GERD LEONHARD: FUTURIST, KEYNOTE SPEAKER, AUTHOR
& CEO, THE FUTURES AGENCY

Gerd

Telecom, ICT & Internet Futures and Sustainable Broadband:

The next 5 years

GERD
FUTURIST
@gleonhard

WTDC-2014
UNITED ARAB EMIRATES
DUBAI, 30 MARCH - 10 APRIL

International Telecommunication Union
World Telecommunication Development Conference 2014

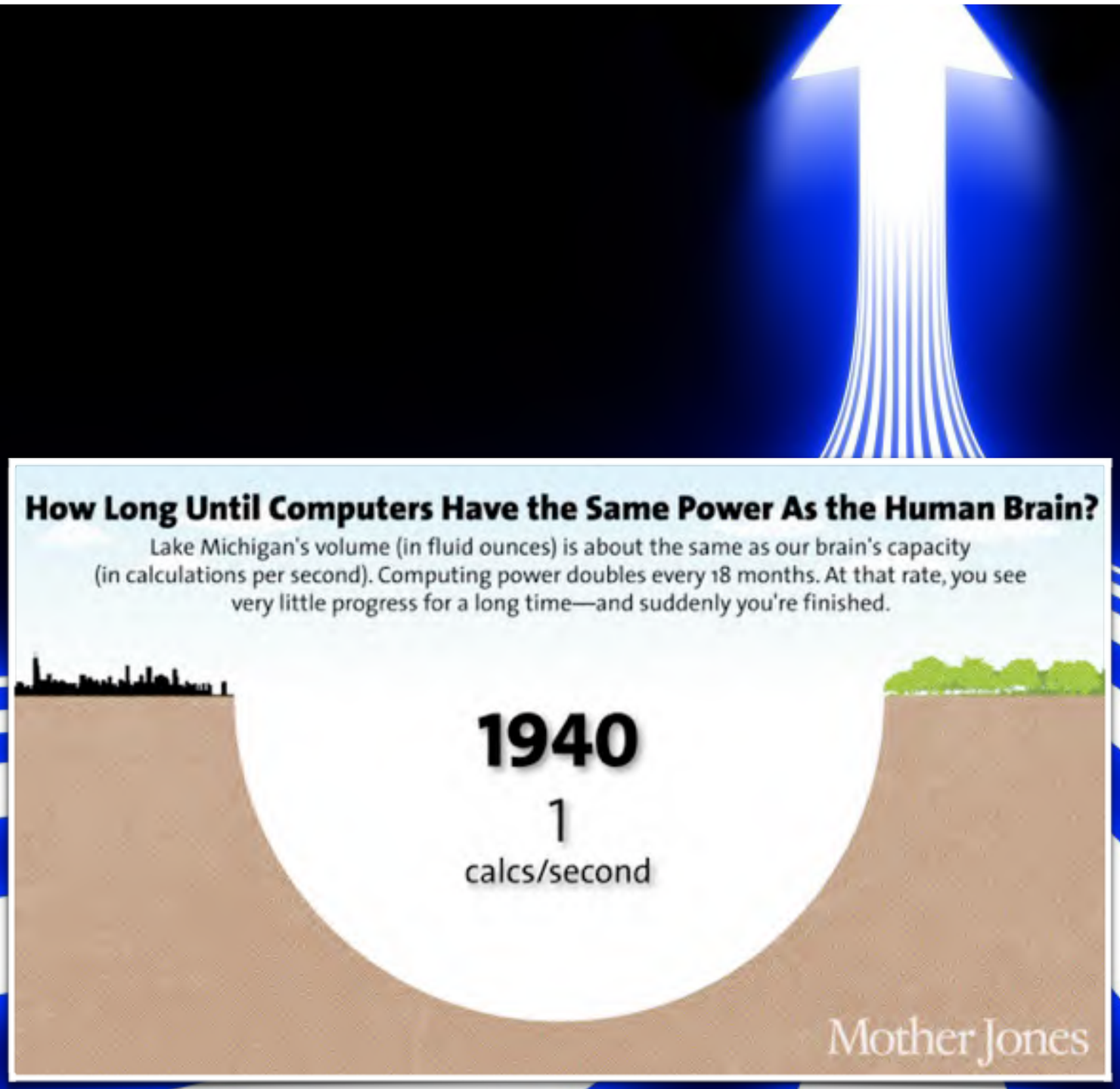
EXECUTIVE STRATEGIC DIALOGUE
Broadband for Sustainable Development
29 March 2014, 14:00 – 15:30
Dubai, UAE

