

# **Global Digital Health: The Game Changer for Health Systems and User Involvement - 8Oct2018**

## **Digital empowerment and inclusion - the global perspective**

Prof. Josef Noll

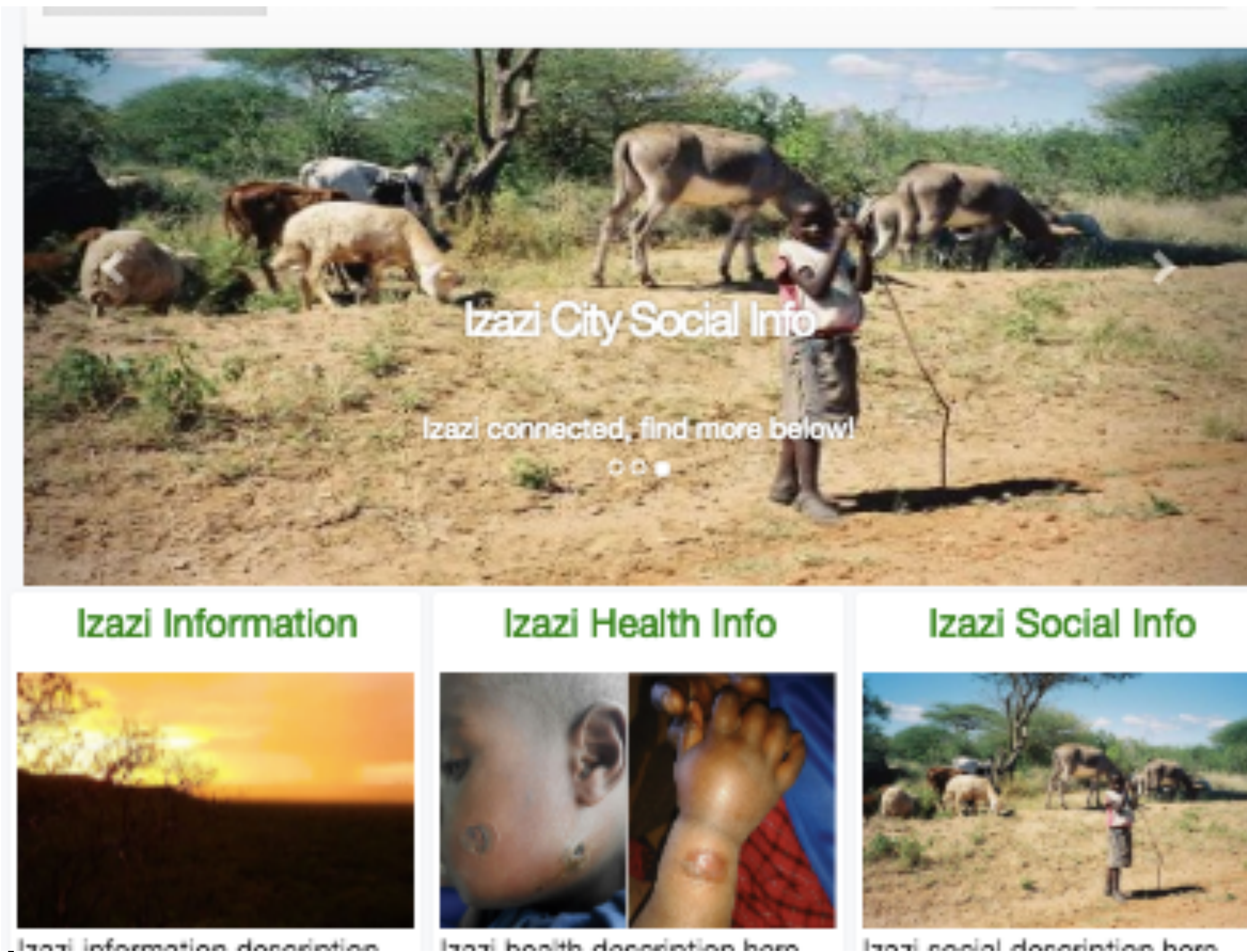
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[Diql.BasicInternet.no](http://Diql.BasicInternet.no)

- The global perspective of Digital Empowerment
- “Internet lite für alle”
  - ➔ Individuals (you and me)
  - ➔ Business & Companies (work)
  - ➔ Society (community & states)
- Common goals
  - ➔ Partnership with Africa
    - ▶ Health as an enabler for Development
    - ▶ Societal development
    - ▶ Framework for European Industries
  - ➔ “Village platform” ([yeboo.com](http://yeboo.com)) as entry-point



