



**East African Health & Science Conference,
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Providing Digital Health - a Question of Sustainability

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Starting Point:

JOSEPH E. STIGLITZ

WINNER OF THE NOBEL PRIZE IN ECONOMICS



THE PRICE OF INEQUALITY

HOW TODAY'S DIVIDED SOCIETY
ENDANGERS OUR FUTURE



Grand Challenges

- Grand Challenges

- ➔ Climate
- ➔ Resources (radio, minerals)
 - Kobald (East - DR Congo)
- ➔ Divide

- Digitisation

- ➔ Mobile Networks
- ➔ IoT
- ➔ Automation

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





SUSTAINABLE DEVELOPMENT GOALS

And what about IoT?

FREEDOM OF EXPRESSION

We can't reach the U.N. goals for sustainable development without the internet

22 JUNE 2017 | 11:40 AM

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It's become common wisdom that the United Nations' ambitious "Global Goals for Sustainable Development" aren't just for the U.N., or even governments, to implement. Launched in September 2015, the 17 goals and 169 targets are "a series of ambitious targets to end extreme poverty and tackle climate change for everyone by 2030" (hence the alternative moniker, the "2030 Agenda for Sustainable Development").

Replacing the more arcane "Millennium Development Goals," these Sustainable Development Goals (SDGs) are everyone's goals, crowd-sourced to completion and promoted by companies and civil society alike. (Cue the hip, auto-playing video on the website.)

Smartly, the goals, especially Goal 17, emphasize that **access to technology underpins every one of these commitments** to the eradication of extreme poverty.

However, not all connectivity is the same, nor yields the same benefits to societies in terms of economic, social, or cultural development. As we told the International Telecommunication Union (ITU), only **stable, secure, and open access** to broadband internet will ensure success for the U.N. SDGs. That's something civil society and our partners will continue to make clear, and we'll need to work in legislatures to get the point across, not simply at aid and development banks.

To reach the SDGs, we need civil and political advocacy

Traditionally, information and communications technology (ICTs) have not been a major recipient of aid funding. That's one reason this crucial technology is "under-represented" in the SDGs and appears in only four of the 169 targets. It's assumed that telecommunications will take care of itself, having been largely deregulated and privatized in the 1980s and 1990s. Yet **more than half the world's population is not using the internet**, a statistic showing the failure of local, national, and global governance with economic, political, and moral implications.



PETER MICEK @lawyerpants

- FREEDOM OF EXPRESSION
- GLOBAL
- #ITU4SDG
- #KEEPITON
- CONNECTIVITY
- ITU
- SDG
- SUSTAINABLE DEVELOPMENT GOALS
- UNITED NATIONS

RELATED

Beyond connectivity: building an inclusive U.N. agenda for internet development [Read More >](#)

Access Now welcomes new report on economic impact of shutdowns [Read More >](#)



STEPHEN HAWKING CARES MOST ABOUT #GOAL 9 INDUSTRY, INNOVATION & INFRASTRUCTURE #GLOBALGOALS

<https://www.accessnow.org/cant-reach-u-n-goals-sustainable-development-without-internet/>