1 2 4 8 16 32 64

Now

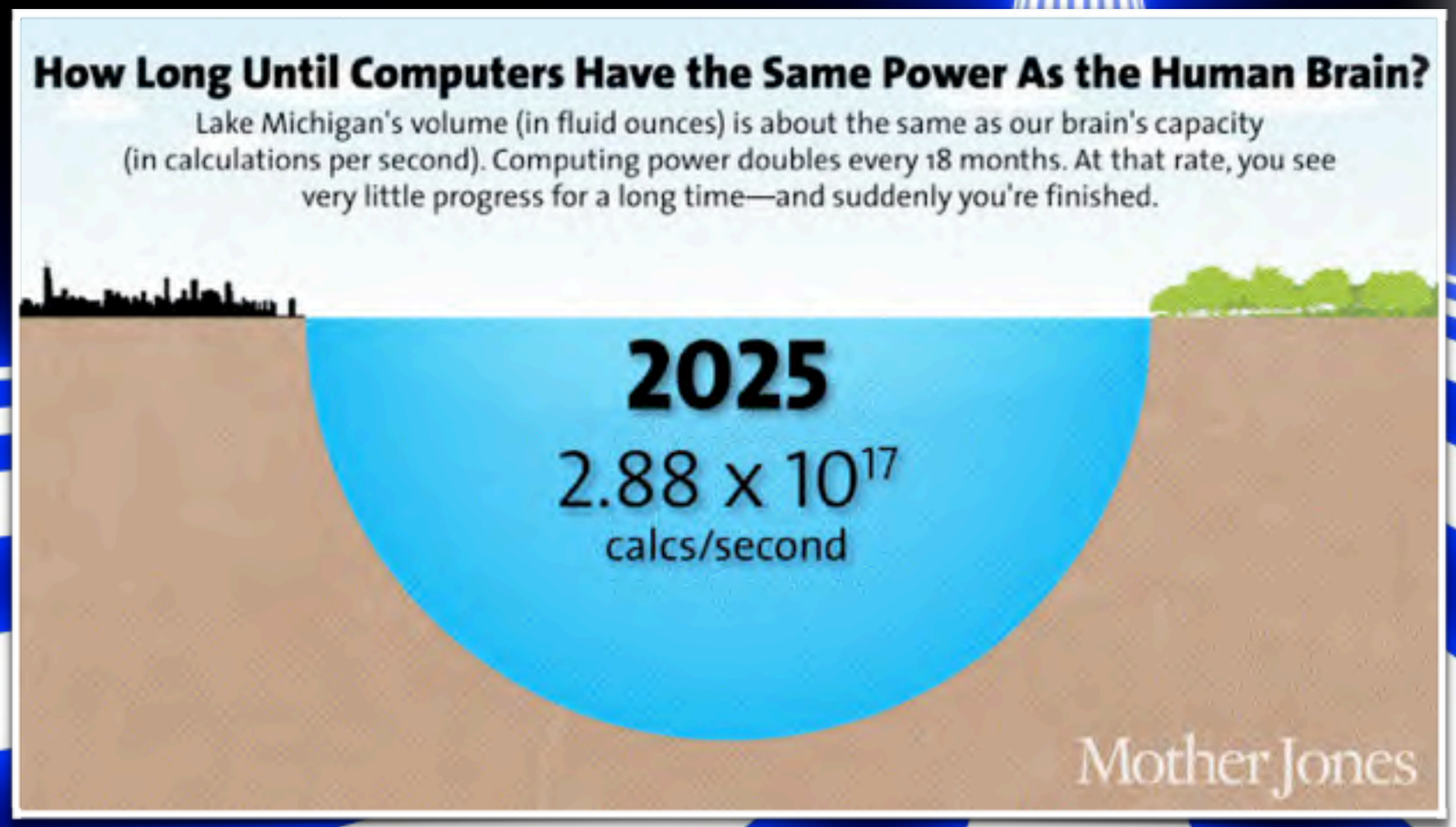
“How does a person go broke?
Gradually, then suddenly”