# #Basic4all, #5GforAll and #DigitalEmpowerment

- #Basic4All

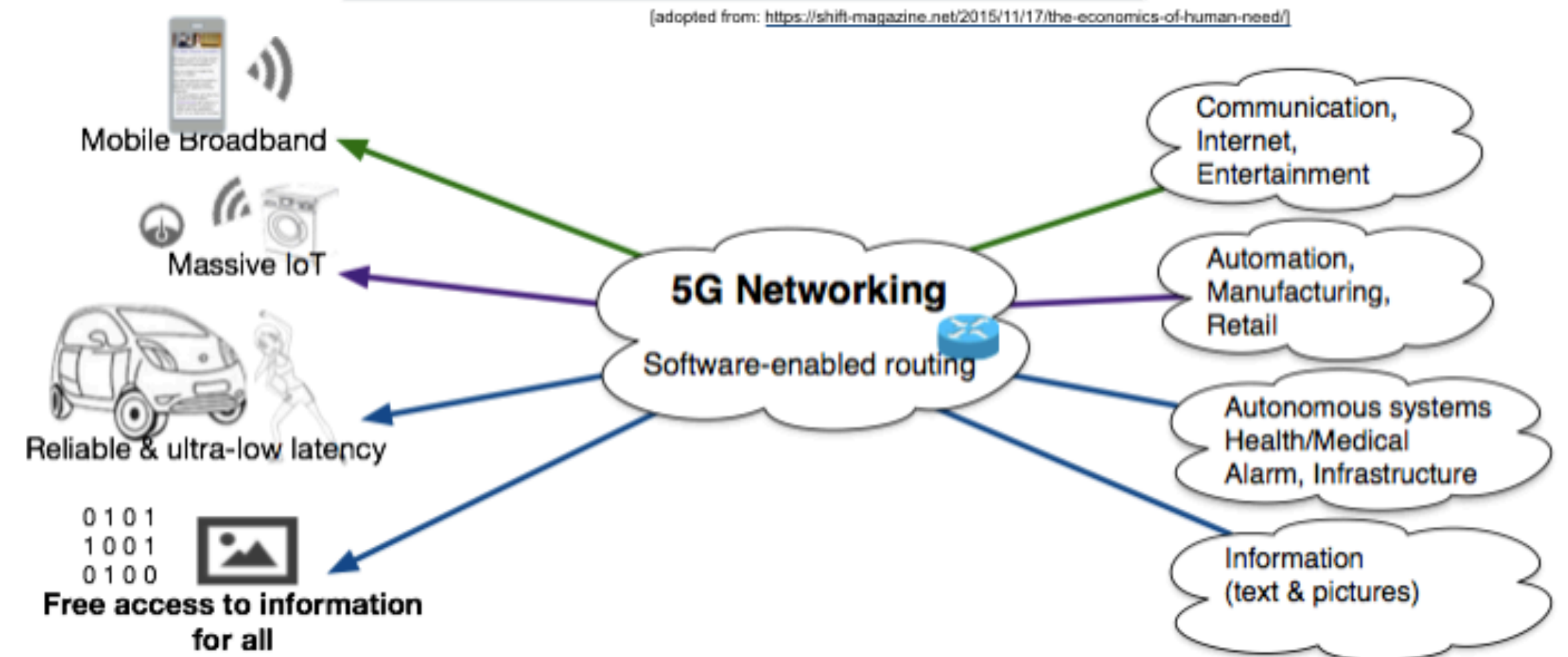
- ➔ Food, **health**, water (Maslow)
- ➔ Community development:
  - Digital health as enabler
  - Energy and communication
  - “**Internet lite for all**”

