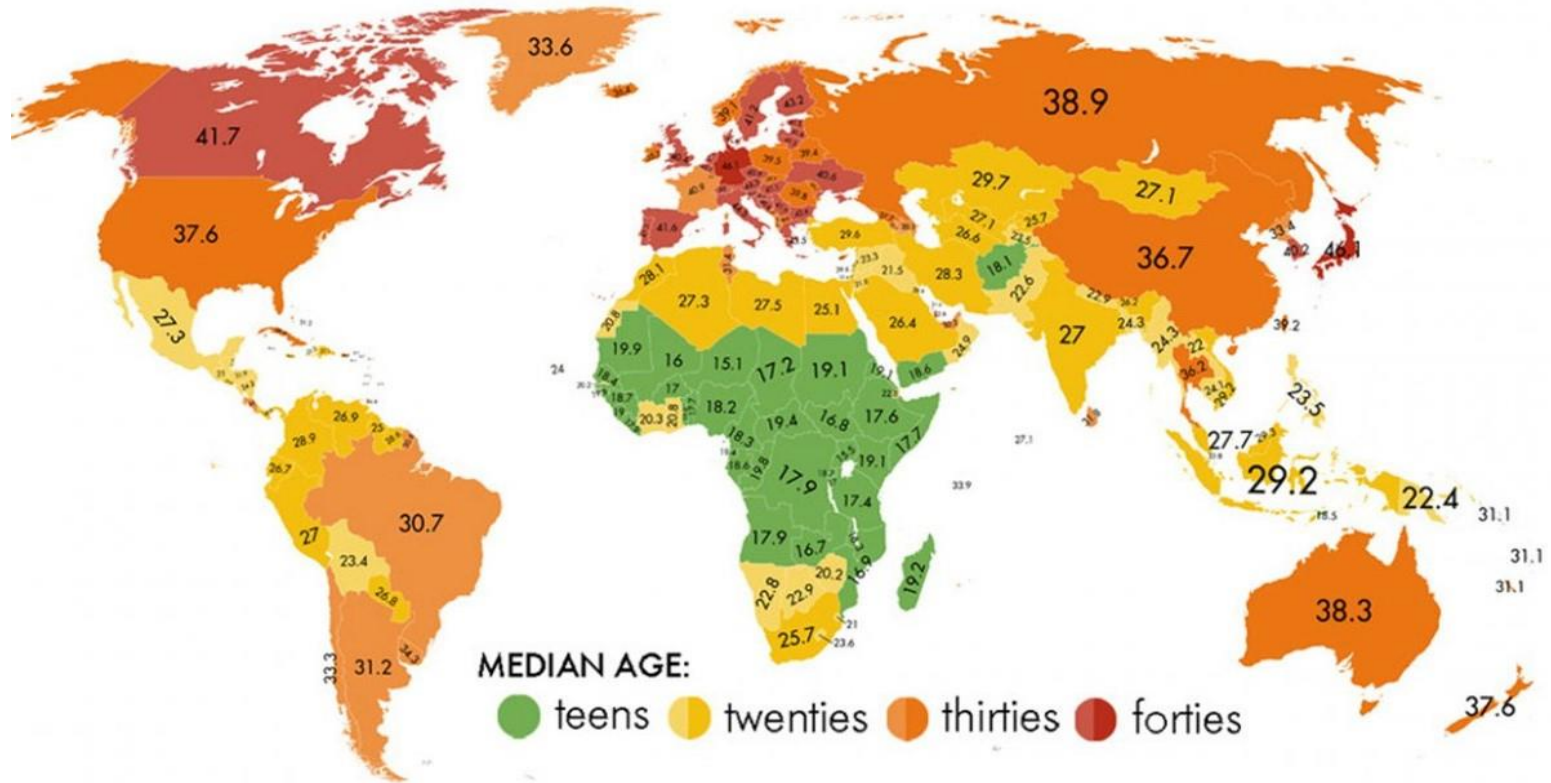
Digital Economy for Development

WSIS 2016



The Challenge

Youth Distribution World (Age 14 - 29 Years)



YOUNGEST: 1. Niger (15.1) 2. Uganda (15.5) 3. Mali (16) 4. Malawi (16.3) 5. Zambia (16.7)

