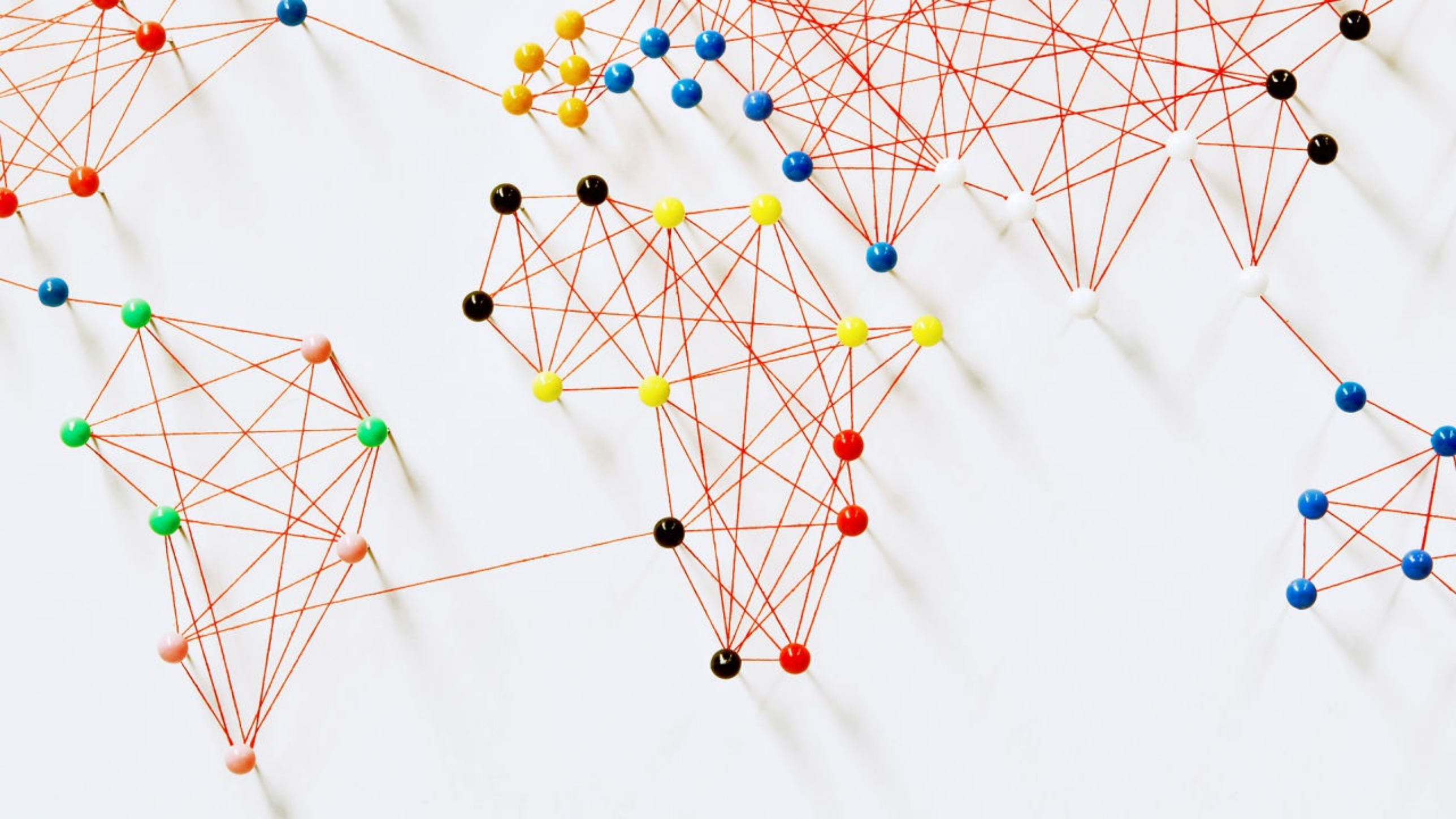


IoT and Development: lessons learned

Marco Zennaro, PhD
Telecommunication/ICT4D Lab
The Abdus Salam International Centre for Theoretical Physics

