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Digitalisation, Energy and Health; the Building Blocks for an Innovative Society?

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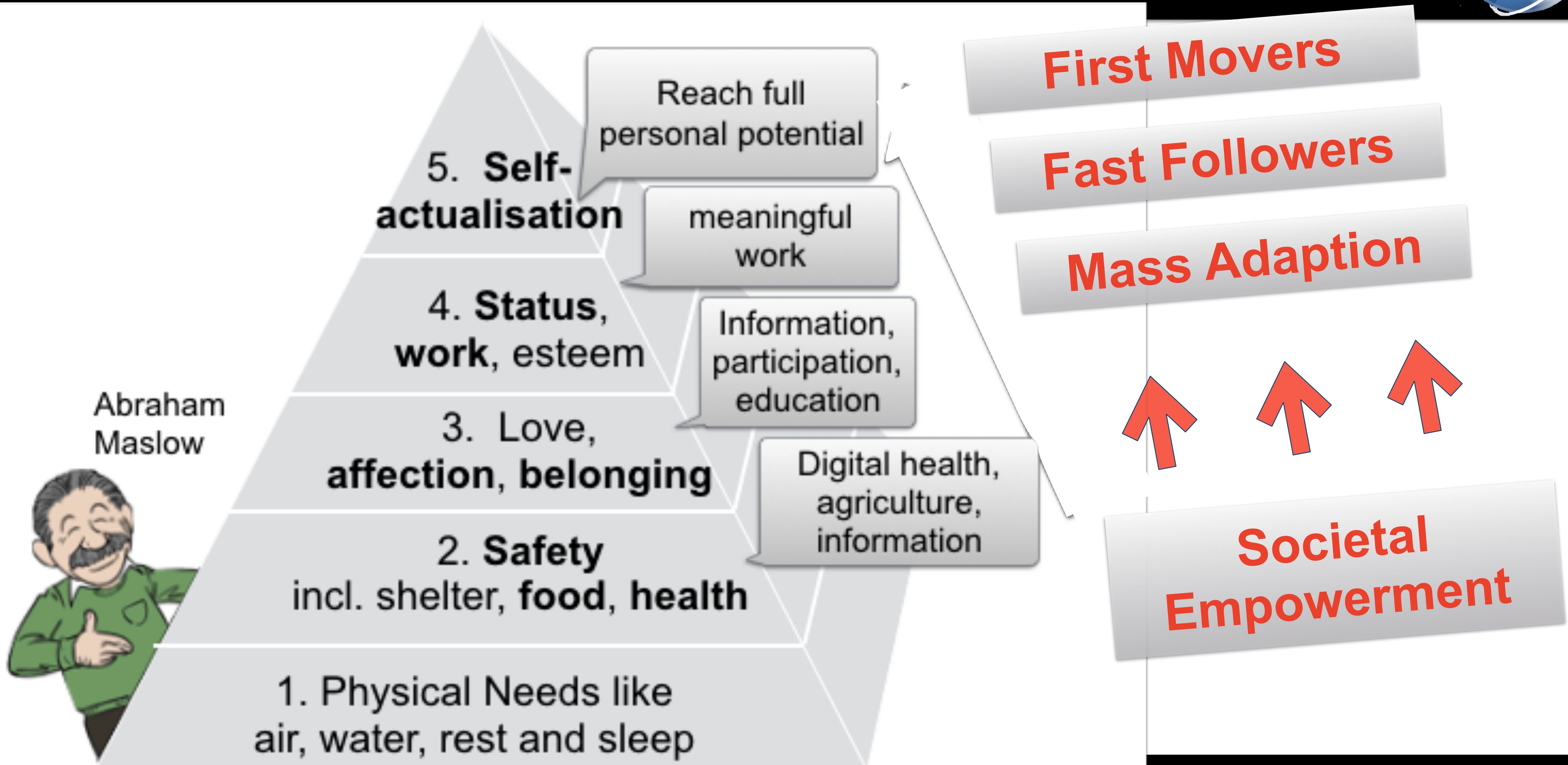
Kjeller, Norway