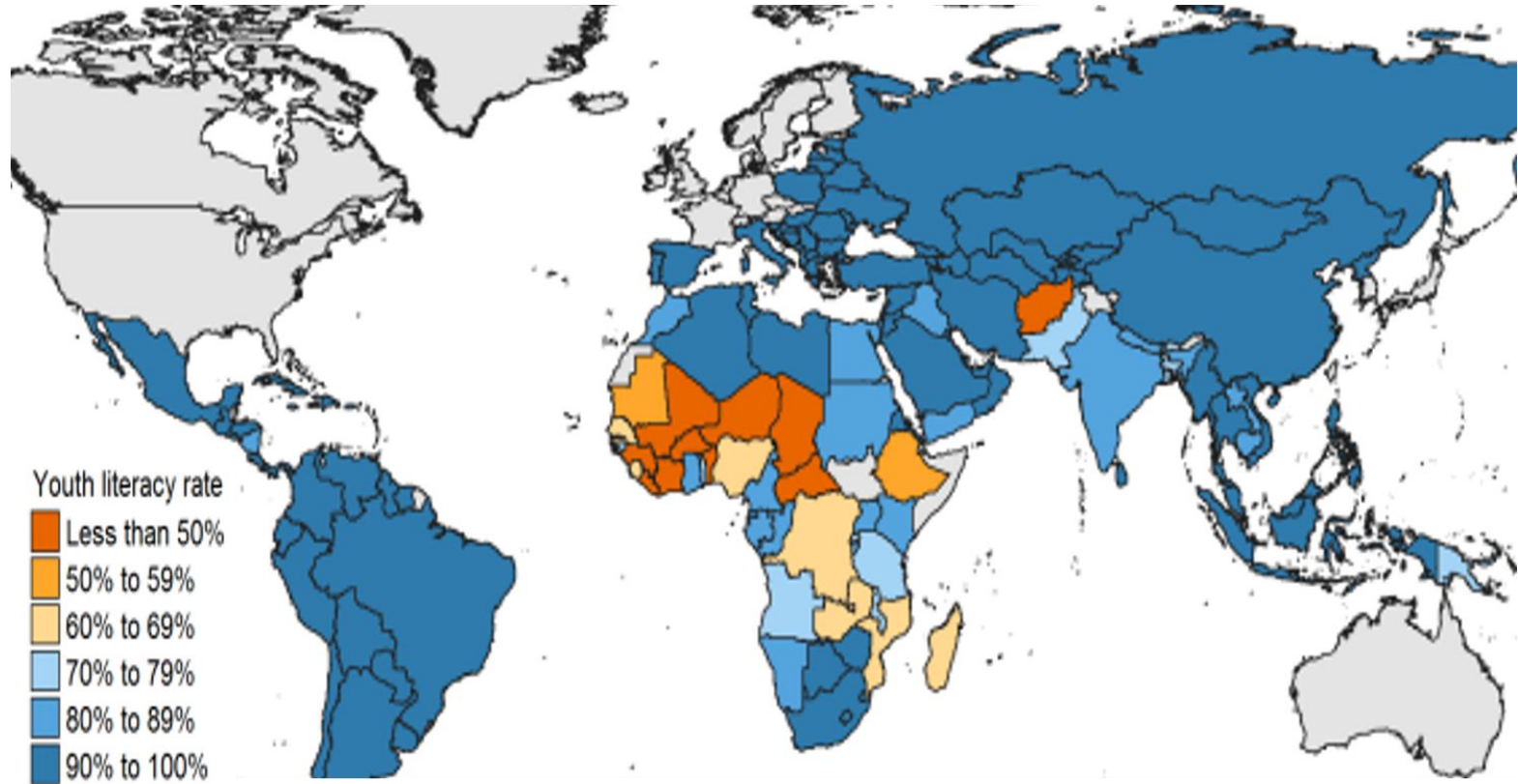
Source: <http://mentalfloss.com/article/58876/median-age-around-world>

Youth Unemployment Rates, By Region

Youth Unemployment Rates 2000 and 2007–2016, by Region (%)