Ernest Hemingway

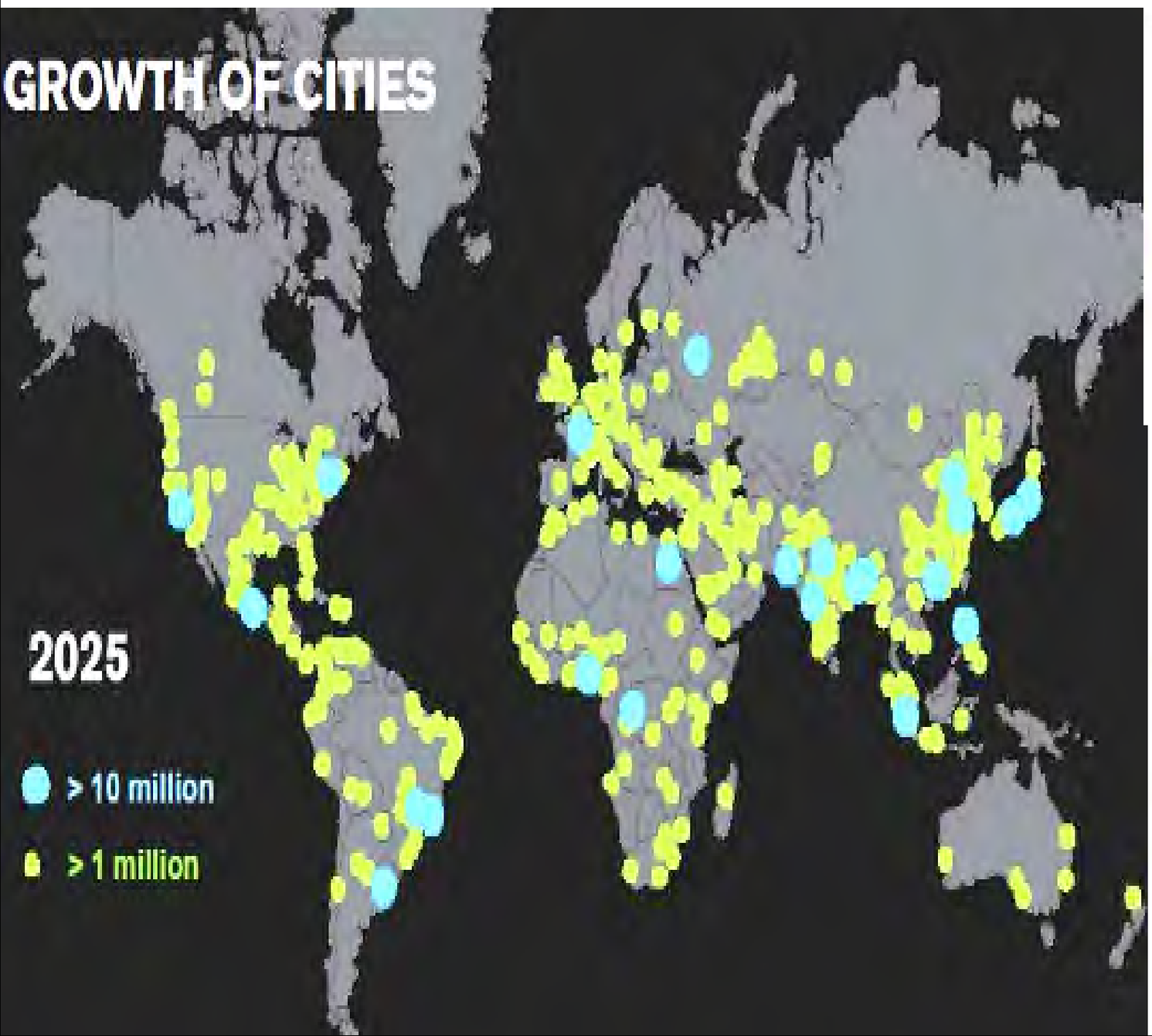


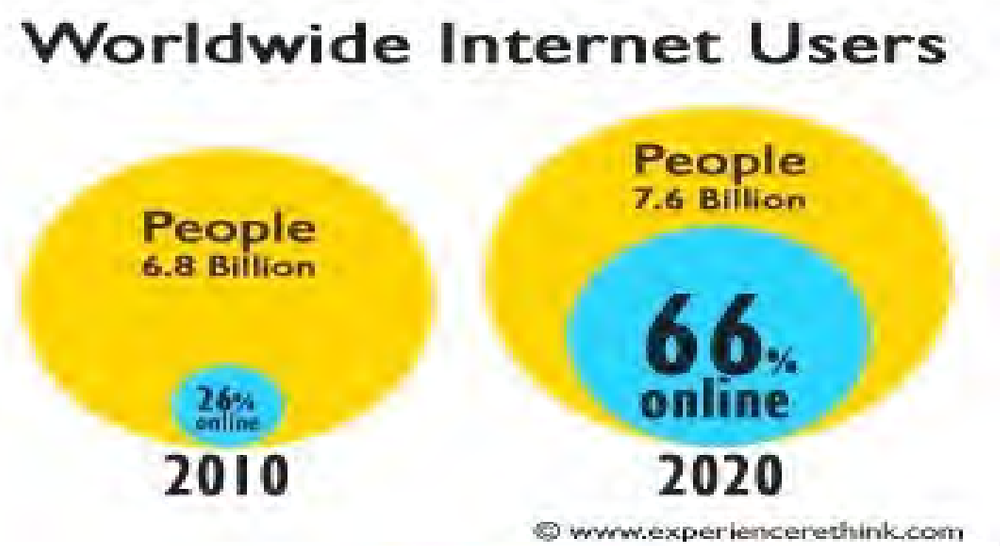
How will broadband reach everyone on the globe?

Gradually, then suddenly



Urbanization will drive connectivity which drives productivity which drives innovation which drives transformation which drives sustainable growth