- #5GforAll

- ➔ now: industrial perspective
- ➔ demand: coverage and freemium model

- #Digital Empowerment

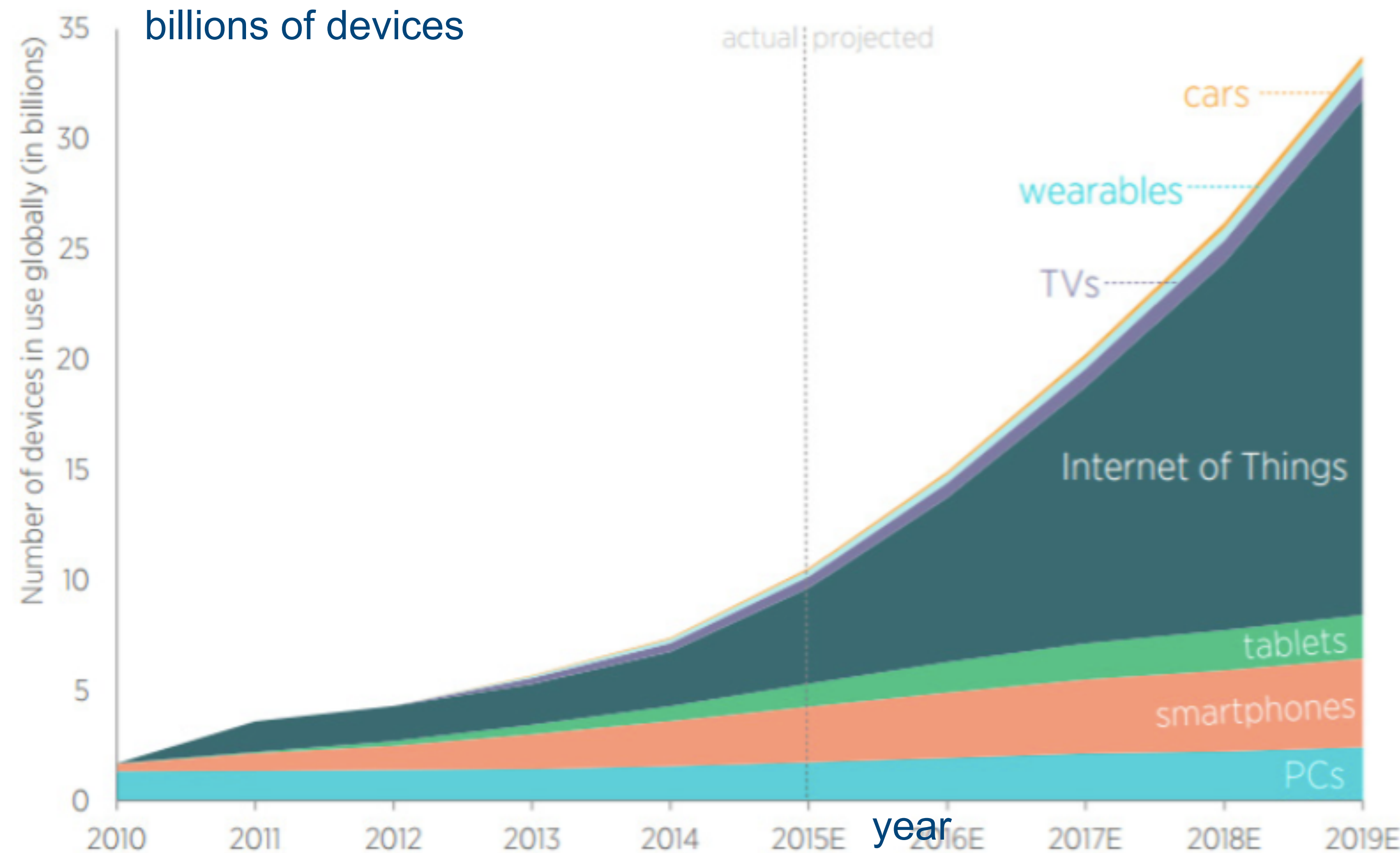
- ➔ Participation in the digital society
- ➔ Catalyst for the SDGs



# IoT expected impact, only for “the connected”?

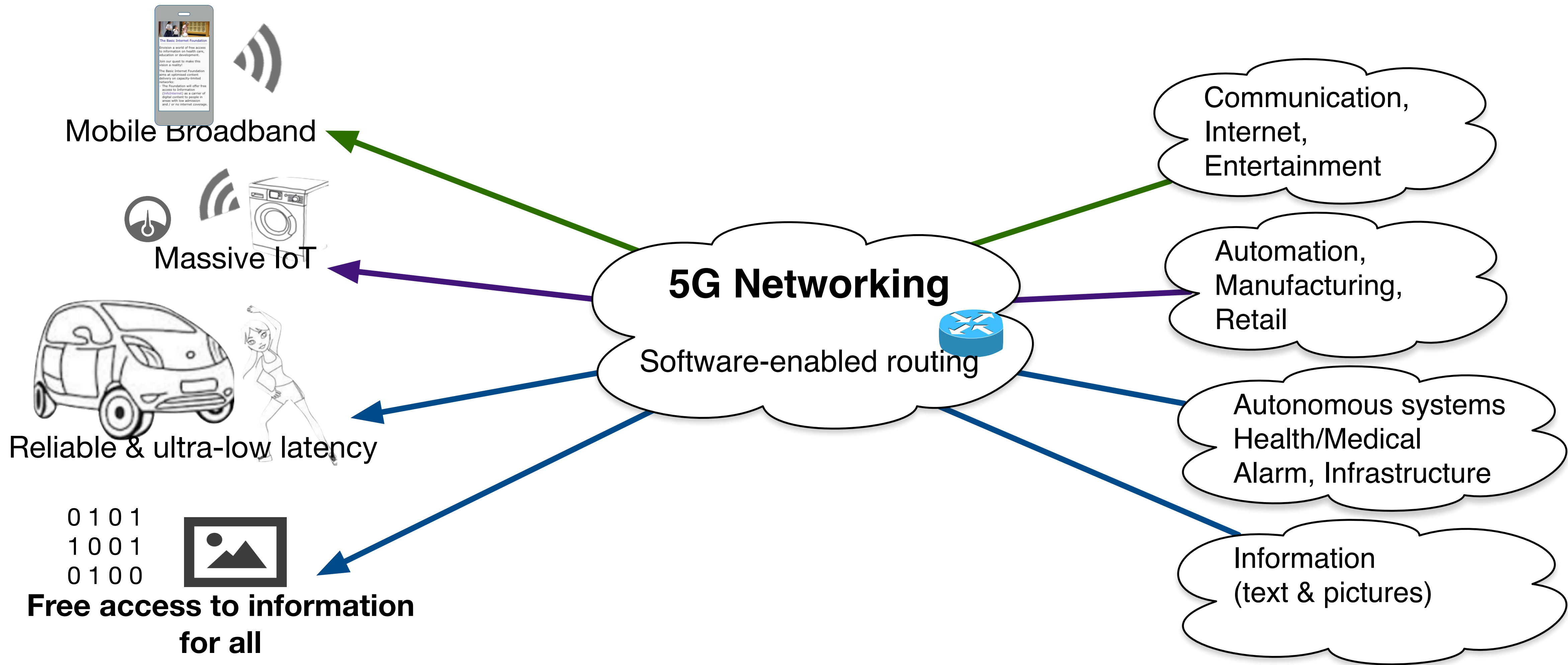
[Source: A. Thinner and A. Castillo, 2015]