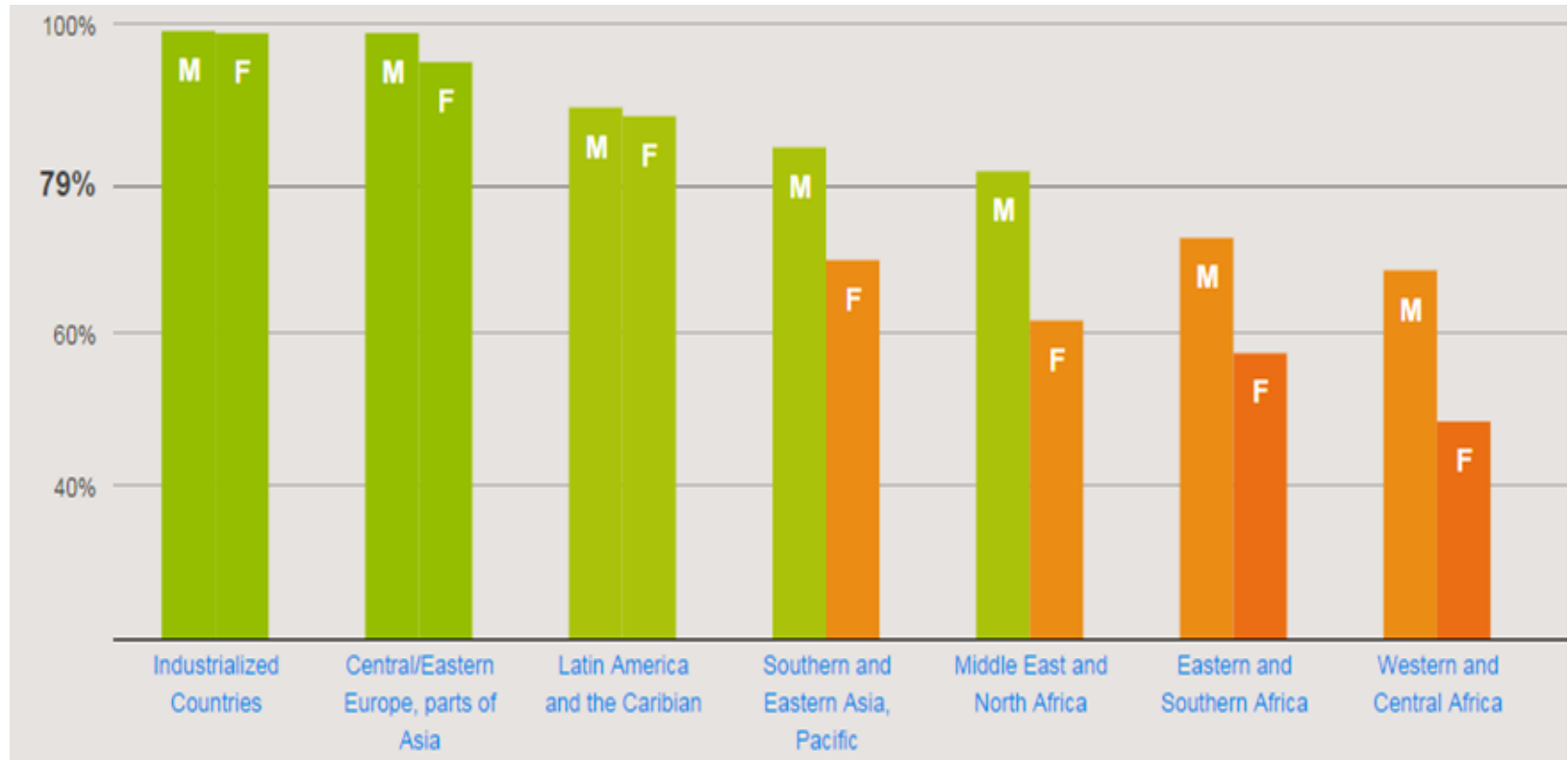
| | 2000 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016p |
|--|------|------|------|------|------|------|------|------|------|------|-------|
| WORLD | 12.7 | 11.6 | 11.7 | 12.6 | 12.7 | 12.6 | 12.7 | 12.7 | 12.7 | 12.7 | 12.7 |
| Developed Economies & EU | 13.5 | 12.5 | 13.3 | 17.3 | 18.1 | 18.0 | 18.0 | 17.7 | 17.2 | 16.5 | 16.0 |
| Central & South-Eastern Europe (non-EU) & CIS | 20.0 | 17.5 | 17.0 | 20.5 | 19.4 | 17.6 | 17.5 | 17.6 | 17.5 | 17.5 | 17.5 |
| East Asia | 9.3 | 8.0 | 9.1 | 9.3 | 8.9 | 9.0 | 9.3 | 9.4 | 9.6 | 9.7 | 9.8 |
| South-East Asia & the Pacific | 13.2 | 14.9 | 14.2 | 13.9 | 13.6 | 13.5 | 13.7 | 14.0 | 14.2 | 14.2 | 14.3 |
| South Asia | 10.1 | 9.0 | 8.6 | 9.1 | 10.2 | 9.8 | 9.8 | 9.7 | 9.7 | 9.8 | 9.8 |
| Latin America & the Caribbean | 15.8 | 14.1 | 13.7 | 15.6 | 14.5 | 14.3 | 14.3 | 14.4 | 14.5 | 14.5 | 14.6 |
| Middle East | 24.0 | 24.8 | 25.7 | 25.2 | 25.4 | 26.5 | 26.9 | 27.5 | 28.0 | 28.6 | 29.0 |
| North Africa | 28.7 | 23.8 | 23.0 | 23.6 | 23.1 | 27.9 | 27.8 | 27.6 | 27.3 | 26.9 | 26.7 |
| Sub-Saharan Africa | 12.9 | 11.5 | 11.5 | 11.5 | 11.4 | 11.5 | 11.5 | 11.5 | 11.4 | 11.4 | 11.4 |