Connected Devices

In 2014 nearly **2 billion**
connected devices will be shipped

This number will grow to nearly
8 billion devices for the year 2020

**Not including mobile phones*

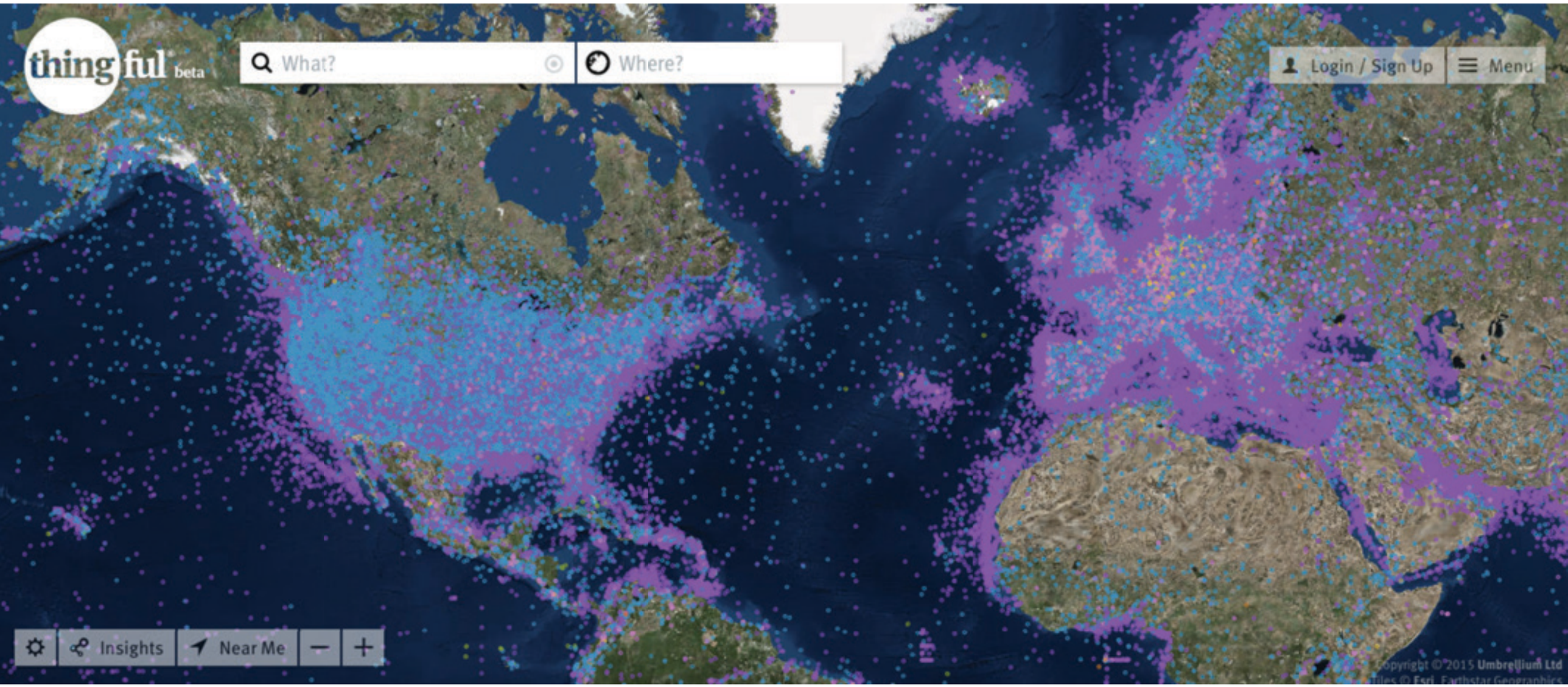
Home (Consumer)
3,745.71 (Devices millions)

Transport (Mobility)
392.72 (Devices millions)

Body (Health)
360.03 (Devices millions)

Buildings (Infrastructure)
1,726.59 (Devices millions)

Cities (Industry)
1,524.70 (Devices millions)