- Smart home appliances, “wearables”, smart metering, autonomous vehicles,...
- 10 billion (2013) -> 19 - 40 billion (2019)
- total global impact: US\$ 2.7 - 14.4 trillion by 2025
- ~3/4 of devices from IoT++  
~1/4 from tablet, mobile,...



Source: John Greenough, “The Internet of Everything 2015,” *Business Insider Intelligence*. Produced by Adam Thierer and Andrea Castillo, Mercatus Center at George Mason University, 2015.

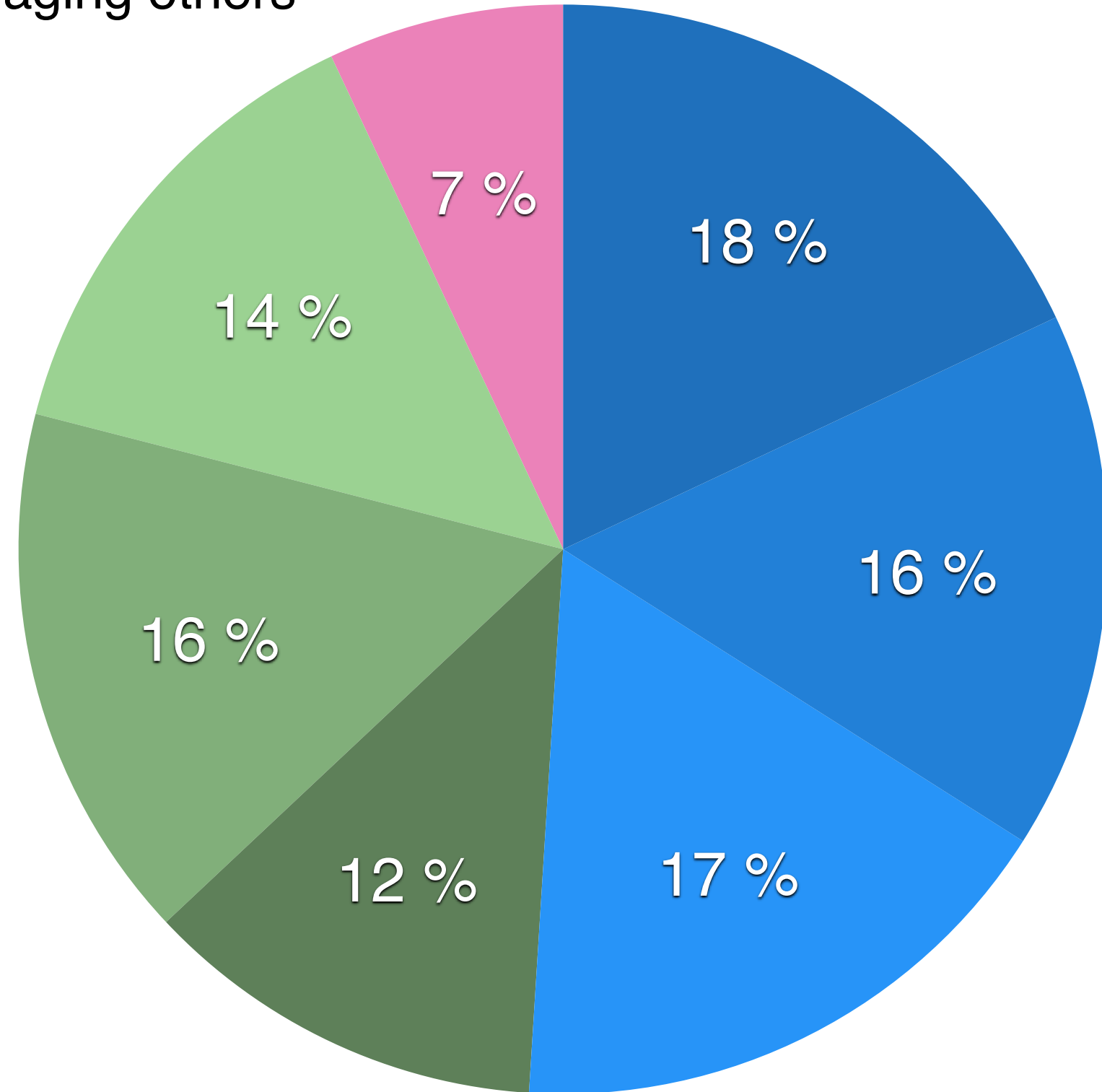
# 5G network slicing for Free Access to Information for All