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THE PRICE OF INEQUALITY

HOW TODAY'S DIVIDED SOCIETY
ENDANGERS OUR FUTURE

Empowering people for the **Innovative** Society

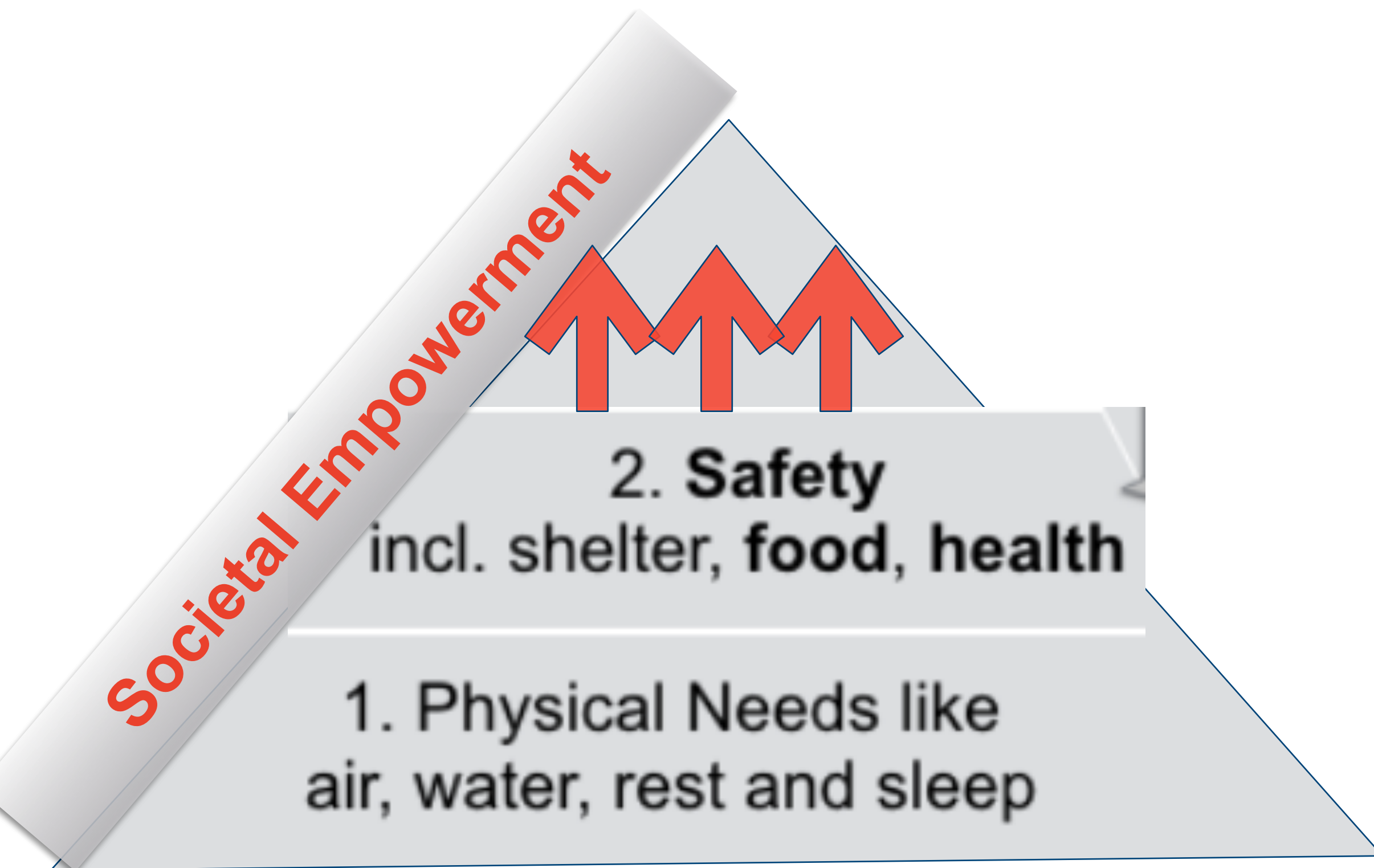


Societal Empowerment Sector thinking or converged approach?

Health

Energy

Digitalisation

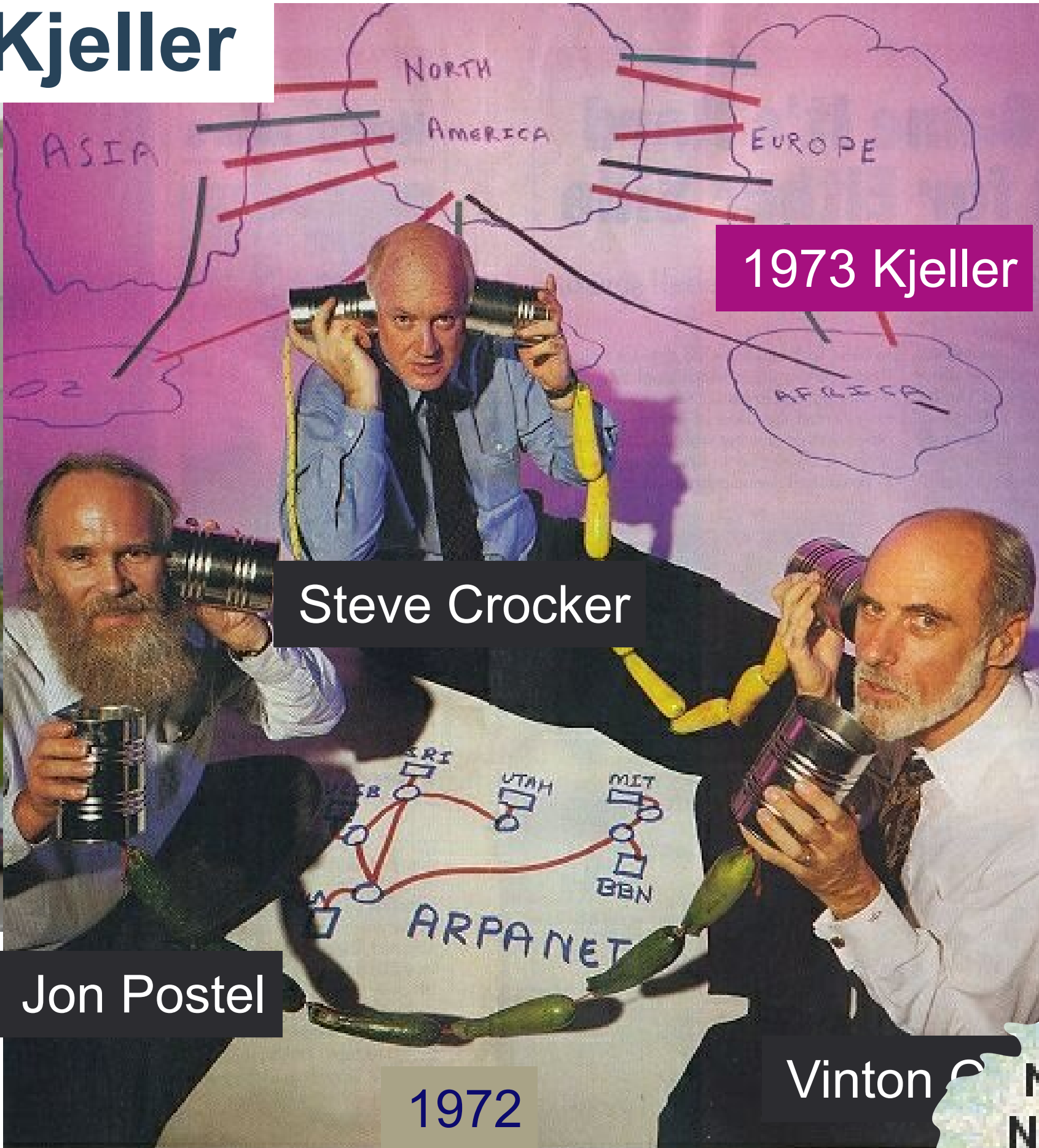


- Region Development Funds (BRGF)
 - ➔ not why, what to achieve
- Technology today
 - ➔ Convergence
 - ➔ Edge Intelligence
- Integrated Framework
 - ➔ Best ROI on each invested NOK

Kjeller: Internet, 2G, 3G, ...