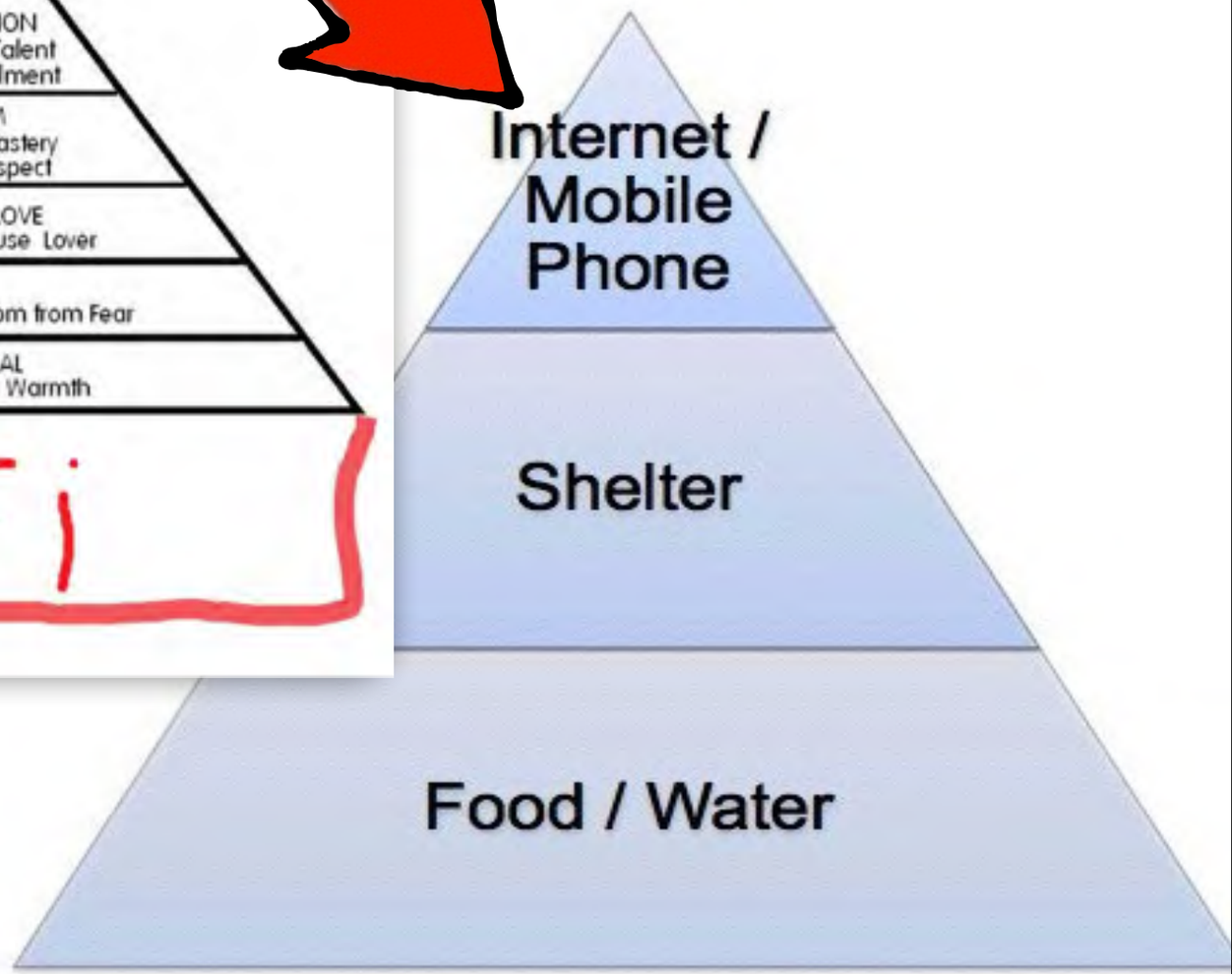
Broadband like Air. Water. Electricity.

KPCB

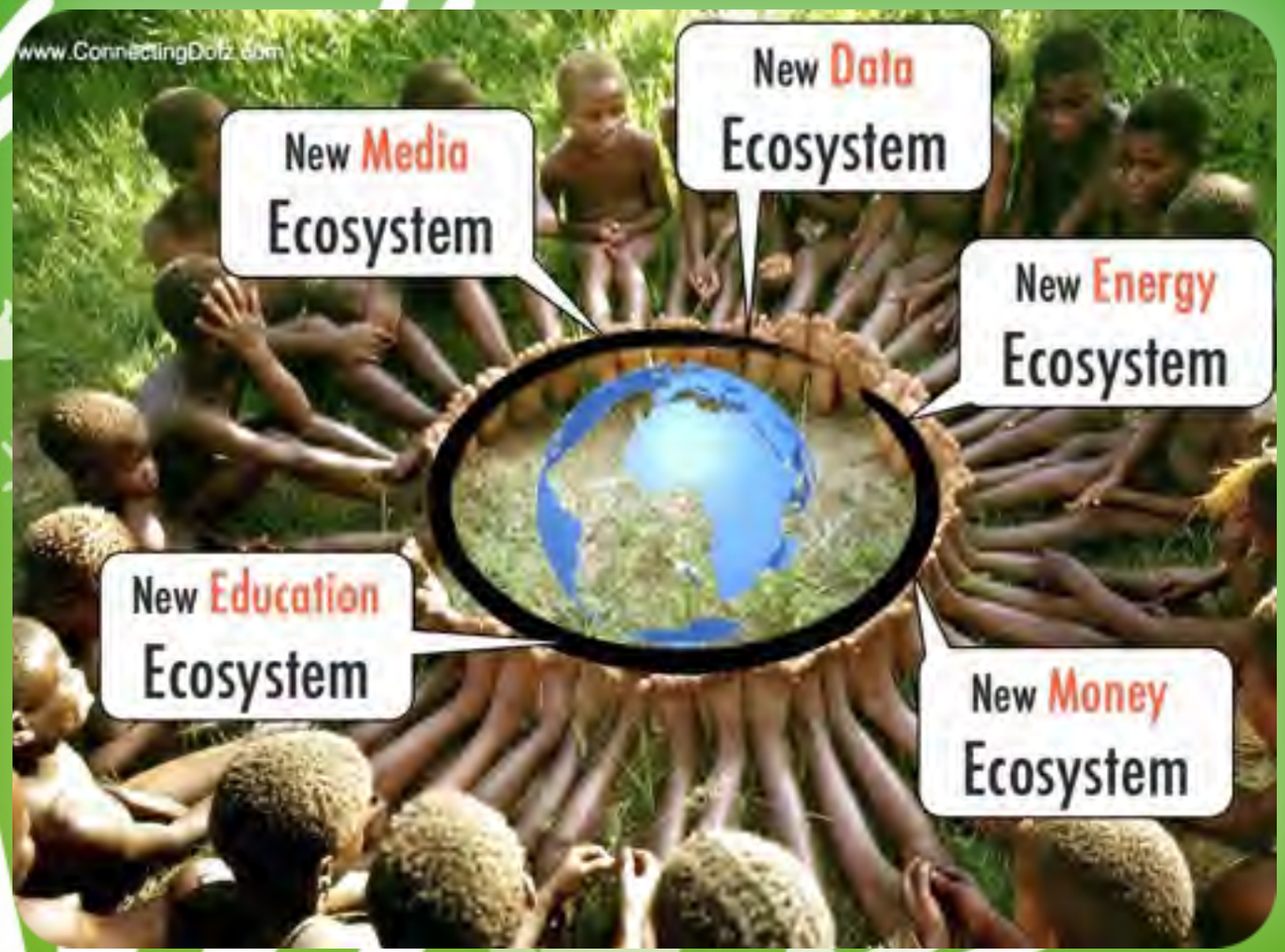
‘Hierarchy of Needs’ Revisited?