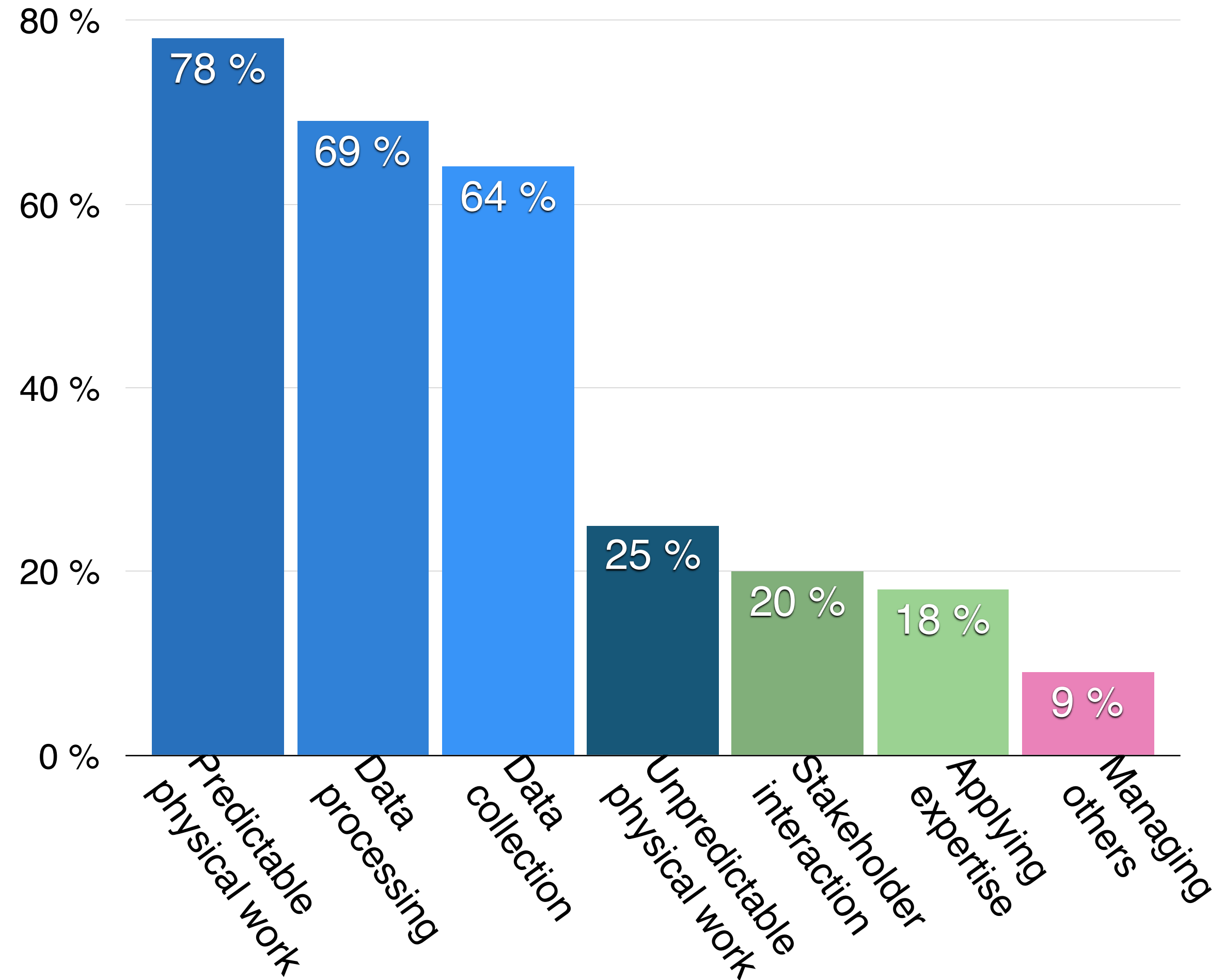
# Automation driving business

## USA work force time spent

- Predictable physical work
- Data collection
- Stakeholder interactions
- Managing others
- Data processing
- Unpredictable physical work
- Applying Expertise