Norsar/UiO/Telenor at Kjeller



Jon Postel

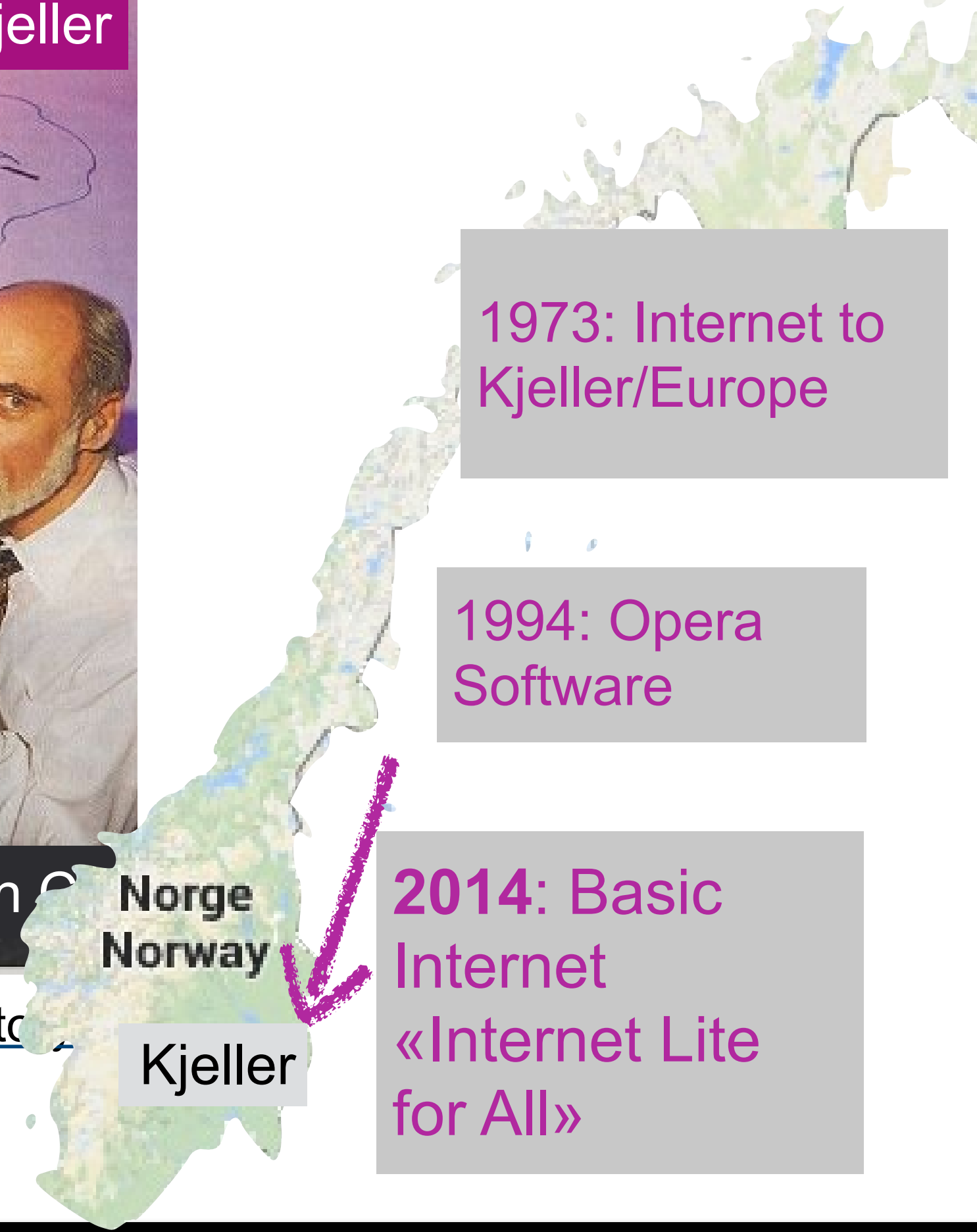
Steve Crocker

Vinton Cerf

1973: Internet to Kjeller/Europe

1994: Opera Software

2014: Basic Internet «Internet Lite for All»



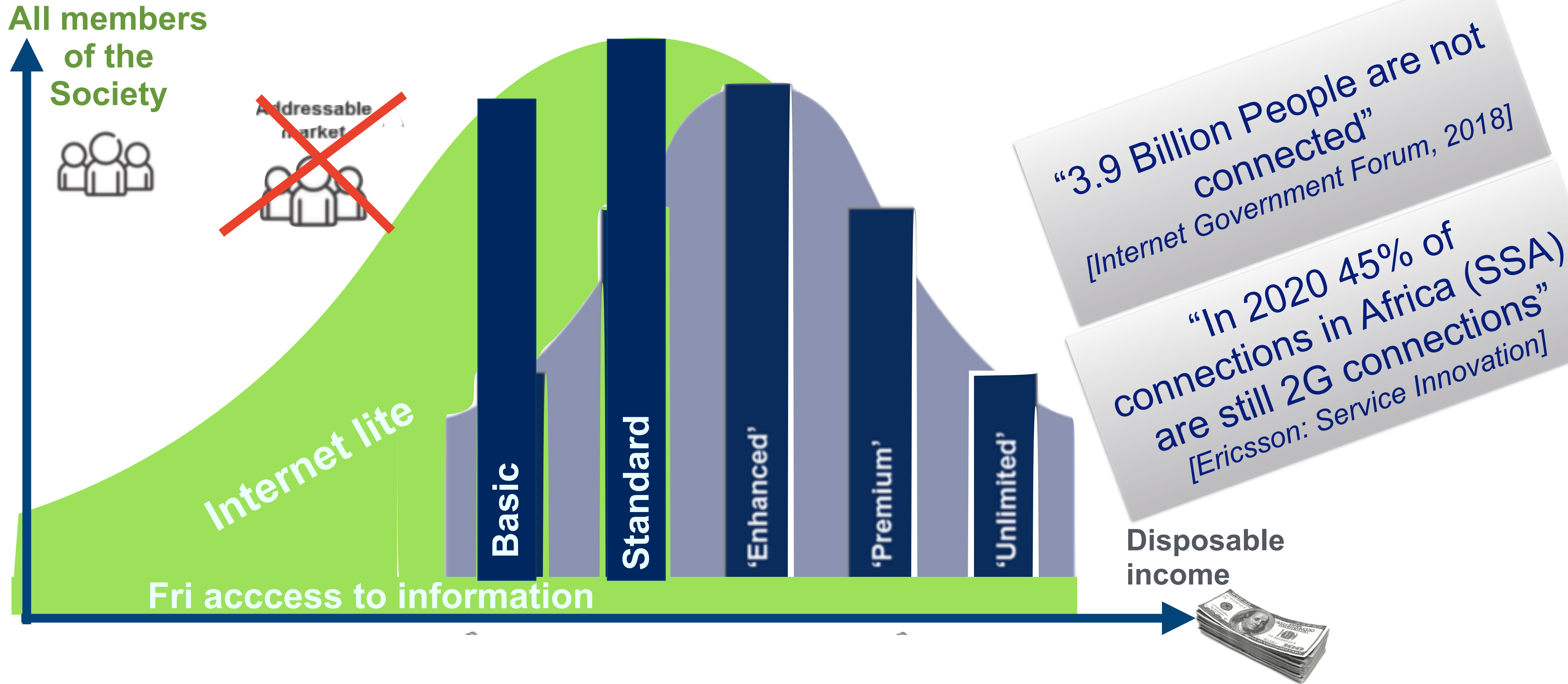
Source: <http://www.michaelkaul.de/History/histo>

- The building where the Internet (Arpanet) came to Europe in June 1973

1971 (at which point 23 hosts, at universities and government research centers, were connected to the ARPANET); 29 by August, 1972, and 40 by September, 1973.

At that point, two satellite links, across the Pacific and Atlantic Oceans to Hawaii and Norway (NORSAR) had been added to the network. From Norway, a terrestrial circuit added an IMP in London to the growing network.