1943 – Maslo

2011 – ? ;)



Note: Created for discussion purposes and a bit of humor. Not intended to discredit Maslow's hierarchy, which we believe to be accurate.
Originally presented in Morgan Stanley's "The Age of Engagement" presentation, dated April 2005

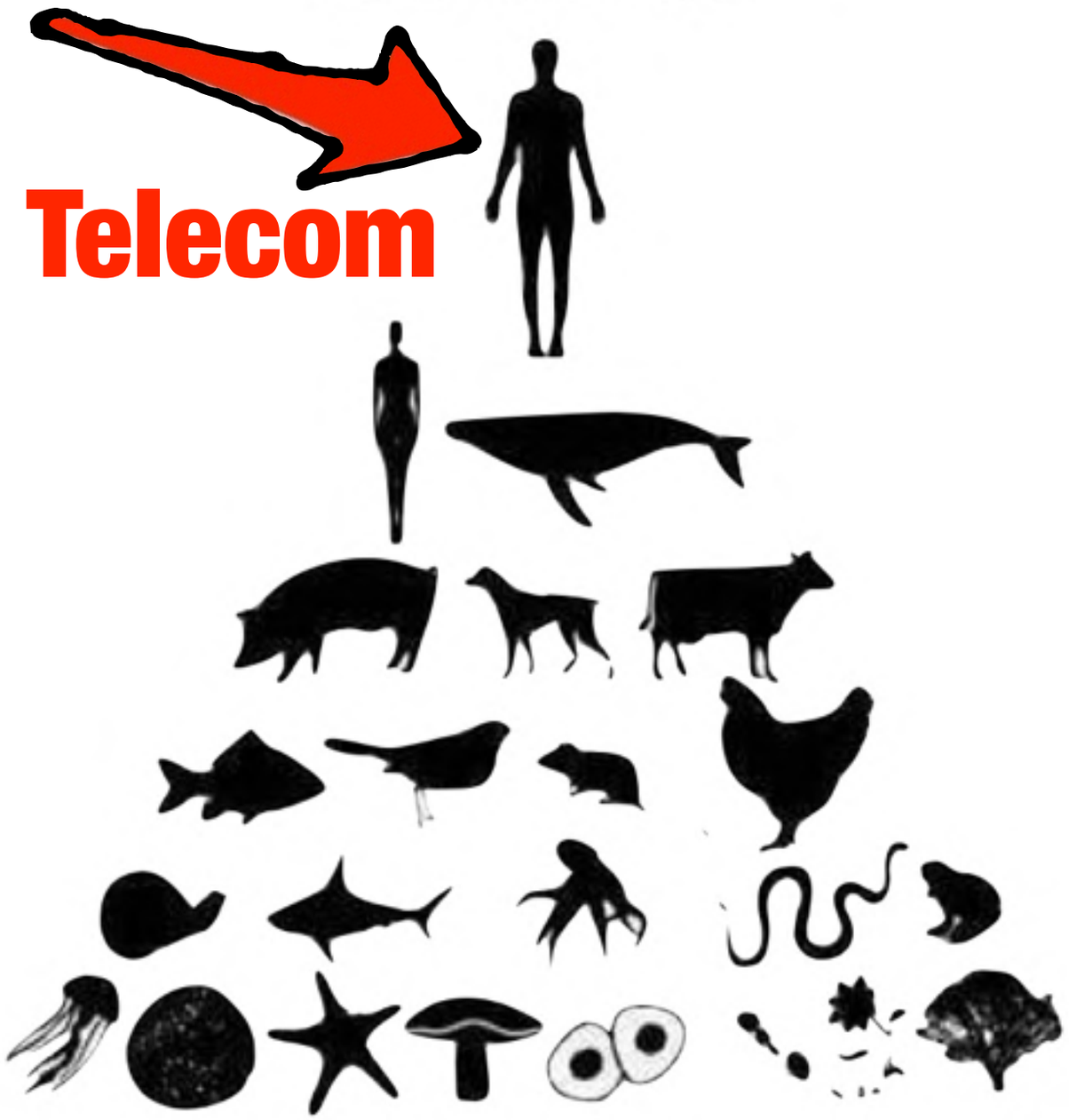

www.ConnectingDots.com
New Media Ecosystem
New Data Ecosystem
New Energy Ecosystem
New Education Ecosystem
New Money Ecosystem