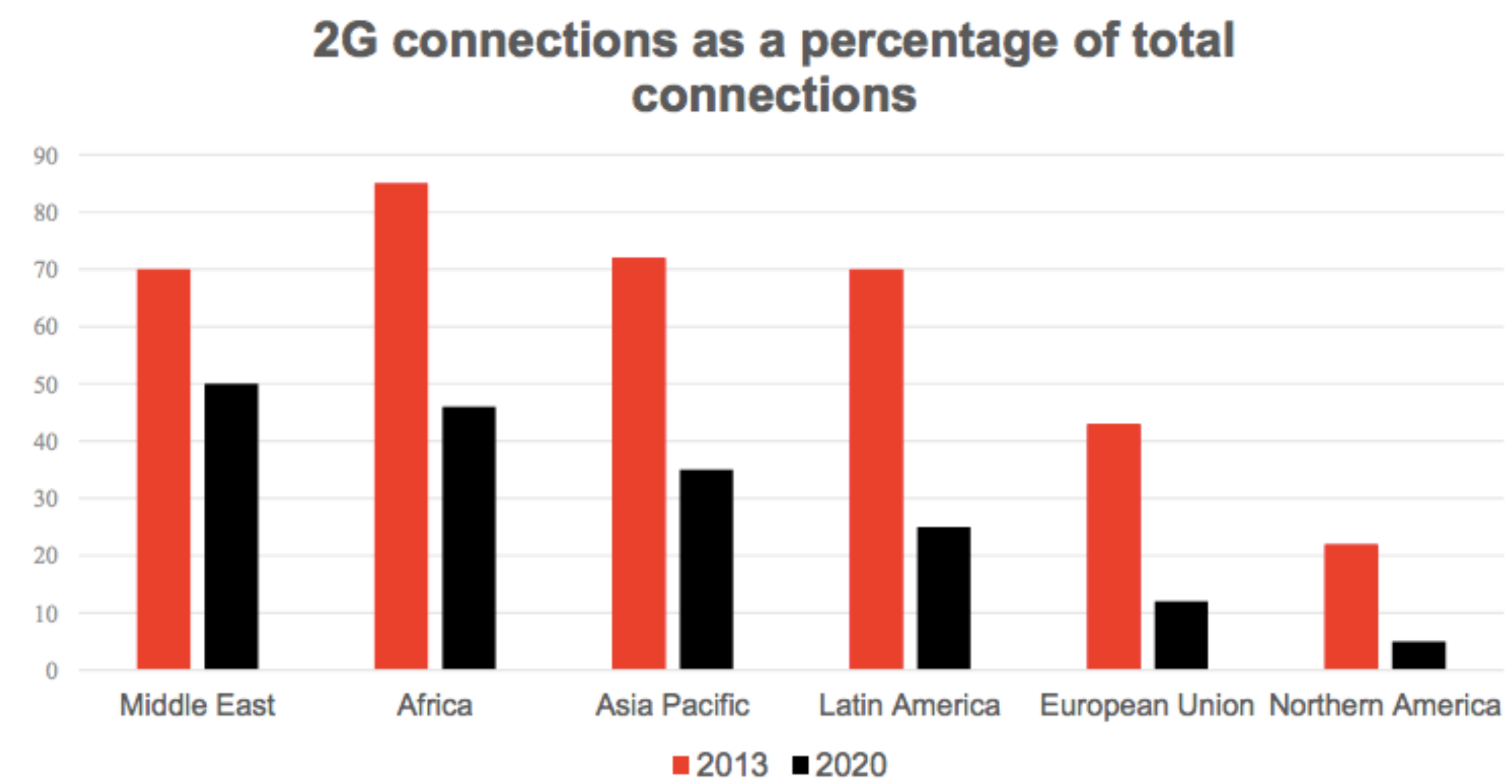
## Technical automation potential 2016 [%]



[adapted from: McKinsey, 2016]