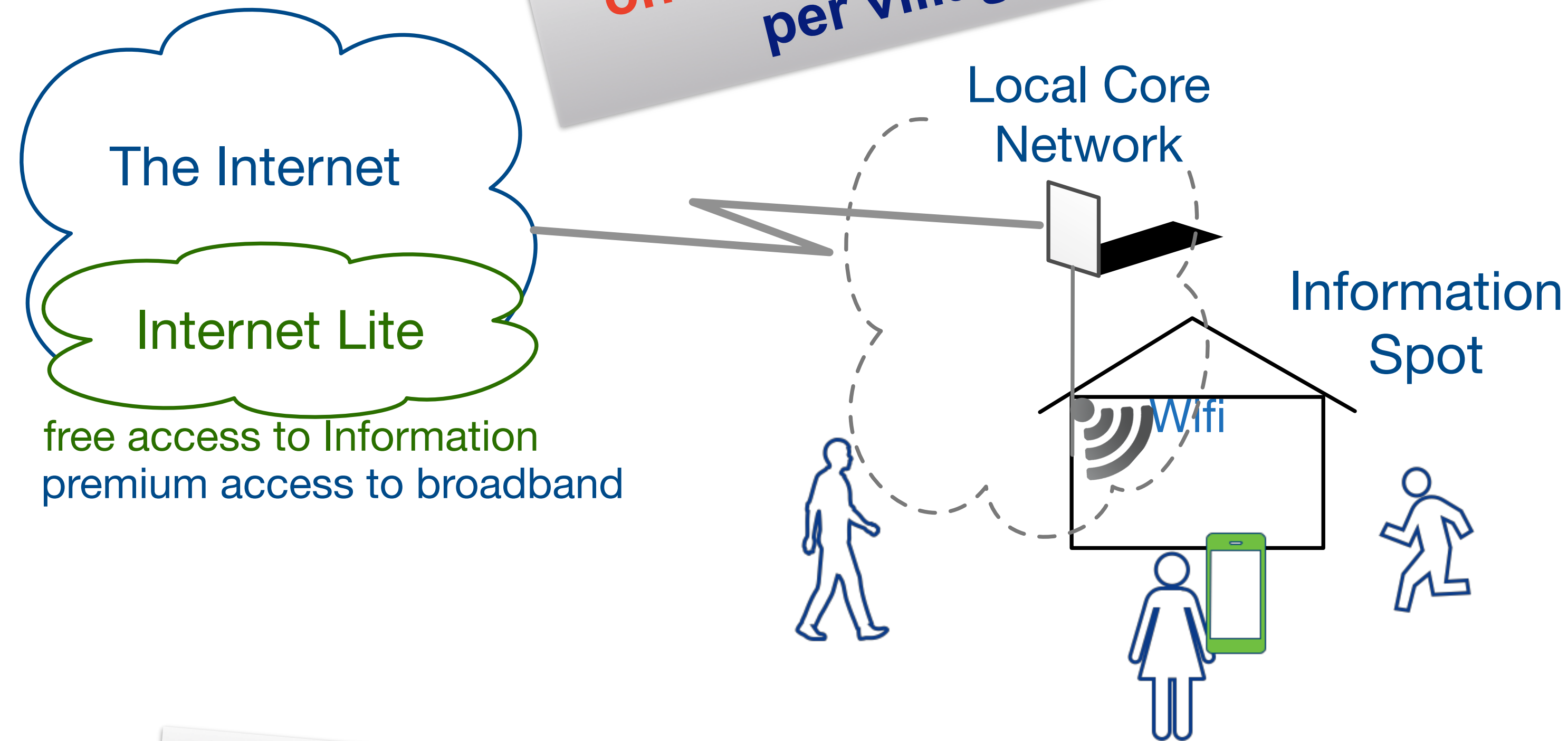
Internet Lite for All

the catalyst for the goals



“Internet Lite for All” the walk on the Internet

- **Freemium** model for access
 - ➔ Free: text, pictures & local video
 - ➔ Premium: broadband services
- Ensure **Network Neutrality**
 - ➔ Content type filtering
- 1 premium pays for 300 free
 - ➔ “10 months of Information, or 10 min of video”?



Satellite: 1 Mbit/s = 2000 US\$/month
TZ Network operator: 4Mbit/s = 600 US\$/month