thingful beta
What?
Where?
Login / Sign Up
Menu
Insights
Near Me
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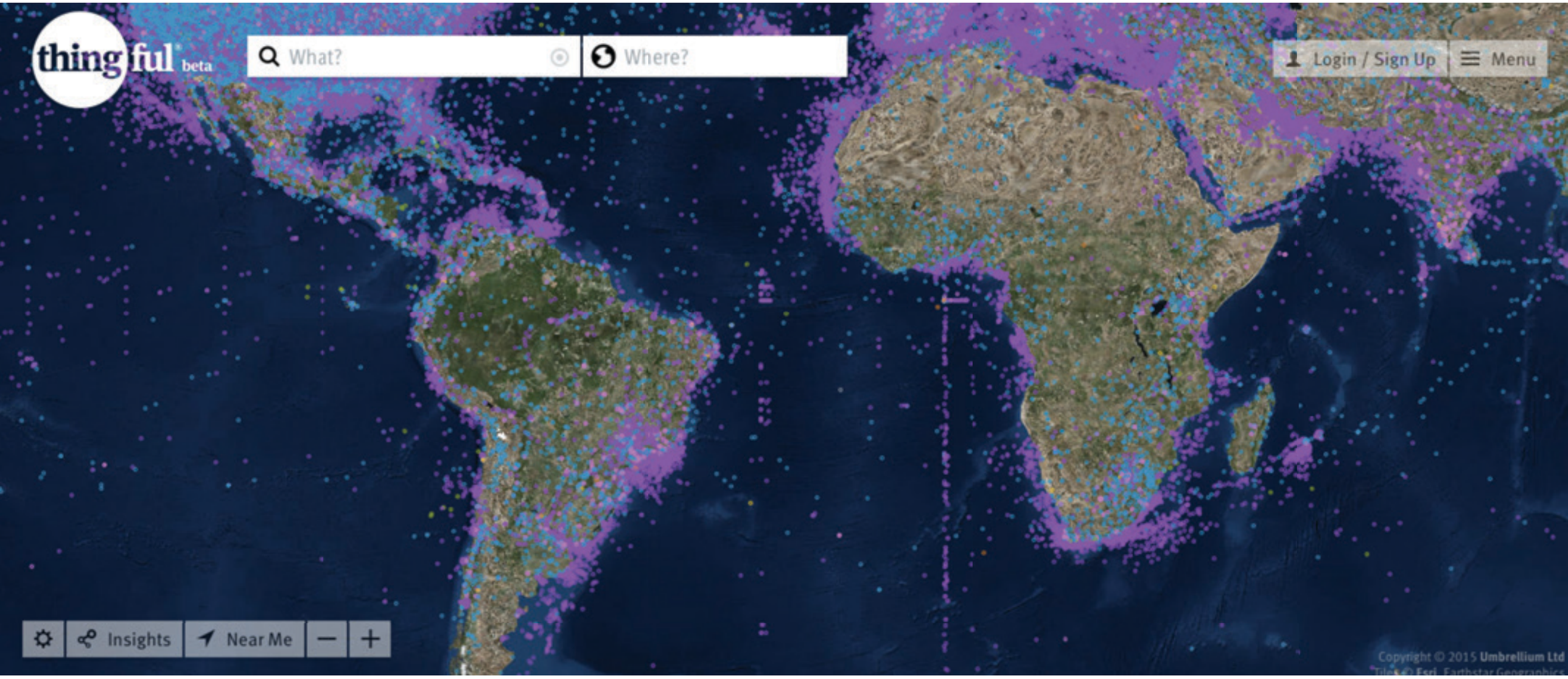
thingful beta
What?
Where?
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Near Me
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Training in IoT

Workshops in Africa: South Africa, Kenya, Ghana, Benin, Egypt, Rwanda

Workshops in Trieste

Workshops in Latin America: Panama, Nicaragua, Costa Rica

Workshops in Asia: Thailand, India, Indonesia, Japan

IoT4D – Air quality sensors in Benin

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SENSORS FOR GLOBAL DEVELOPMENT FINALISTS

Fresh Air in Benin by Marco Zennaro source files

We are developing a network of air quality sensors in Benin. There are few air quality sensors in Africa, while the problem of pollution is relevant in many big cities. Some pictures are available here: https://www.flickr.com/photos/zennaro/sets/72157645018270403/

Lessons learned

#1: mobile connectivity. 3G is not available everywhere, SMS might be the solution