My view on digital inclusion



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

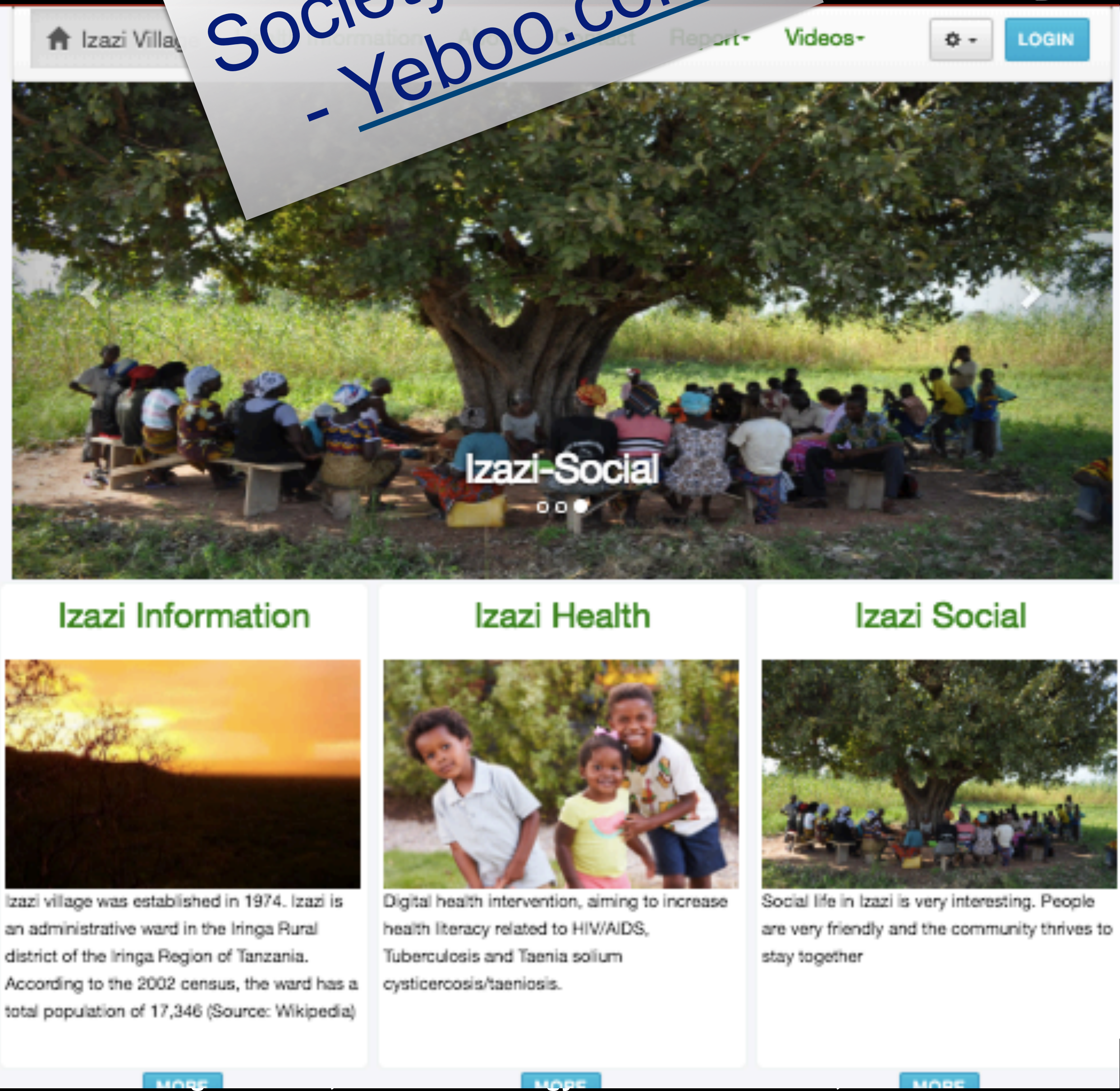
Information Spot per Village

- Free Access to Information for All
- Gateway for Services



Information Spot
Freemium Access

Society Platform
- Yeboo.com



Izazi Village

Report Videos LOGIN

Izazi-Social

Izazi Information

Izazi village was established in 1974. Izazi is an administrative ward in the Iringa Rural district of the Iringa Region of Tanzania. According to the 2002 census, the ward has a total population of 17,346 (Source: Wikipedia)

Izazi Health

Digital health intervention, aiming to increase health literacy related to HIV/AIDS, Tuberculosis and Taenia solium cysticercosis/taeniosis.

Izazi Social

Social life in Izazi is very interesting. People are very friendly and the community thrives to stay together