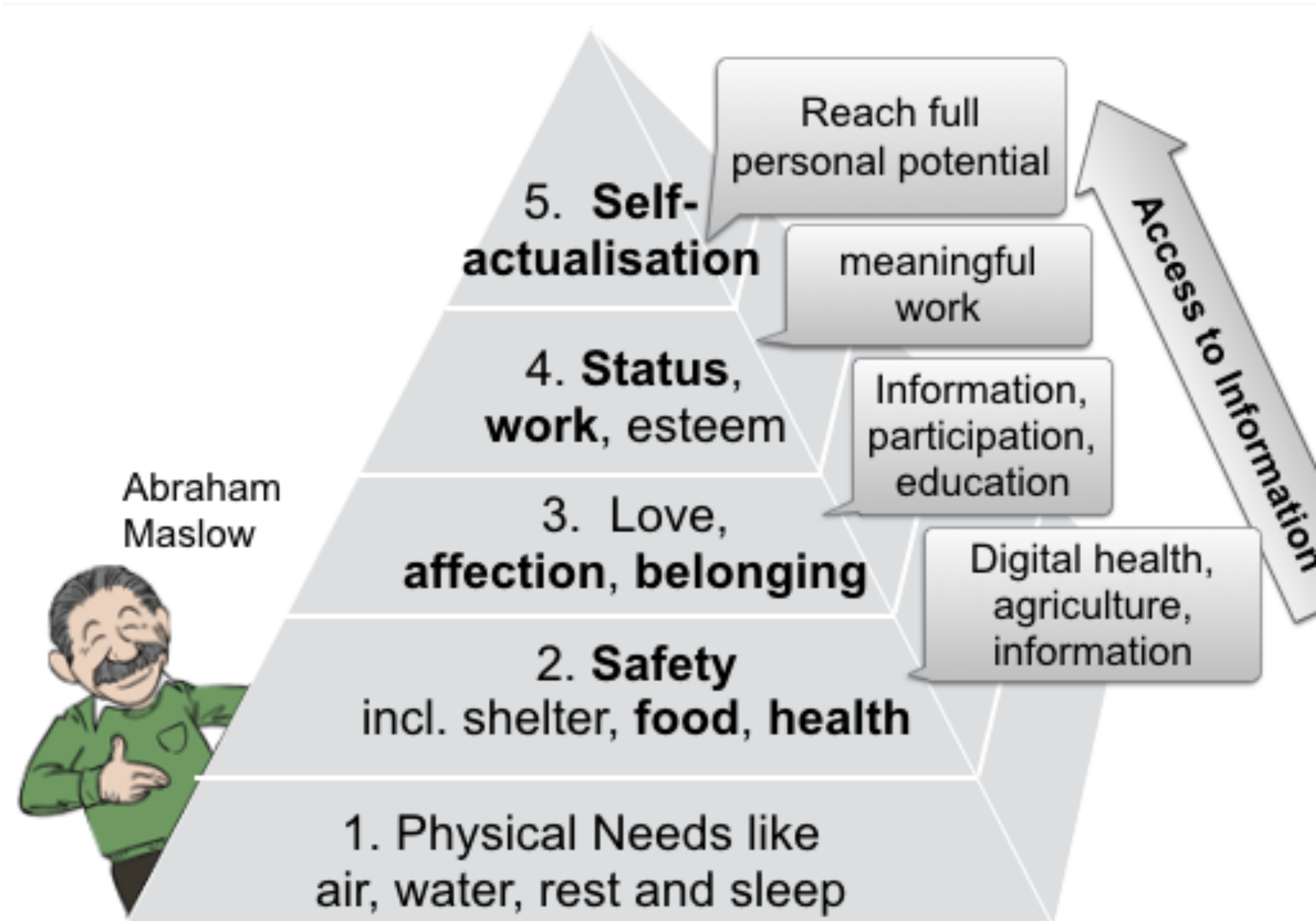
Digital Health for Digital Inclusion and Societal Empowerment

- **Digital Health Promotion (DHP) as catalyst**

- Disease prevention
- Better Health
- Faster Response

- **Framework: health, energy & digital**

- Empower the society
- Catalyst for the Sustainable Development Goals (SDGs)



[adopted from: <https://shift-magazine.net/2015/11/17/the-economics-of-human-need/>]

United Nations: High-Level Panel on Digital Cooperation



Secretary-General's High-level Panel on Digital Cooperation



PANEL DOCUMENTS



My vision: Digital Champion through Health Information Spots

- UN Digital Cooperation Panel
 - ➔ published areas for recommendation
 - ➔ Mar/Apr2019 draft recommendations
 - ➔ May2019 report
- Asking for “Implementation Champions”

Leadership &
Political Will

Incentives
Alignment

Implementation
of Guiding
Values &
Principles

Shared
Meanings

Clear Roles &
Responsibilities

Coherence in
Action

**Inclusive
ness**

Trust

Capacity



Panel Discussions:



Role of the Government in providing a robust enabling ecosystem for scaling uptake and utilisation of technologies in health: leadership, policies, regulation, and enabling environment for digital technology and solutions in health

*Role of the Government
Framework for Digital Health
Empowerment
At least **one health information spot** per village*