Broadband

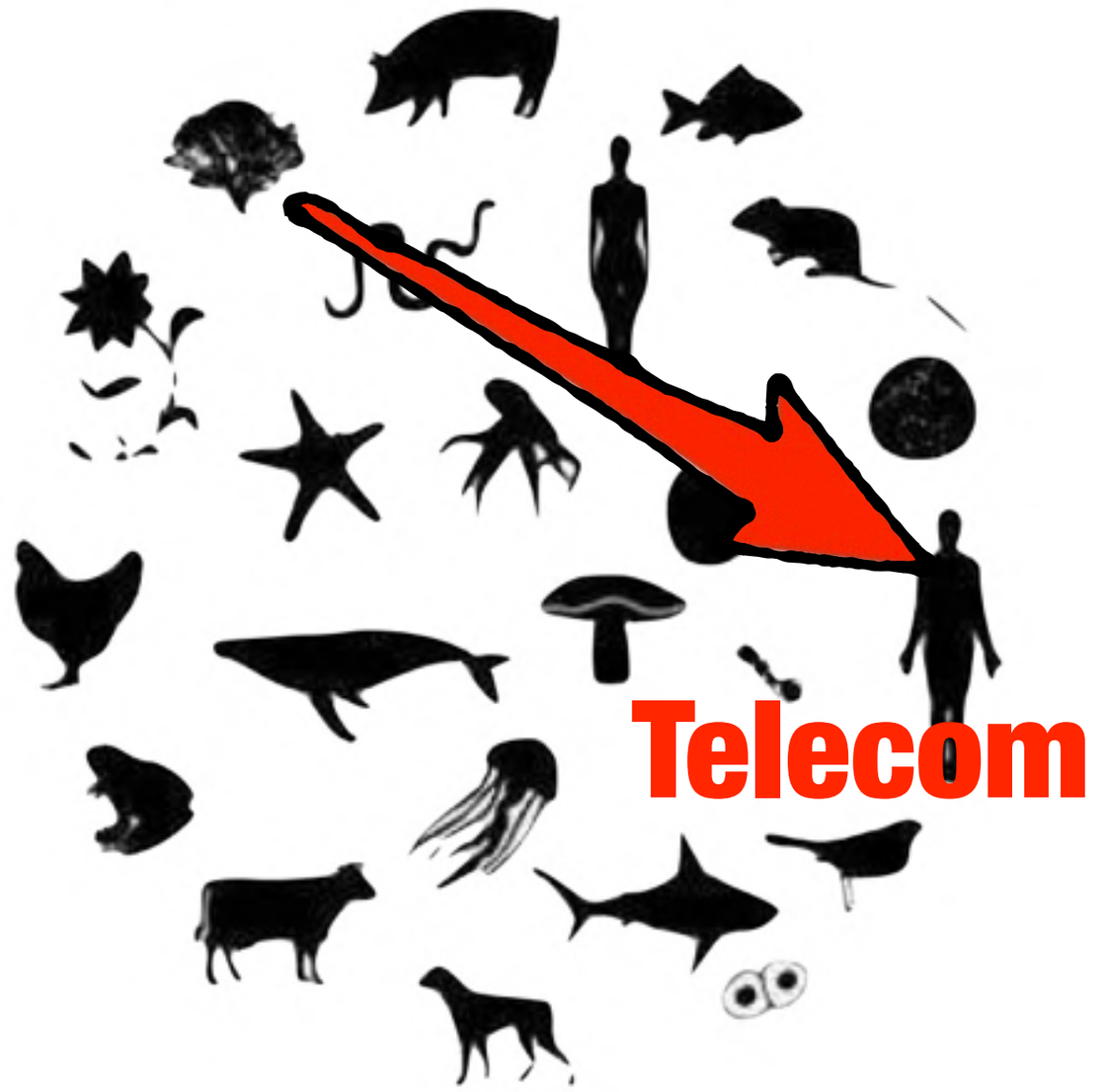
A very challenging paradigm shift

EGO

Telecom



ECO



Interdependence is the key to building broadband demand - and to monetizing it