MORE MORE MORE

Internet lite for all *the catalyst for the goals*

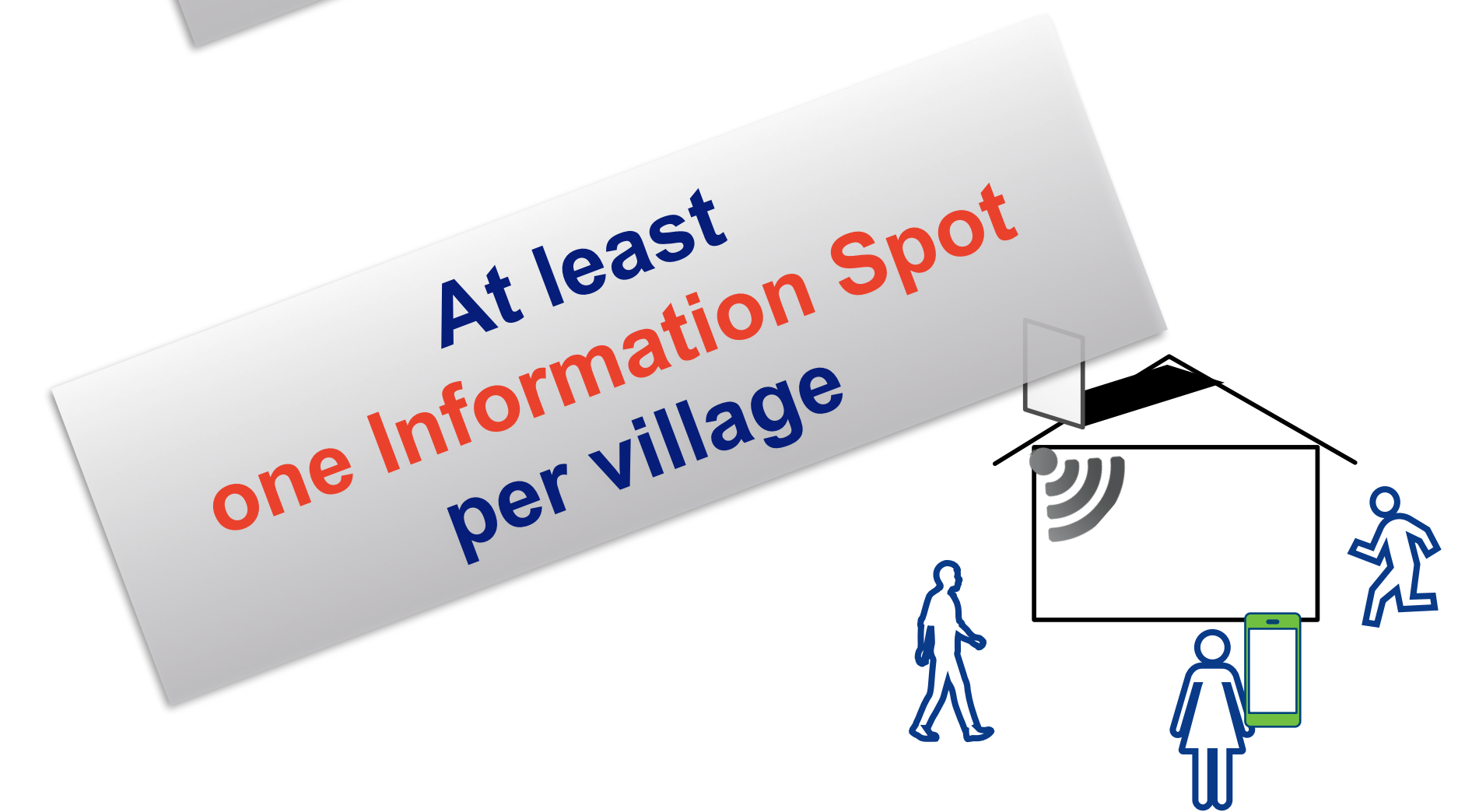


Conclusion



- Framework for Sustainable Development
 - ➔ Convergence: Energy & Health & Digital
 - ➔ Societal ROI on invested NOK/INR
- Information Spot(s) in each village
 - ➔ basis: **free access to information** for everyone
 - ➔ add-on: Health, Education, Decent Work
Financial Inclusion, ...
- **Foundation and Business Partnership**
 - ➔ **80%** business, **20%** societal empowerment
 - ➔ Your help: business, content, support

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



Partners



FR



ES



Ministry of Health, TZ



UiO



TZ



USA



UK



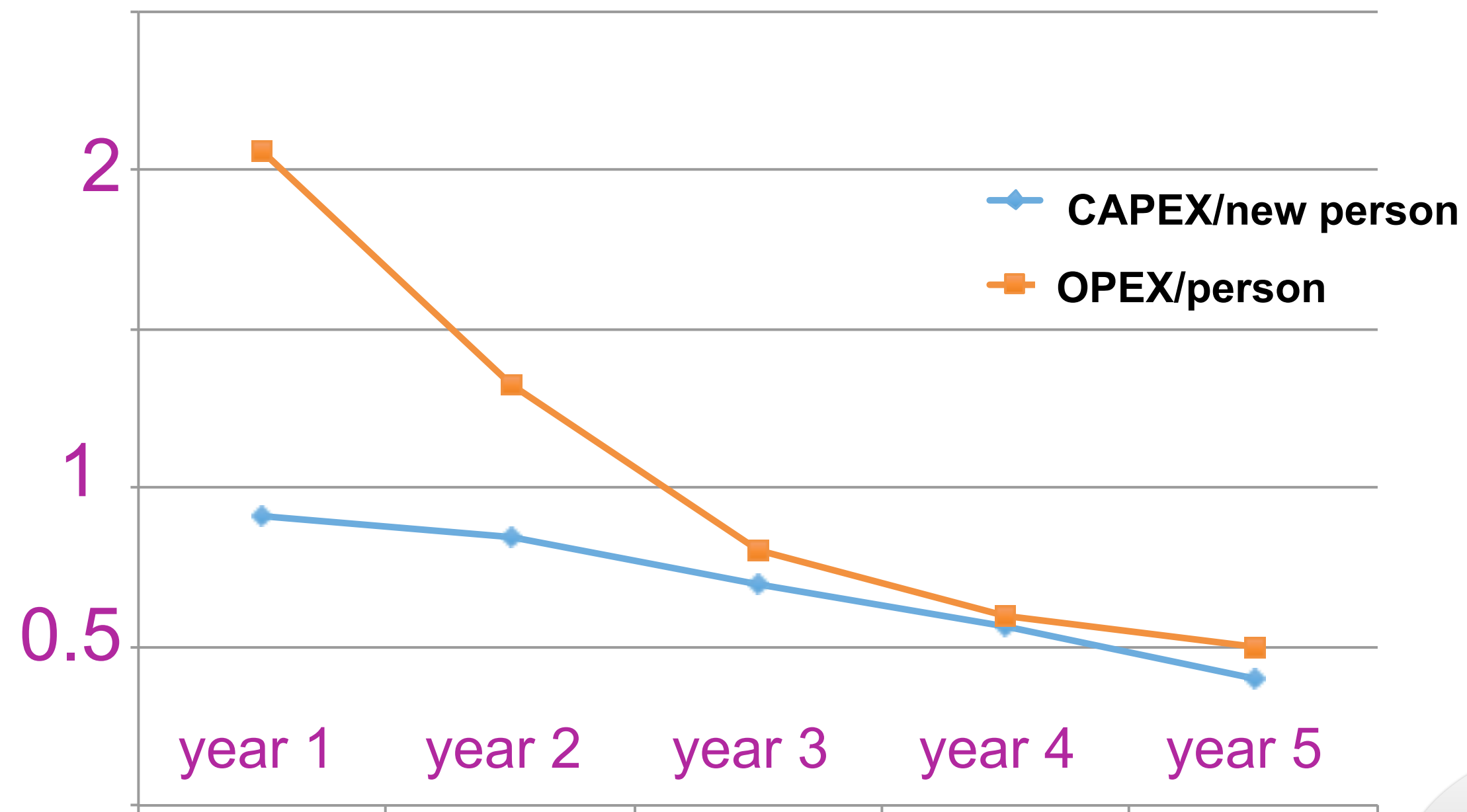
- **Background Slides**

Estimation Cost of ICT development



Comparison - societal costs

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

Google translate Partnership for Digital Africa

http://www.aftenposten.no/meninger/debatt/
Kronikk-Som-gjesteland-pa-G20-toppmotet-ma-
bidra-til-a-endre-verden--Erna-



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

Comment: As a guest country at the G20 summit, we must change the world
Erna Solberg

G20:
Compact with Africa



PANEL DOCUMENT

- Press release
- Terms of reference
- Panel member bios



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.

Digital technology is changing economies and societies at warp speed and scale.

Call for Contribution

G20 can therefore help the public and international organizations use their resources more effectively to 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.



How to reach the Strategic Goal 2

- The **Sustainable Business Model** for Freemium Access

- Selling of vouchers
- Sponsored content
- Banking, online-shopping
- governmental:
 - health
 - education
- Costs of non-delivery
 - UK:
- Local entrepreneurship
 - mobile charging