# The challenge of area coverage

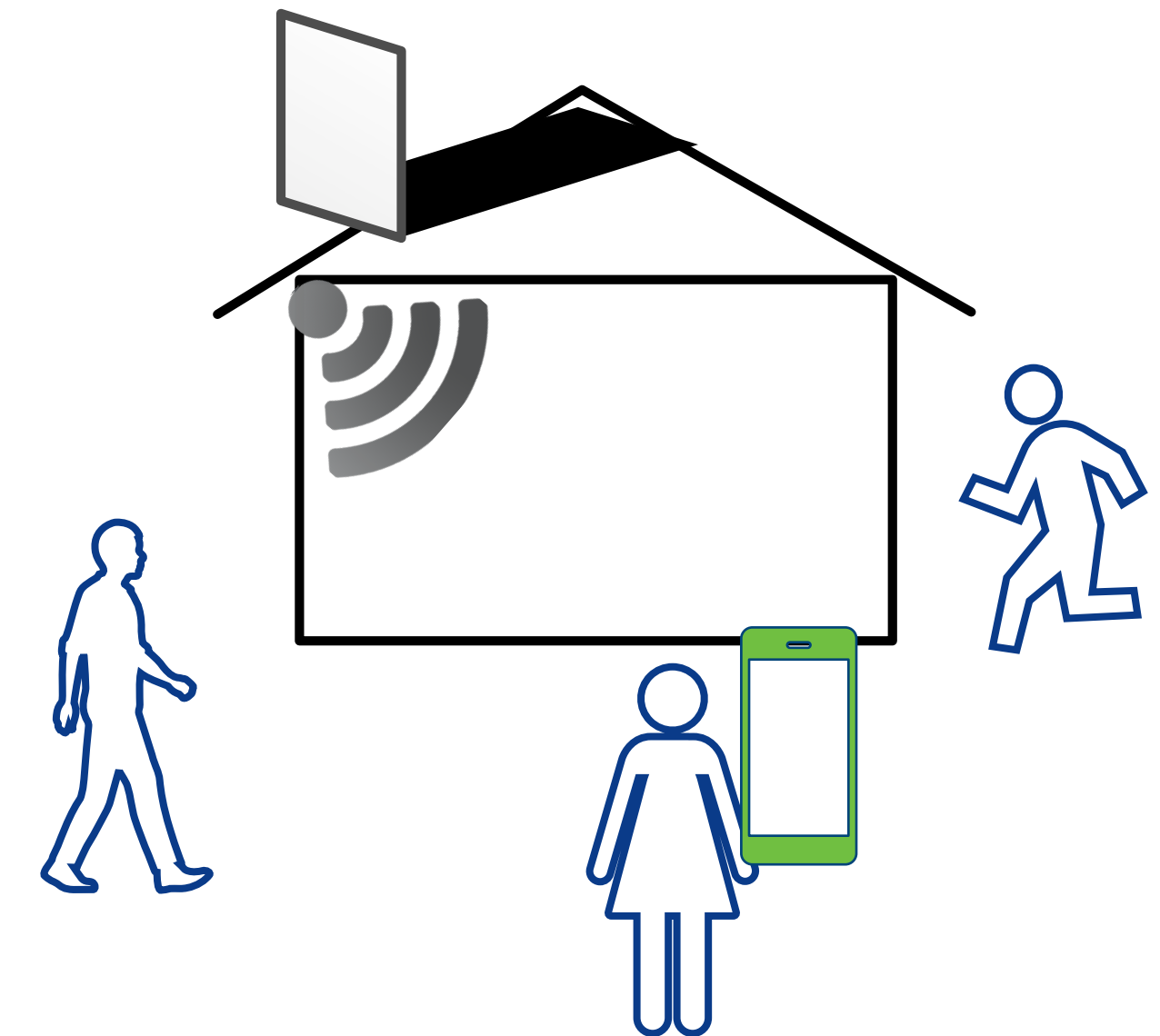
- Land area Norway, 385.178 km<sup>2</sup> - 7500 basestasjons
  - ➔ <http://www.mynewsdesk.com/no/telenor/pressreleases/sjekk-naar-du-faar-4g-der-du-bor-1399662>
- Tanzania 947,303 km<sup>2</sup> = 3 x Norway,
- Mali 1,240,000 km<sup>2</sup> = 4 x Norway
- DR Congo 2,345,000 km<sup>2</sup> = 8 x Norway
- Economy in building Wireless Broadband
  - ➔ #5Gforall
  - ➔ Amazon: 20% revenue from data sales
  - ➔ “Big Five”: same GDP as that of France



# Goals of Basic Internet Foundation

- **Internet lite** for **all**
  - ➔ “Nobody should be left out from the Digital Society”
  - ➔ Give everyone **access to digital information**
- **Traditional business** models are too slow
  - ➔ Mobile broadband roll-out dominated by return on investment
  - ➔ Premier league, Bollywood **outranges non-profit content**
- Providing at least **one Information Spot** in each village
  - ➔ **Internet lite for all** - free access to information
  - ➔ **Premium** access to profitable content - **sustainable** solution

“Internet had the ability to dismantle the divide. Internet failed miserably, the divide is bigger than ever.”  
Kate Gilmore, Human Rights, UNO





# Collaboration: Caritas - Basic Internet Stiftung

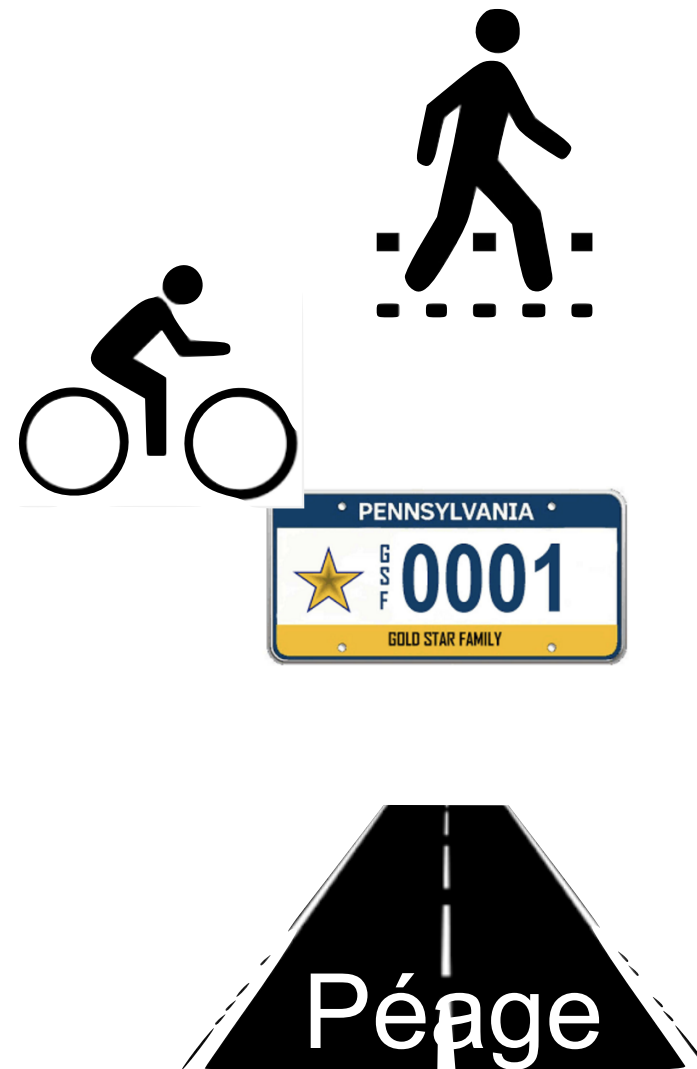
- Internet lite in Caritas Kinderdorf (Bottrop)
  - ➔ free information access for 60 Kinder/Jugendliche
  - ➔ Pedagogical concept, children empowerment
- Partnership Caritas (Diozöse Essen)
  - ➔ *Digital Participation for all*
  - ➔ social innovation “Social Digi Hubs”
  - ➔ Free access to information  
“Internet lite for all”
  - ➔ Example: Social support (Harz IV in DE) does not include Internet access