*Robust enabling ecosystem
Scaling uptake: from **digital health**
to **digital inclusion**
Utilisation of Technology: **Internet Lite** for All*

*Health Policies & Regulations
“Digital First”
Health promotion videos/
animations*

*Enabling Environment for Health
Digital **Health Information Spots**
Digitisation of Education*



Esilalei (Arusha)





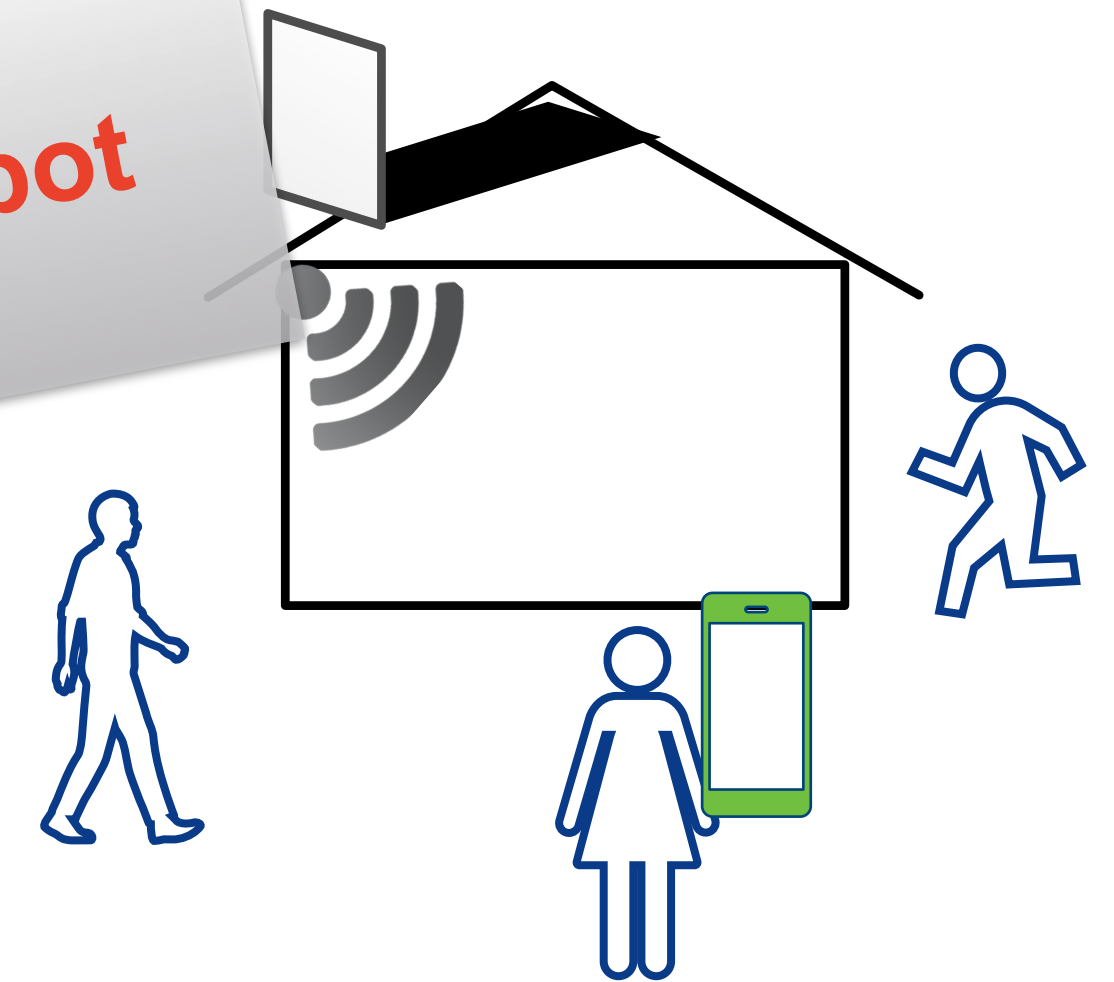
Conclusion



- “Internet Lite for All”
 - Freemium model for access
 - at Home, in the Mobile Network, World-Wide
- Framework for Sustainable Development
 - Convergence: Energy & Health & Digital
 - #ReturnOnSDGs instead of #ROI
- Information Spot(s) in each village
 - basis: free access to information for everyone
 - add-on: Health, Education, Decent Work Financial Inclusion, ...
- Digital Implementation Champion
 - one information spot per villages
 - Digital Health Promotion

“Providing Internet to the basic of the pyramid isn't a question of affordability, but rather a question of sustainability”
Internet Governance Forum, Panel

Starting with one Information Spot per village



Partners - Hope I'll see you here ...