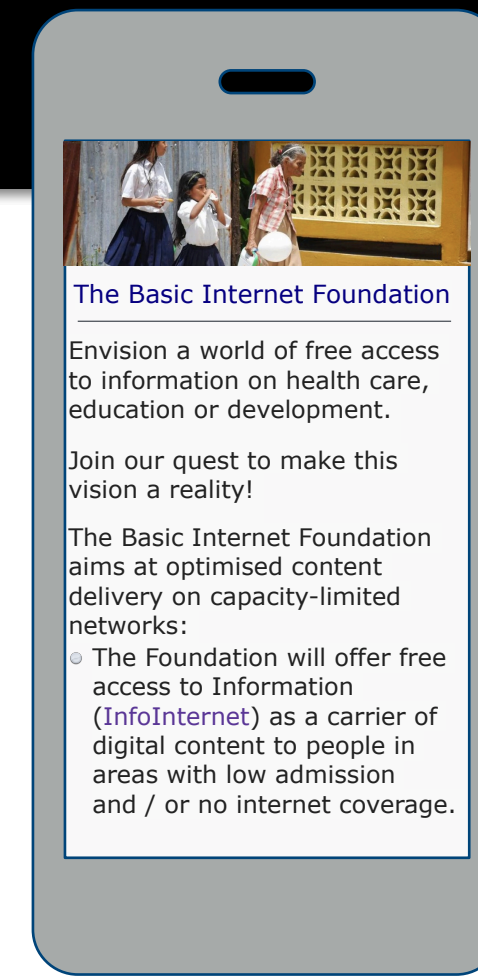
How to reach the Strategic Goal 3

- **3. Demonstrate the proof of concept**
- Pilot demonstrations & Operational Excellency
 - Technology works already, more than 4 years of operation
 - Germany: Caritas Kinderdorf
 - Norway: Health Stations
- Support with strong partners
 - Tanzania: Digital Global Health as Enabler
 - Orange Mali: Empowerment of the Society
 - Caritas Kinderdorf: Proof of concept with 100+ devices
 - India: Governmental Support of Grand Panchayats

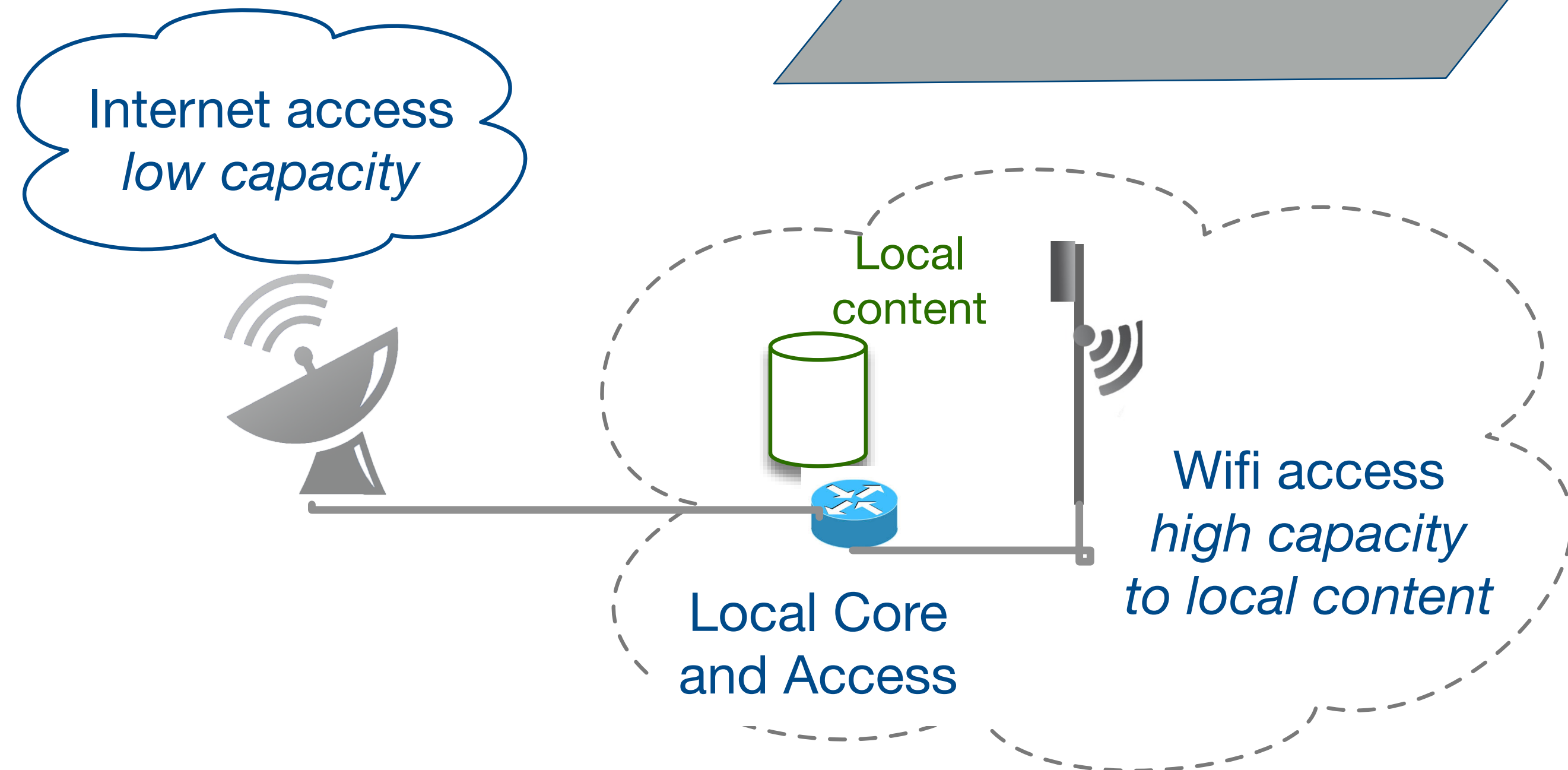
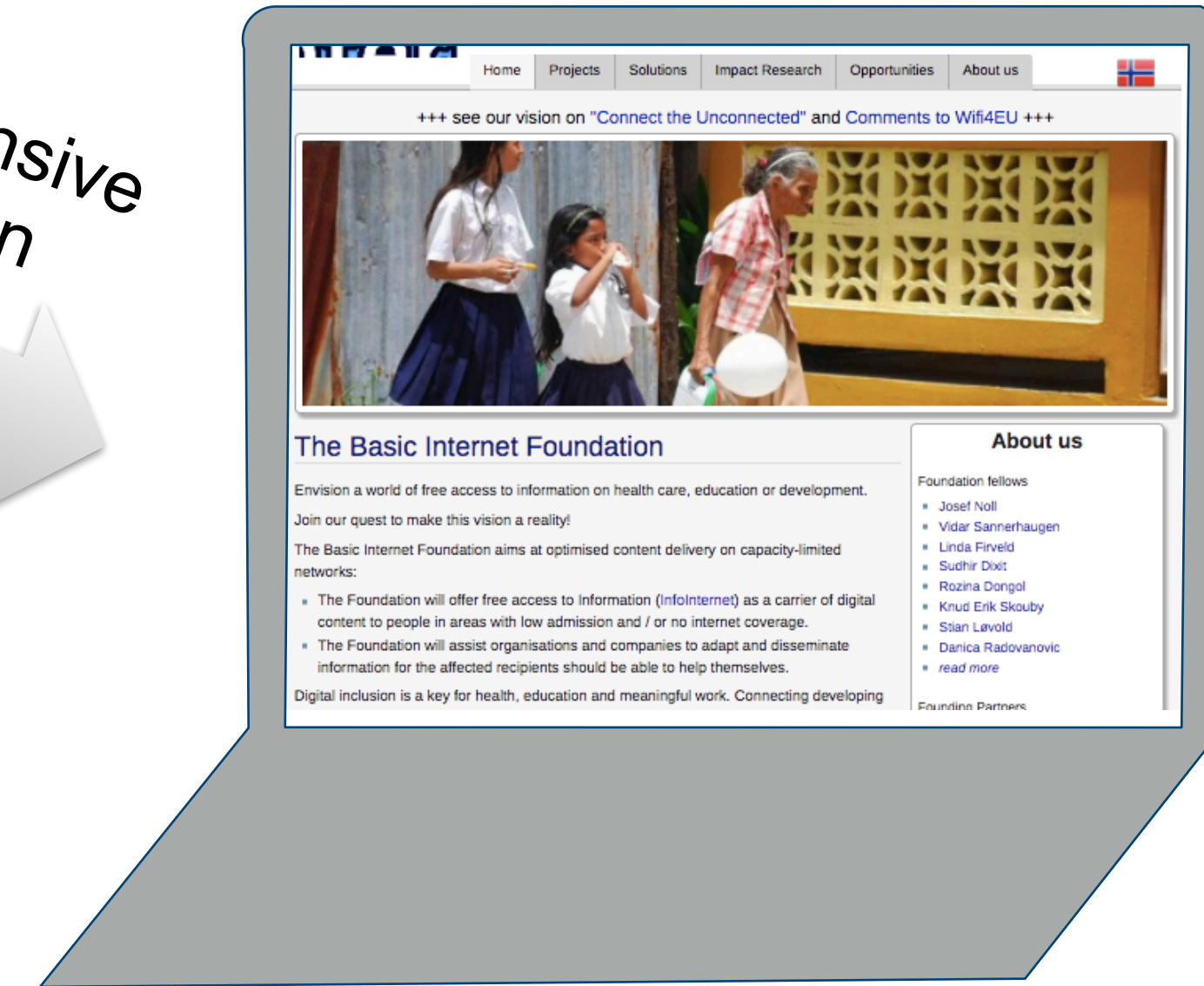
The Network Responsive Web