# Internet lite for All - the “walk on the Internet”

## Road Infrastructure

- Basic infrastructure
  - free usage for pedestrians & cyclists
  - authentication for cars
  - Pay for use model when a license plate is required
- Highways & toll roads
  - speed & comfort
  - often privately managed
- Railways
- Successful complementarity



## Internet Lite Infrastructure

- Basic Access
  - free access of information
  - text, pictures and local video
- Broadband and Mobile services
  - Voice, video & games
  - speed & comfort
  - privately managed
- Complementarity



multimedia++

# Partnership for Digital Africa

<http://www.aftenposten.no/meninger/debatt/Kronikk-Som-gjesteland-pa-G20-toppmotet-ma-bidra-til-a-endre-verden--Erna-Solberg-614076b.html>

● **Main Objectives of CTU**  
Comment: As a great country at the G20 summit, we must help to change the world | Erna Solberg

→ Create the Showcase Digital Tanzania



Catalyst for SDG 2030, Showcase for Digital

→ Combined effort of IT industry, World Bank, 1

● **Main Objectives of CTU**

→ Create the Showcase Digital Tanzania



In July last year was Erna Solberg invited by Angela Merkel for this year's G20 meeting. Here from a meeting between the German Chancellor and the Norwegian Prime Minister in Berlin in November, where Norway's participation as guest country at the economic summit were among issues discussed.

## 1. UN sustainability goals and Agenda 2030:

Germany has chosen this agenda as a backdrop for their entire program for the presidency, and I lead a group at the United Nations that will drive towards implementation.

We will work to ensure that the G20 goes ahead with its own specific commitments to help achieve sustainability goals.

## 2. Migration and partnership with Africa:

The world is experiencing the greatest influx of refugees since World War II. Europe, and especially Germany, have seen the consequences of that.

**It is necessary to improve the situation where people break up close.** Germany will use its chairmanship to do something about the problems which people belong. There is no minimum job creation and private investment. There are agreements with African countries wishing to achieve it.

G20 can therefore help the countries and international organizations use their resources more on measures which create growth and job creation.

## 3. Health and education.

Norway has long had a heavy international involvement. Education and health are associated with economic growth.

# Internet lite for all *the catalyst for the goals*

- “Non discrimin...

→ funded by RO

(for 2017-2020)



Internet lite for all

# Digi project recommendation

“Internet lite for all”  
free access to information

- at least one health information spot per village
  - ➔ solar power, Wifi hot-spot, phone charger, light
  - ➔ ~300 USD per spot
- Catalyst for SDGs
- Entry point for the Digital Society



addressing people with  
1-2 USD/month for Information

All Small Baby Newborn Childbirth Breastfeeding Cholera



The Story of Ebola, English



The Story of Ebola, Swahili

<https://globalhealthmedia.org/videos/ebola-portfolio/>



# Agenda - Digitisation in Development

- Norway
  - ➔ “Digitisation in Development” (Astrup, Unicef)
  - ➔ UNO High-level panel on Digital Collaboration
- International perspective
  - ➔ Germany-Norway collaboration West-Africa
  - ➔ G20 Compact with Africa



# Conclusions: Digital Empowerment and Inclusion



- Digital Empowerment
  - fostered through “Internet lite for all”
  - free access to information for all
  - Inclusion in the Digital Society
- Net neutrality through freemium model for access
  - free information access
  - premium access for bandwidth-demanding services
- Catalyst for Sustainable Development Goals (SDGs)
- Digital Health as Game Changer
  - Increased Health knowledge
  - Better prevention and preparedness
  - Digital literacy

