IRTF Global Access to the Internet for All (GAIA)

Arjuna Sathiaseelan and Marco Zennaro ACM DEV San Jose



Motivation 1: Health



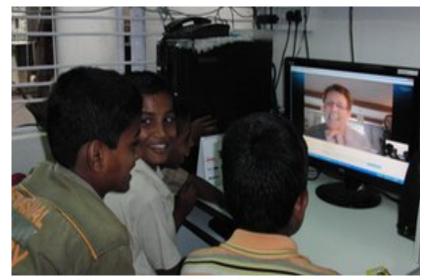


- ☐ Influenza 250,000-500,000 deaths annually
- Ebola, Cholera, Malaria, Flu, Dengue Fever, Small pox and many more....
- 0.6 doctors for every 1000 people in India!

Motivation 2: Education







The Internet

- Internet access as an enabler for human rights
 - Internet is an important (potentially life saving) enabler
 - Communication, Health, Knowledge, Economy, Governance
- ..and the human right argument
 - □ ISOC 2012 survey with 10,000 users in 20 countries
 - 83% agreed or agreed strongly that access to Internet is a human right
 - 2/3 agreed or agreed strongly that the Internet would play a
 - Significant role in solving global problems:
 - Reducing child mortality (63%)
 - Improving maternal health (65%)
 - Eliminating extreme poverty and hunger (61%)
 - Preventing trafficking of women and children (69%)

Internet access is challenged

- Geographic
 - Conventional Internet access has physical limitations
 - Not economically feasible for a network operator to provide coverage
- Economic
 - Access to fixed broadband in some developing countries costs almost 40x-100x the national average income
 - In developed countries, affordability limits broadband access in impoverished communities
- Regulatory, Social & Capacity building challenges

Why IRTF GAIA?

- Why has 3+ decades of progressive Internet research failed to solve these challenges to make the Internet universally accessible to all?
- What have we overlooked? And why have we overlooked?
- And now how do we solve it?

IRTF Global Access to the Internet for All (GAIA) Research Group

- Need increased visibility among the wider community and foster collaboration
 - Workshops, projects, papers, IRTF drafts
- Understand what are the costs and how do we reduce costs (10x reduction in access costs especially in geographies and populations with low Internet penetration)
- Report deployment experiences to better understand
 - what technologies/protocols work
 - what are the challenges in terms of adoption
- Longer term: Input to standards → stacks → adoption
- 200+ members

Official page: https://irtf.org/gaia https://sites.google.com/site/irtfgaia/ Mailing list: https://irtf.org/mailman/listinfo/gaia

Plan for the day

- Agenda is here: https://sites.google.com/site/irtfgaia/
- 4 Informal Sessions: 30 mins (20 mins + questions)
- Facebook hosted reception (Market Room, 1st floor): 7pm
 9pm
- Register by 10am →
 - http://fbatgaiadev2014.splashthat.com/