- Network responsive Web
 - ➔ through InfoInternet Standard
 - ➔ Adapt to network capabilities
 - Car queue in remote areas
 - Mobile tethering (Wifi)
 - ➔ Server-side adaption of content

- Examples
 - ➔ Opera Mini (proxy)
 - ➔ Chrome (compression)



Responsive design



InfoInternet Standard

- Guidelines **InfoInternet** Standard

- ➔ Internet Neutrality, “all content”
 - free information (text, pictures, local video)
 - paid entertainment (broadband, download)
- ➔ Network responsiveness

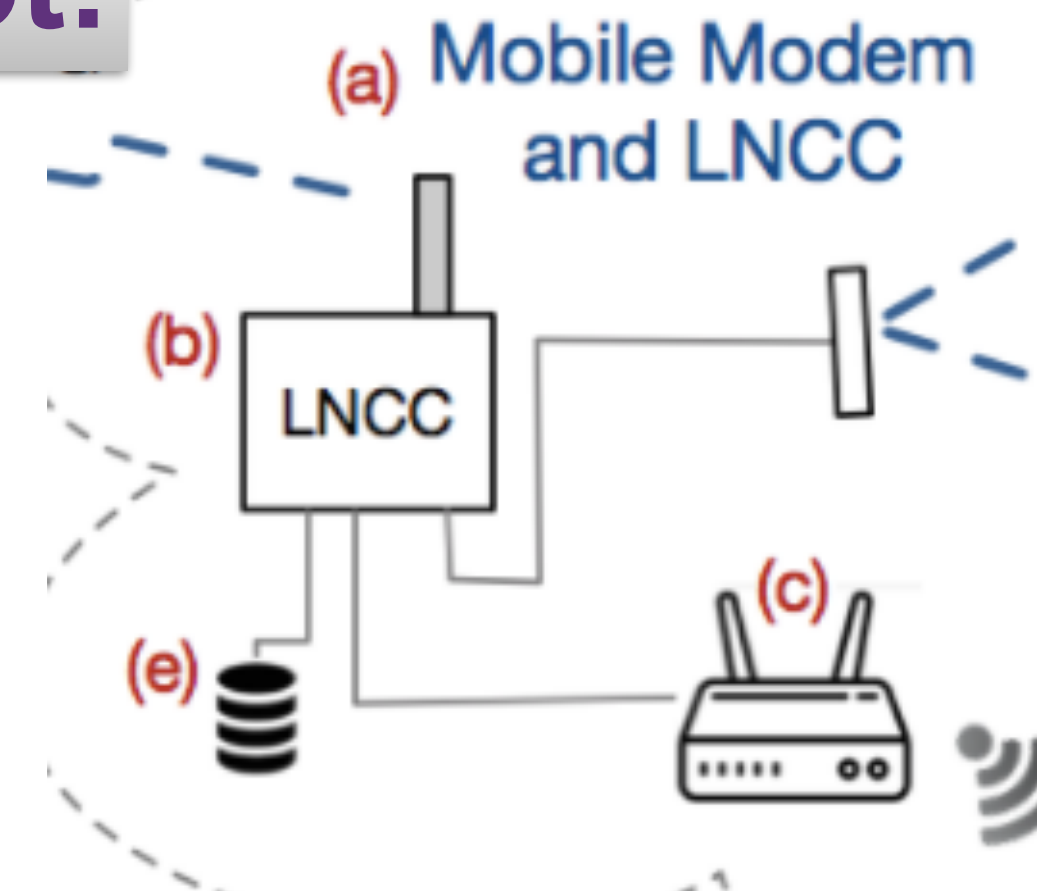
- InfoInternet Standard development

- ➔ **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>

Konzept:

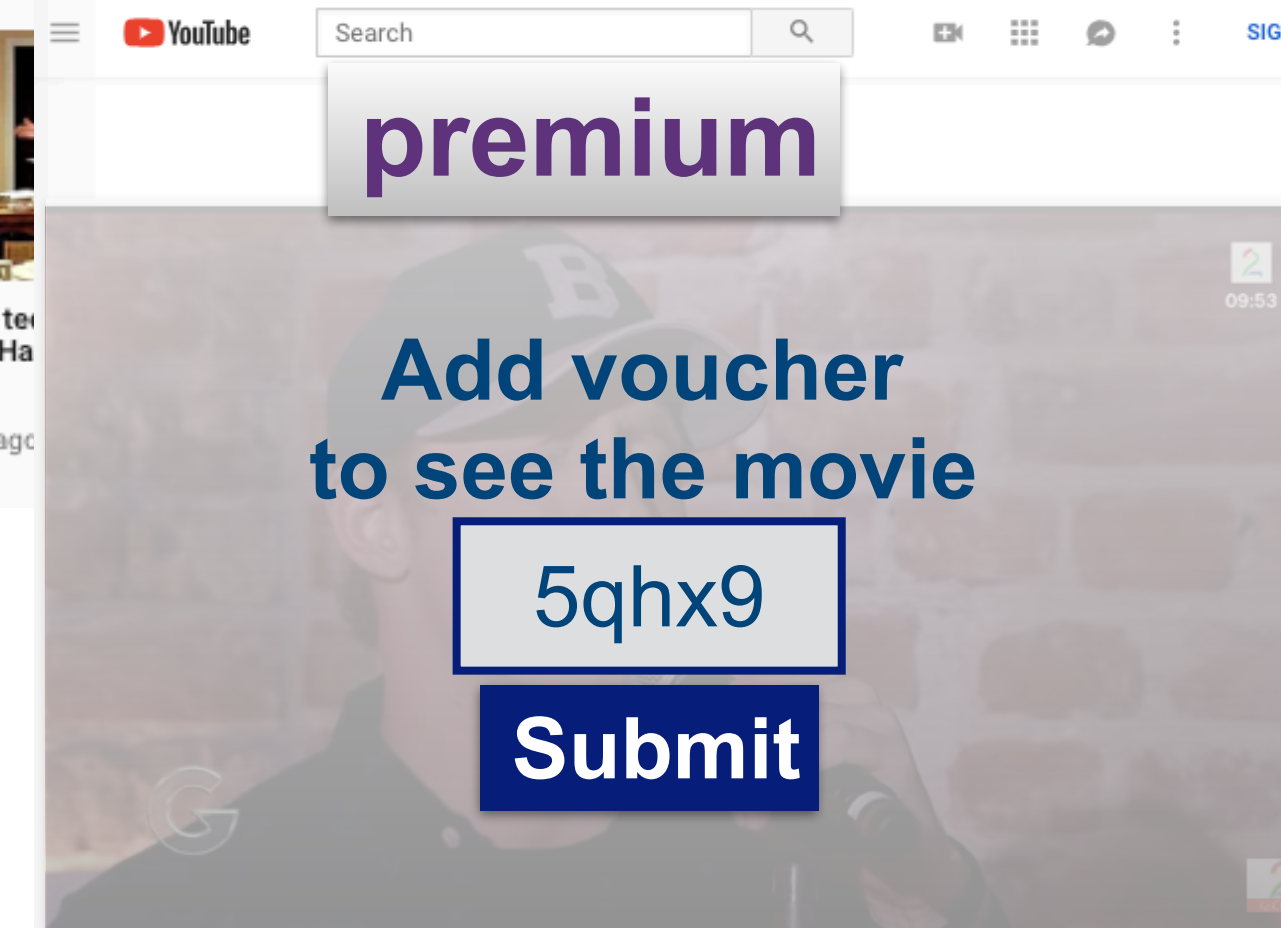
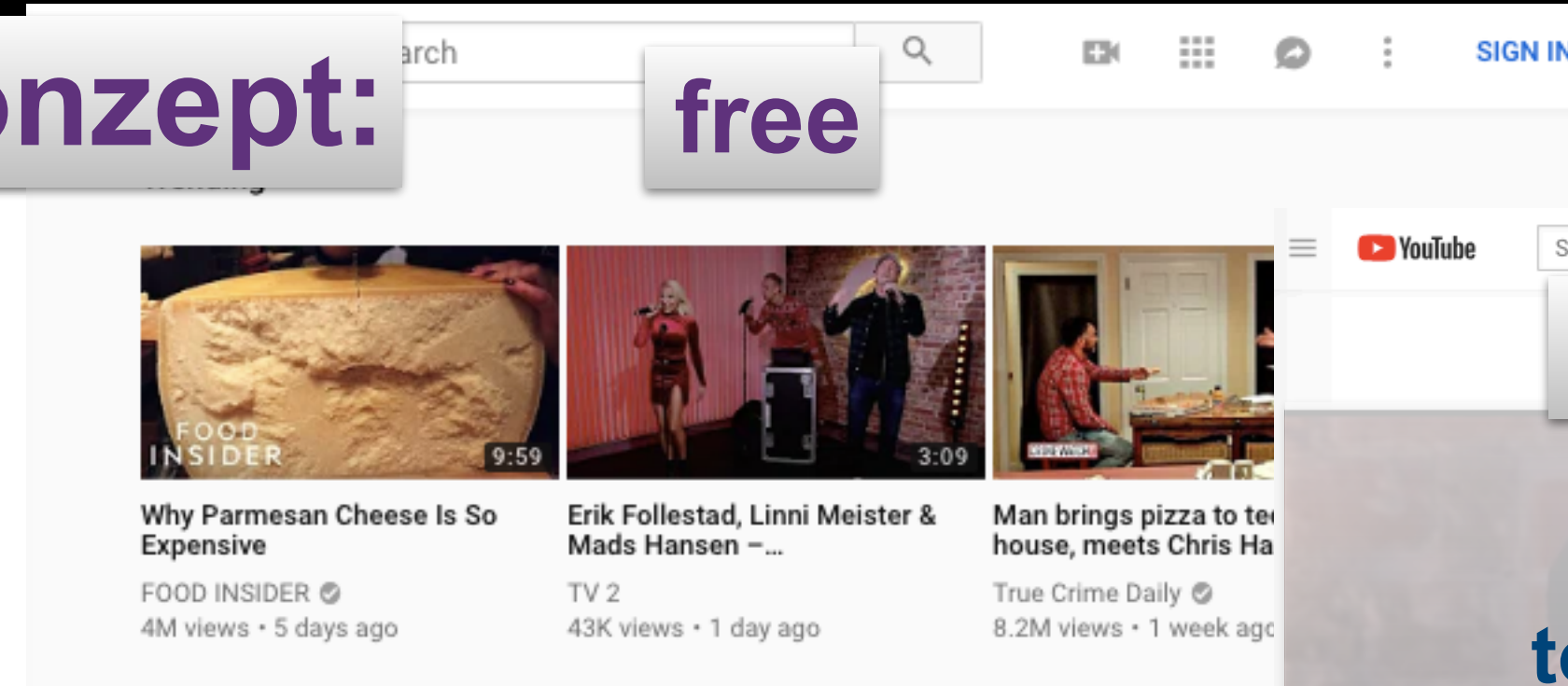
free

Pilot:



Standard:

www.basicinternet.org&network=InfoInternet



Collaboration: Caritas - Basic Internet Foundation

- Internet lite in the Caritas Kinderdorf (Bottrop, DE)
 - ➔ Free information access for 60 children/youngsters
 - ➔ Pedagogical concepts including the children

- Partnership with Caritas (Diozöse Essen)
 - ➔ Digital Participation for all
 - ➔ Social Innovation “Social Digital Hubs”
 - ➔ Free Information access “Internet lite for all”



India pilot

- Two 90 degree antennas (feeding 1-2 hot spots)
- One Wi-Fi access point for the village Panchayat
- Two Wi-Fi access points for the areas
- One Mikrotik router (Local network control center)
- One local server(?)

- Costs of the equipment by Basic Internet Foundation
- BSNL to provide fibre backhaul (capacity of about 100 Mbps)

Locations of Pilots in Two Villages from Gram Panchayats in the district of Chhatarpur in the state of Madhya Pradesh