FR



ES



Ministry of Health, TZ



UiO



TZ



USA



UK

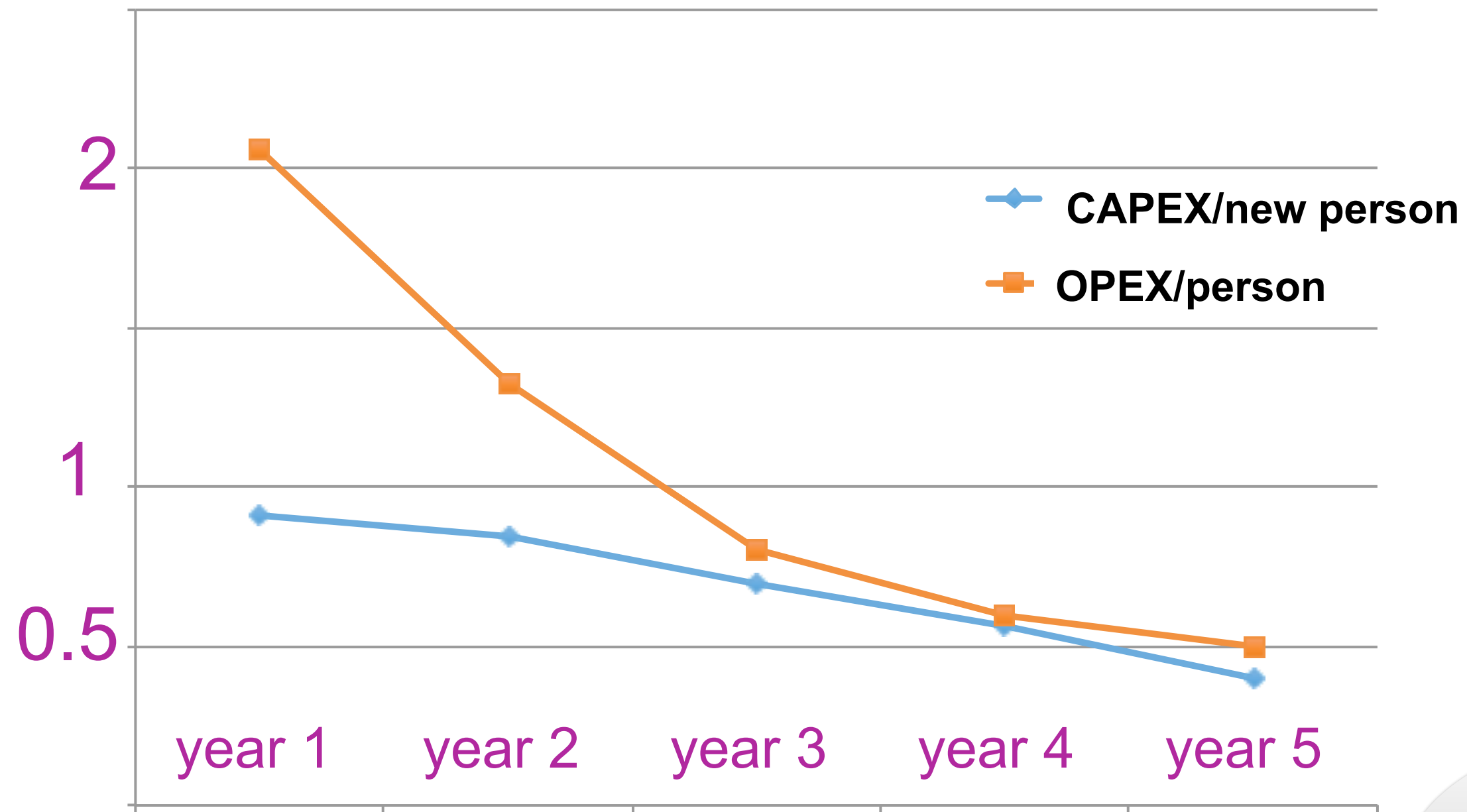


Background slides

Comparison Cost of Digital Inclusion



InfoInternet Costs/user/month [US\$]