Global Literacy Statistics 2014



Source: <http://www.uis.unesco.org/literacy/Pages/literacy-data-release-2014.aspx>

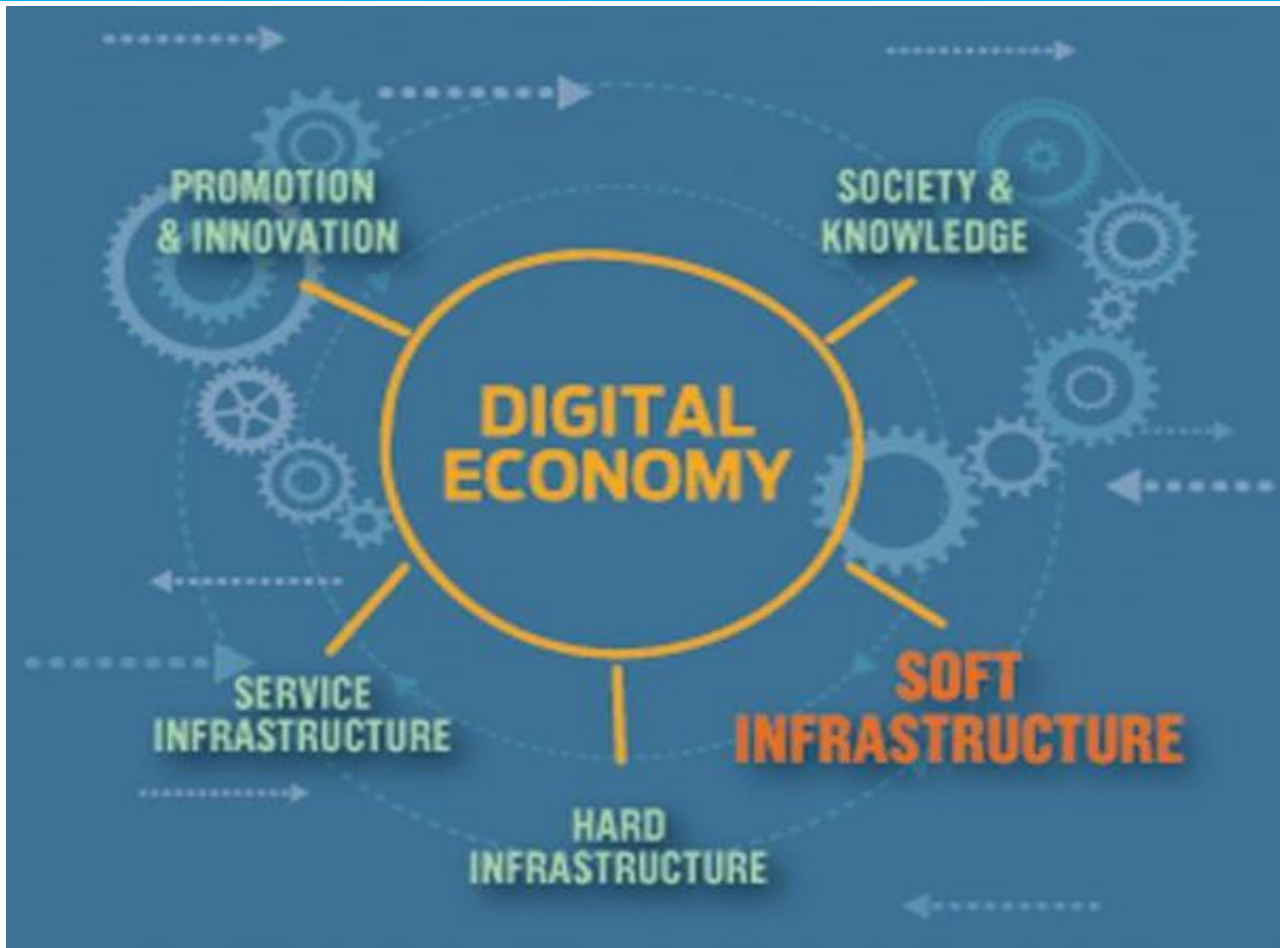