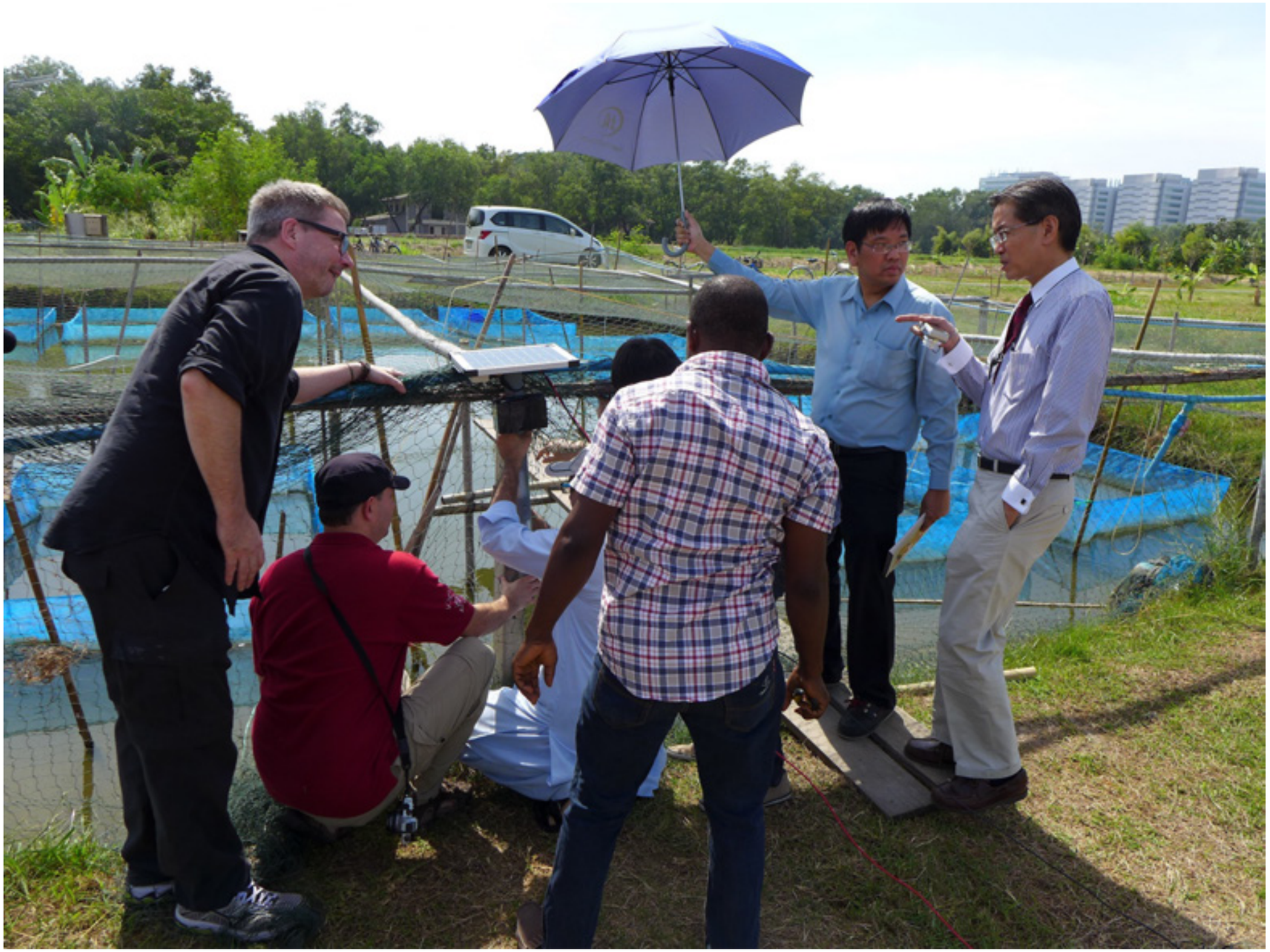
#2: keep the final users in the loop

#3: data privacy vs openness

IoT4D – IoT Living Lab in Thailand

IoT4D – IoT Living Lab in Thailand

IoT4D – IoT Living Lab in Thailand



IoT4D – IoT Living Lab in Thailand

Lessons learned

#1: mobile connectivity. WiFi is the cheapest solution, but it is hard to plan ahead