- local Wifi spots
- based on Satellite connectivity

half a dollar is enough*



Child Protection
Child taken into care
average cost per year

£64,819

Unemployment
Job Seekers Allowance
per claimant per year

£10,025

Care for the Elderly
Residential care for older
person per year

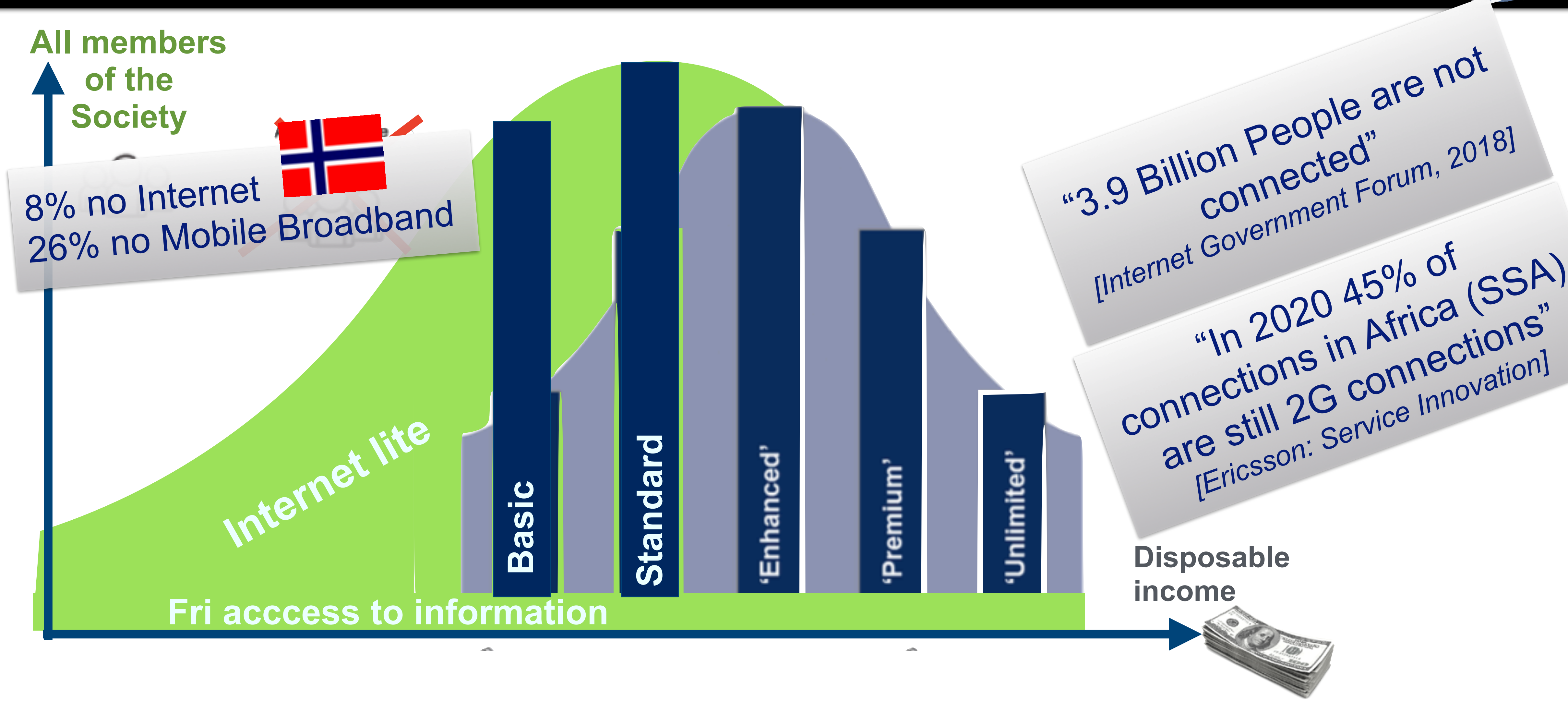
£28,132

exclusion
Education
Exclusion from school
per pupil per year

£11,192

Source: UK GOVERNMENT UNIT COST DATABASE
www.data.gov.uk/sib_knowledge_box/toolkit