Global Literacy Statistics by region



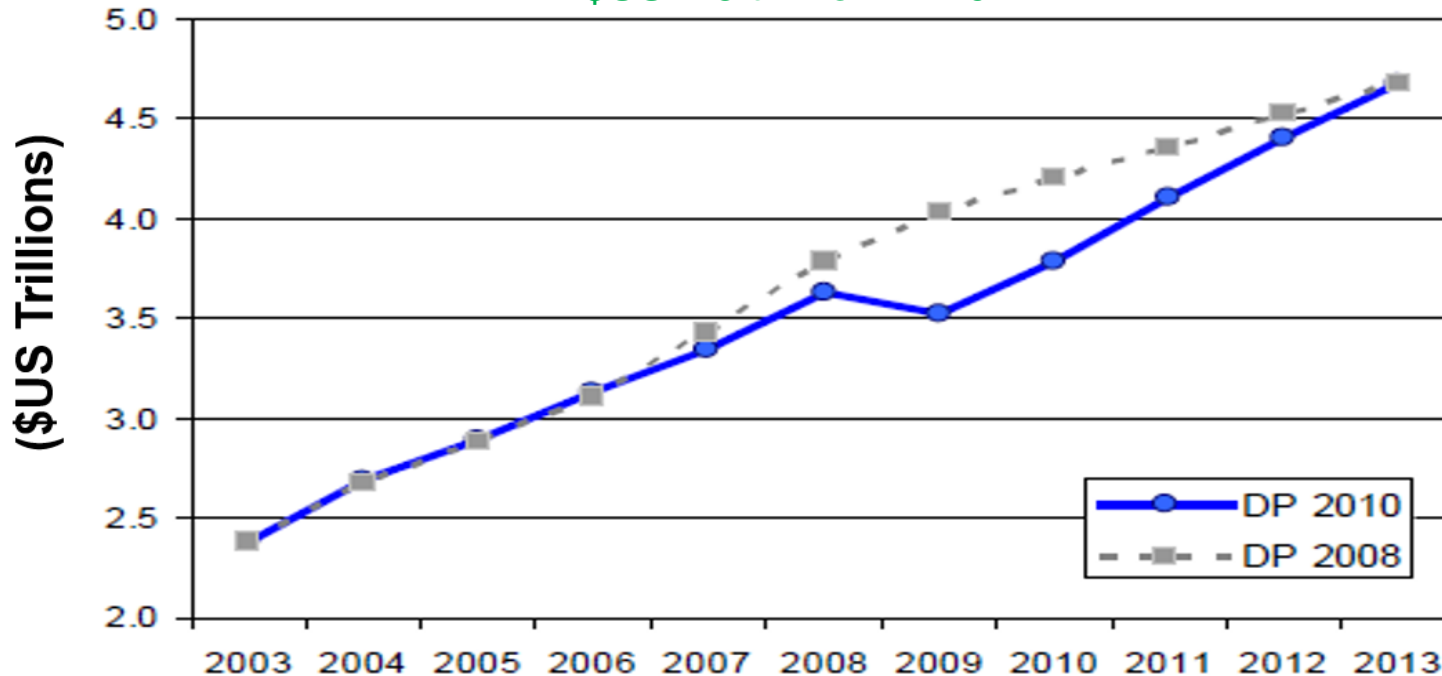
Source: <http://visualdata.dw.de/specials/bildung/en/literacy-global.html>