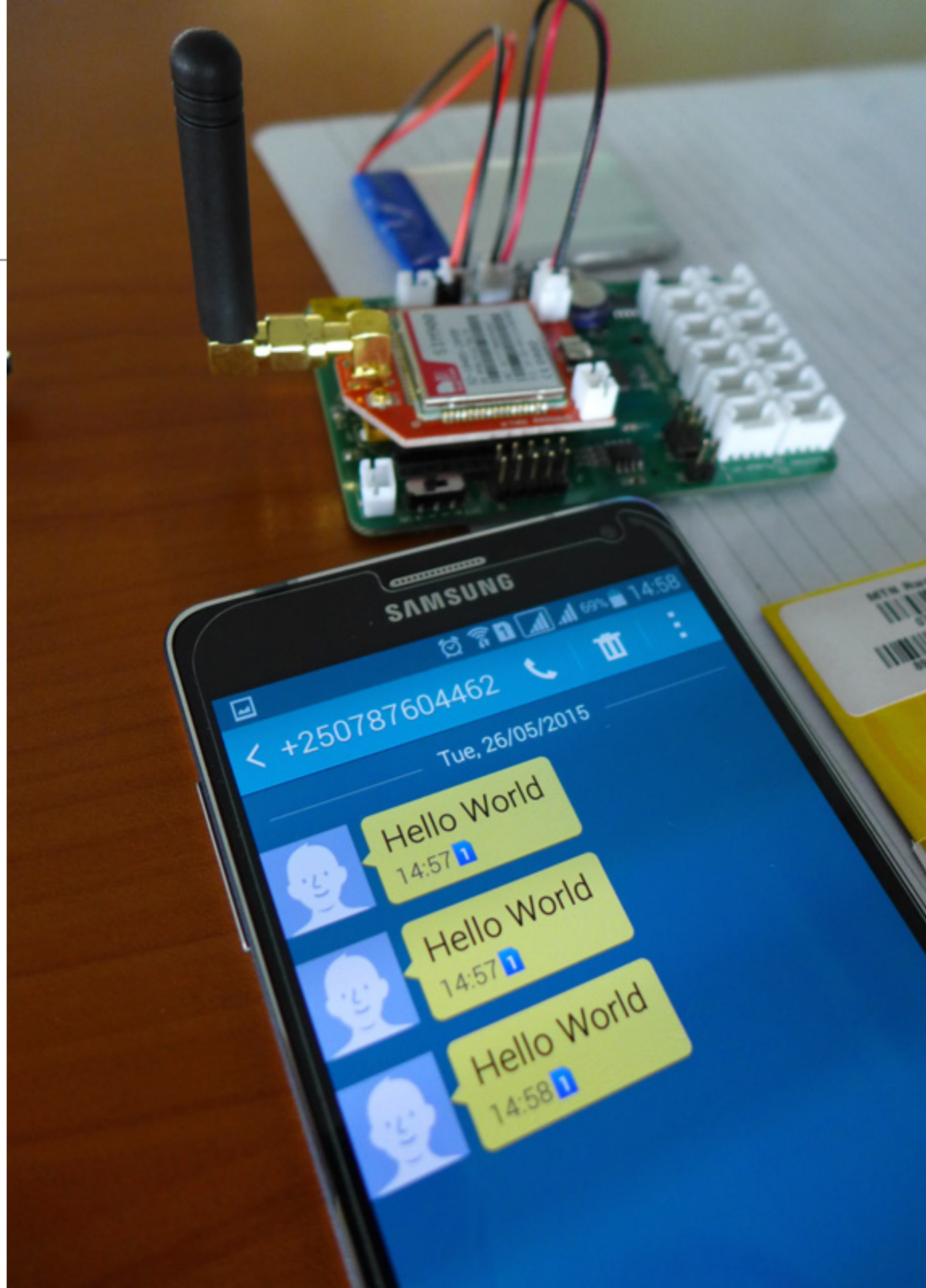
#2: sensors need maintenance

#3: scalability is an issue

IoT4D – IoT in Rwanda

IoT4D – IoT in Rwanda

IoT4D – IoT in Rwanda



IoT4D – IoT in Rwanda

IoT4D – IoT in Rwanda

Lessons learned

#1: mobile connectivity: 4G in Rwanda.

#2: business model is a strong driver

#3: data ownership

IoT and African Islands

IoT book: learn IoT in 5 days

IoT4D – Master course

Michael Daconta, author of The Great Cloud Migration: ... (more)

2 upvotes by Ahmad 'Ans' Syuhada and Okiriza Wibisono.

There are many top universities offering masters degrees in data science - see:

Top Schools for Master's Degrees in Data Science

I have not seen any masters offered on the Internet of Things. IoT is still a niche area but that will change soon.

Best wishes!

Written 24 Mar. 182 views. Asked to answer by Ahmad 'Ans' Syuhada.

Thanks!

Marco Zennaro

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