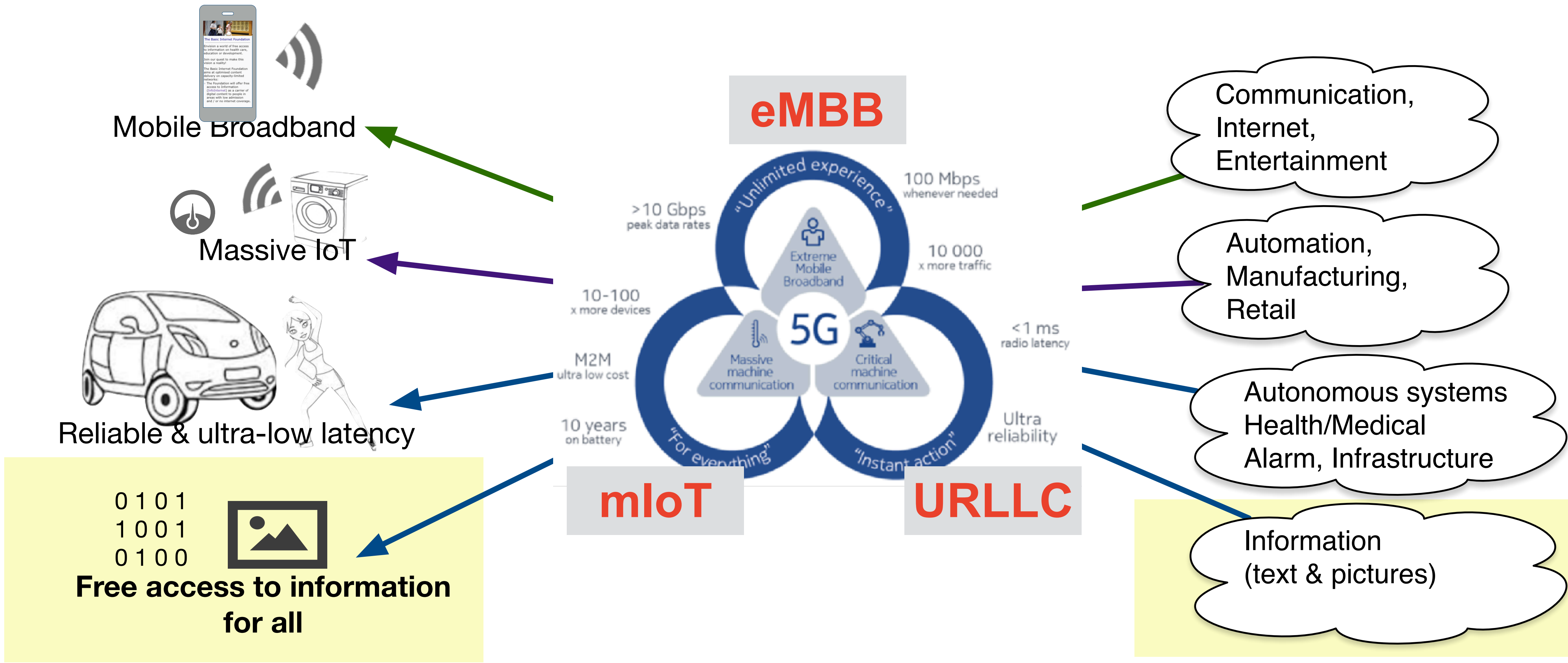
6G (#5GforAll) for digital inclusion



[Adapted from: Service Innovation through Smart Networks, Ericsson, 2018]



5G network slicing for Free Access to Information for All



InfoInternet Standard

- Network responsiveness
- InfoInternet Standard development
 - **Konzept:** www-filtering
 - free: text & picture, premium: video
 - **Pilot:** www metadata & inspection
 - address, port & deep packet analysis
 - **Standard:** proxy & html5 standard,
 - <http://BasicInternet.org&standard=InfoInternet>