The Facts

Digital Economy Framework

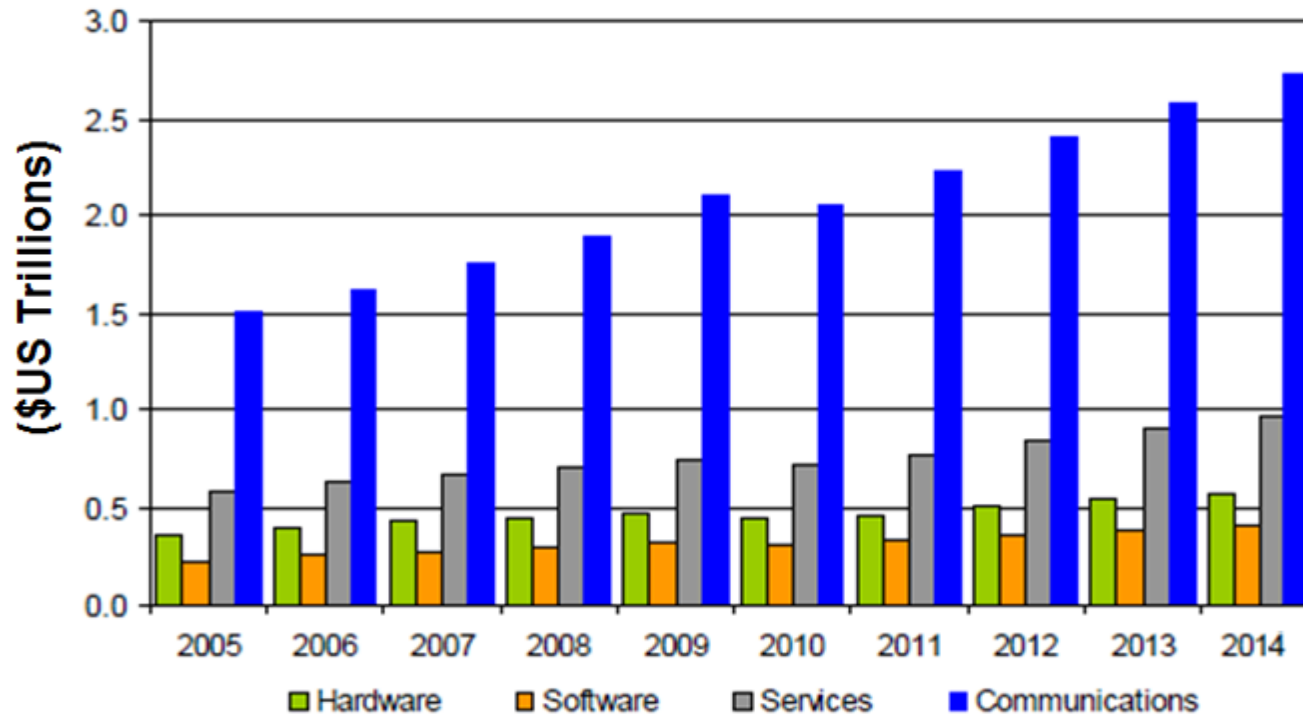


\$ 2.1 trillion U.S. dollars spent in 2001, total ICT spending will increase to nearly **\$US 4.8 trillion in 2014**



Overall ICT Investment

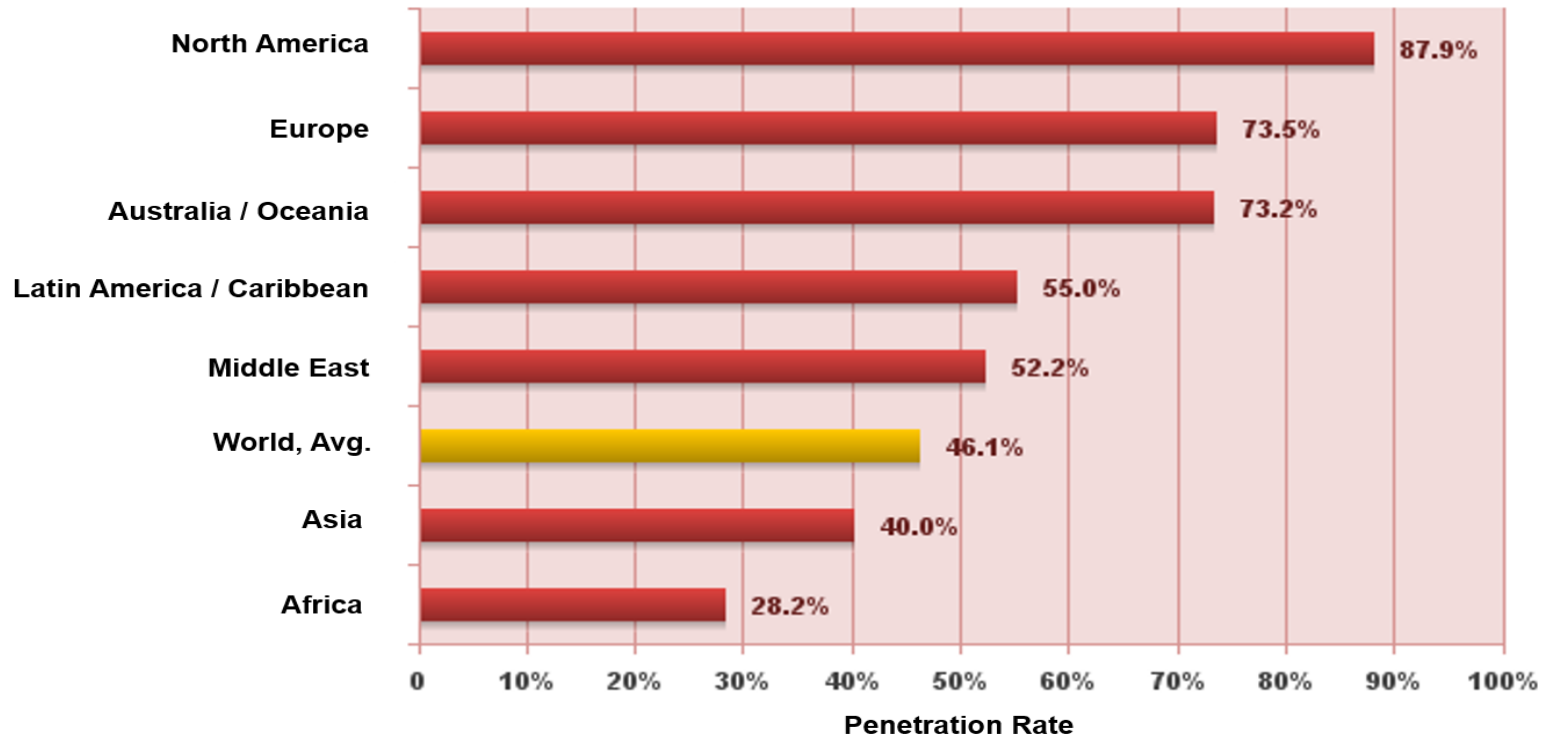
Source: WITSA (October 2012). World Information Technology and Services Alliance



Sector Wise ICT Investment

Source: (2014) World Information Technology and Services Alliance (WITSA)

World Internet Penetration Rate, 2015



<http://www.internetworldstats.com/stats.htm>

World Internet Penetration Rate by Geographic Region 2015

- ID Cards
- e-Payments and entitlements
- e-Administration
- Registration LR, B/D/M and Vehicles
- Taxes and fees
- e-Education/Distance learning
- e-Health and Telemedicine



- Financial Sectors
- Medical, Bio Medical, Healthcare
- Transportations, Airlines
- Space
- Entertainment, Cable TV, Special Effects
- Telecom, Broadband, 4G services
- Media, Print and Electronic

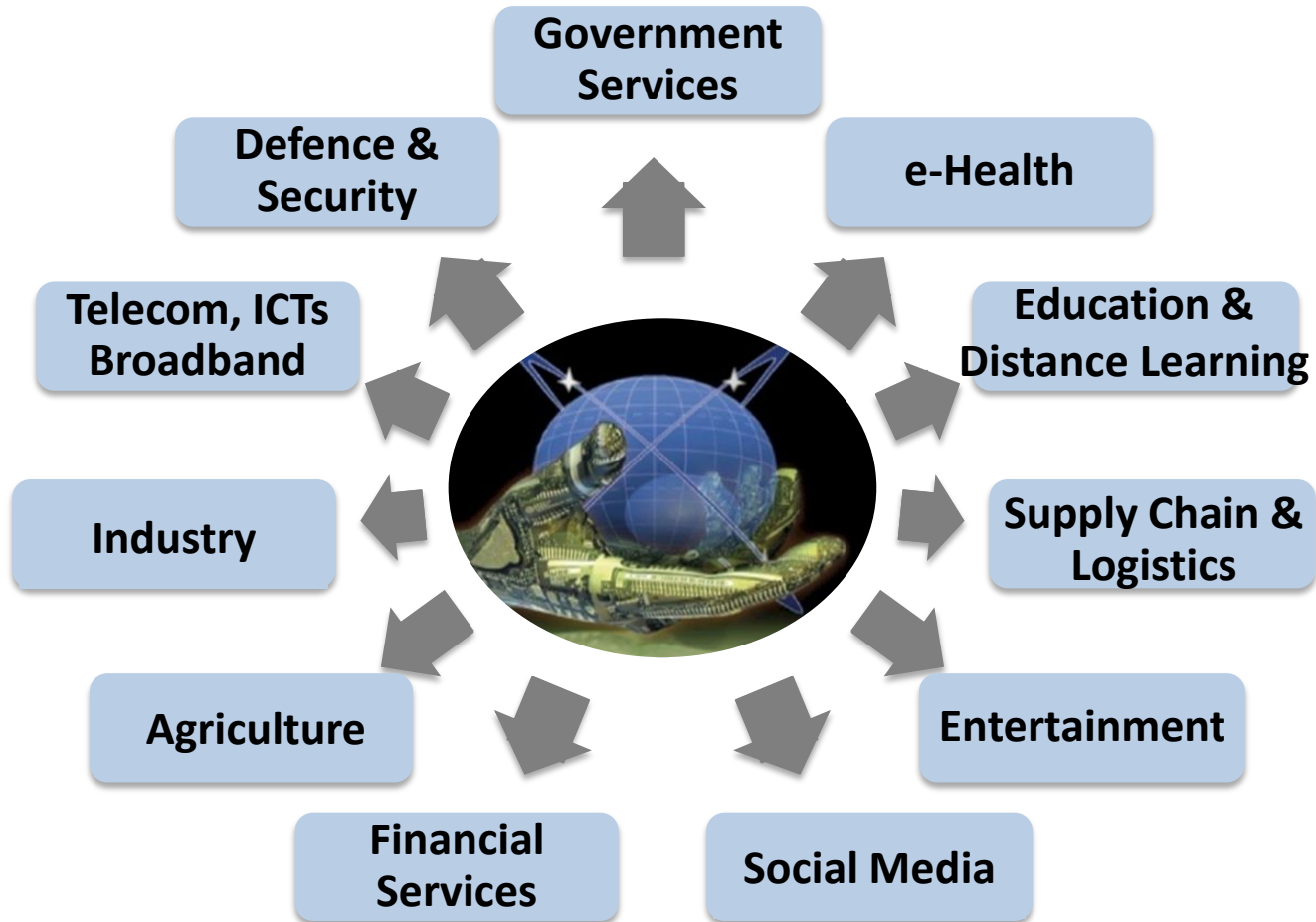


- Education, Distance learning, Interactive
- Security, Cybersecurity, Defense
- Energy (Oil and Gas)
- Green Solutions
- Recycling
- And many more Sectors



Opportunities for SGDs Digital Economy

Digital Economy



- **BPOs, Advertising and Marketing**

- Call centres
 - Web Portals
 - Tele Marketing

- **Education**

- Business Skills Development
 - CD Tutorials
 - ICT Training
 - Virtual learning Centers
 - Virtual Teaching

- **Entertainment**

- Community Radio
 - Film Makers
 - Drama Production
 - Computer Games
 - Cable T.V Networks
 - Games Zones



▪ Research and Analysis

- Market Analysis
 - Customer Needs
 - Competitive Analysis
- Trend Analysis
- New Product Development
- Exploring New Horizons

▪ Value Added Services and Partnerships

- Tele-Medicine
- e-Education & Distance Learning
- Tele-Agricultural
- “Public Information to support”
 - Government Initiatives for MDG
 - Donor Organizations Objectives: “Universal Access”



Mobile Money Agents

- Mobile services for sending and receiving payment
- Transactions track

Example: **Tanzania** 'Rural Women Entrepreneurs and Mobile Money'



Electricity Recharging Services

- Recharging facility. The most common service is;
- Recharging stations for mobile phones

Examples: **Tanzania and Kenya**, the Barefoot College Initiative 'Solar Powered Electricity Recharging Stations'



Mobile Phone Sales and Technical Support

- Mobile phone sales and repair
- Technical support
- SIM cards and accessories

Example: Rwanda *'Action Technique Pour Un Development Communautaire' (ATEDEC)*

Mobile Information Agents

- Calls and messages
- Internet
- Market information

Example: Bangladesh, *'Village Phone Ladies'*



Freelancing and Microwork

- Business connections
- Obtain work of their choices
- Make earnings



Example: India Freelancing on 'oDesk'

Government Outsourcing of IT Services

- The government outsourcing of internal services offer entrepreneurs that benefit of eligibility for bank loans for which she would normally could not apply.



Example: India 'A Kerala Outsourcing Initiative'

Digital Culture

- Solar power for rural connectivity
- Internet services
- Satellite transmission

Example: India, Greenstar solar power initiative



Tourism

- Marketing pro-poor tourism
- Bringing tourists to the remote areas
- Community based Tourism Association web site

Nepal, Community based Tourism Association



Virtual Tutor

- Providing virtual tutor for kids in rural Africa
- Creates educational content for rural kids via cell phones
- Educational quizzes and learning tools via SMS

Example: Kenya, Eneza Education



Apps Development and Coding

- Large, medium, and small app developers.
- Media and software companies
- Finance and retail companies
- Non-tech companies
- Non-profit organizations and government agencies
- Support companies to help manage all the new technology.
- Large companies such as Amazon, Apple, Google, Microsoft, and RIM
- Accounting and IT consulting firms



Gaming Industry

- Online games are an extremely popular sector of the entertainment industry
- Significant source of digital employment for young people
- Gaming platforms rely on the outsourcing of small tasks through third-party gaming services like Crowdfunder
- Gross revenues of the **third-party gaming services industry** approximately USD 4.0 billion in 2012.

Even higher now.....



Green Jobs with ICTs

- Disaster management
- Natural resource management
- Forestry
- Construction
- Precision agriculture
- Waste management
- Fishing
- Urban planning
- Sustainable agriculture
- Energy efficiency
- Transportation
- **Recycling of ICTs**



Critical Success Factors to Success in the Digital Economy for Sustainable Development and Innovation

Critical Success Factors