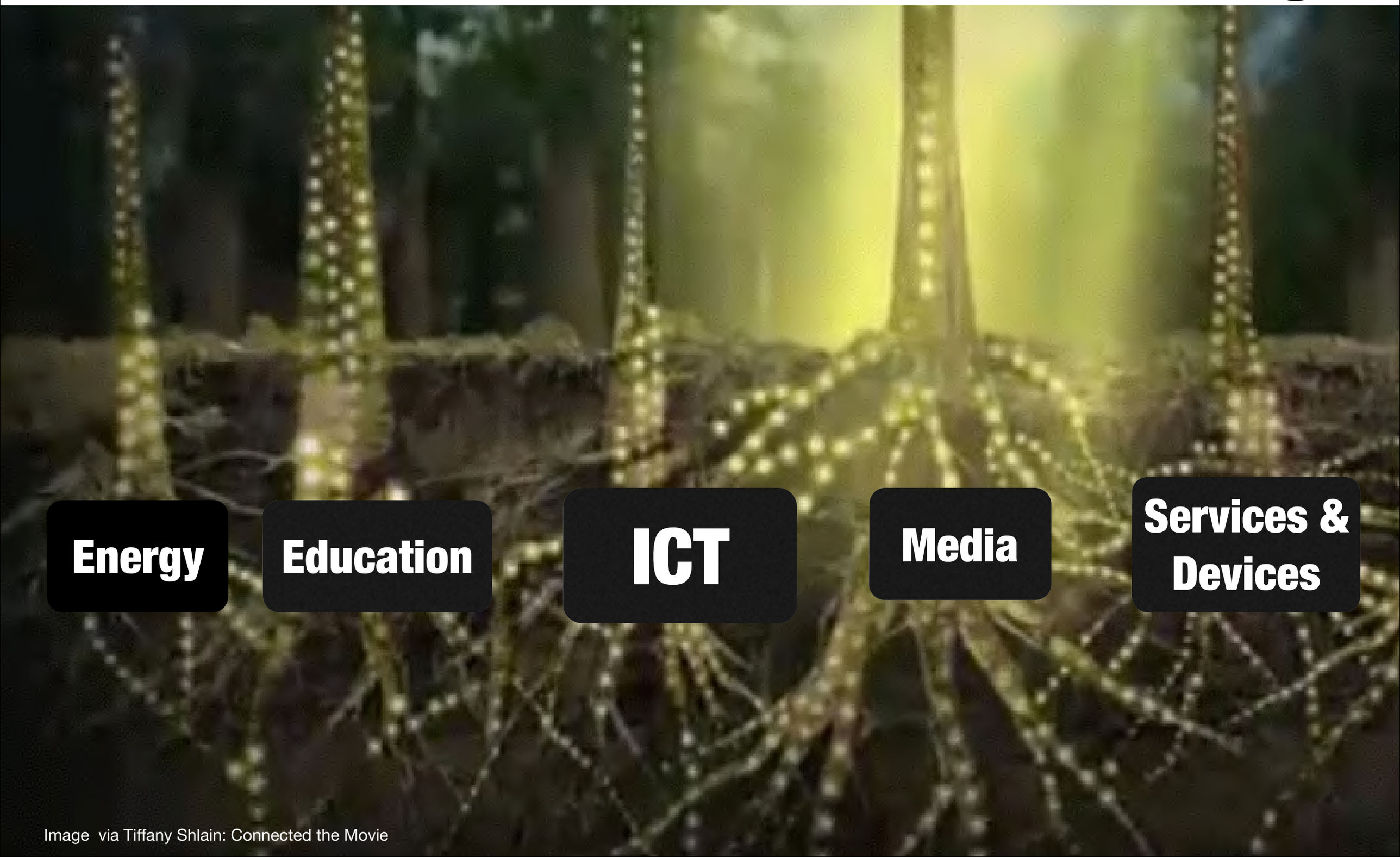
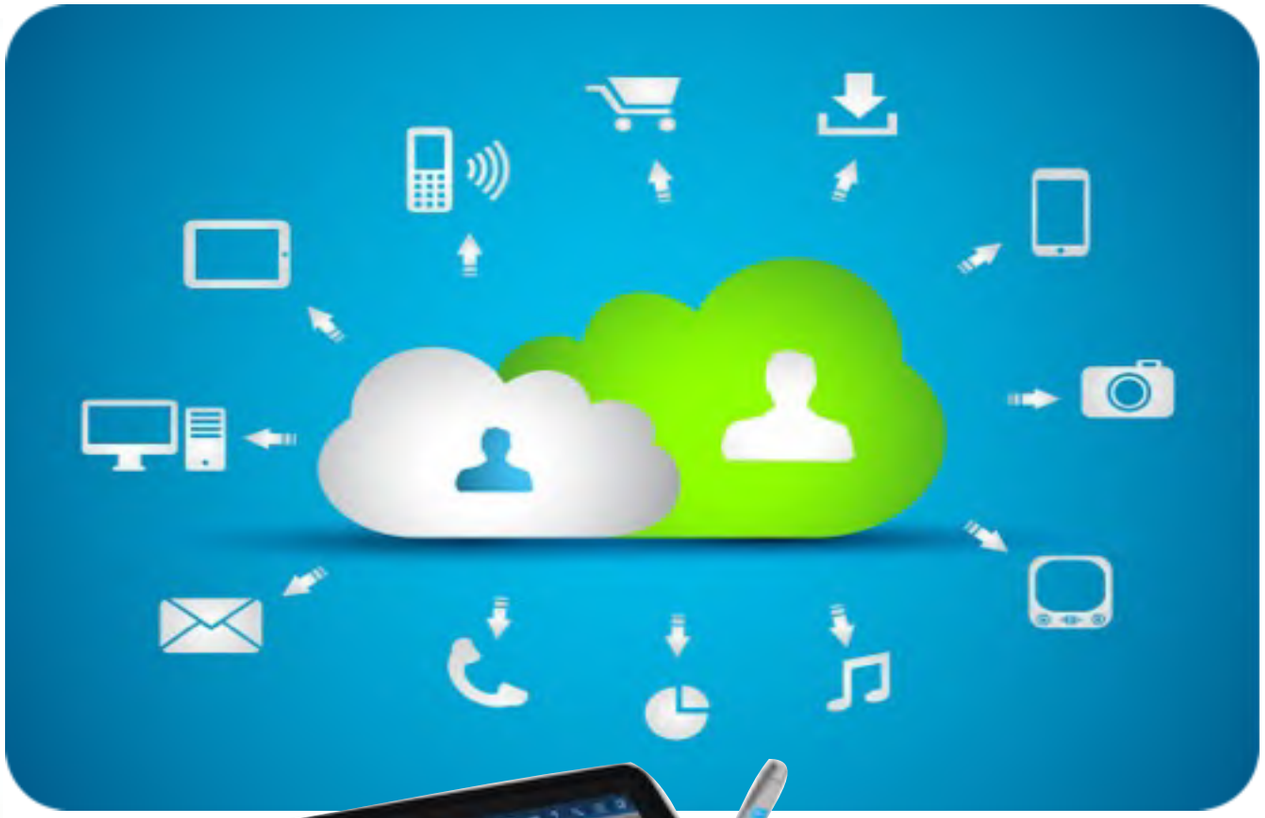
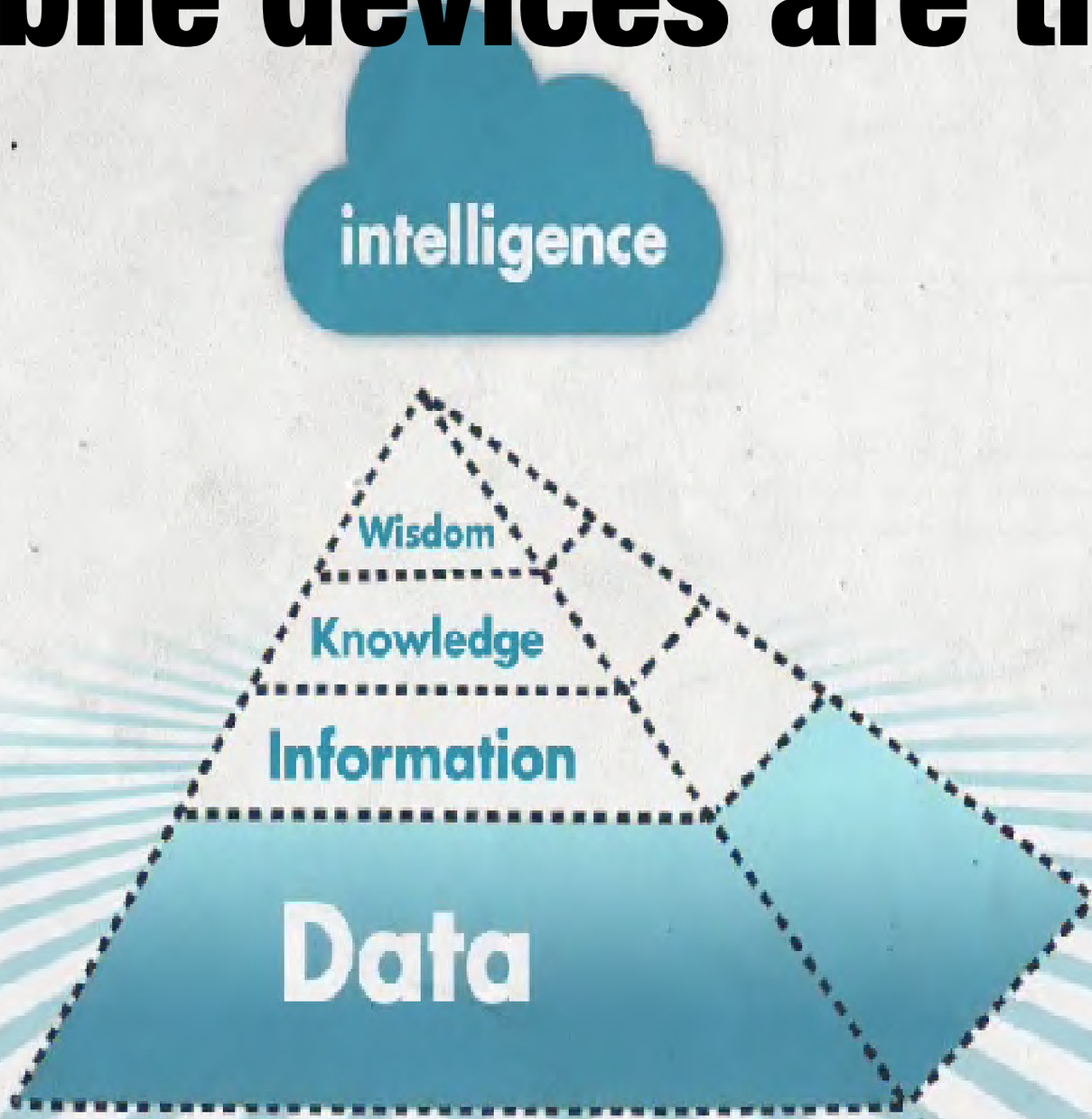


Image via Tiffany Shlain: Connected the Movie

Products ➲ Services ➲ Software or Content ➲ Experiences



Data is the new oil, broadband is the pipeline, mobile devices are the cars

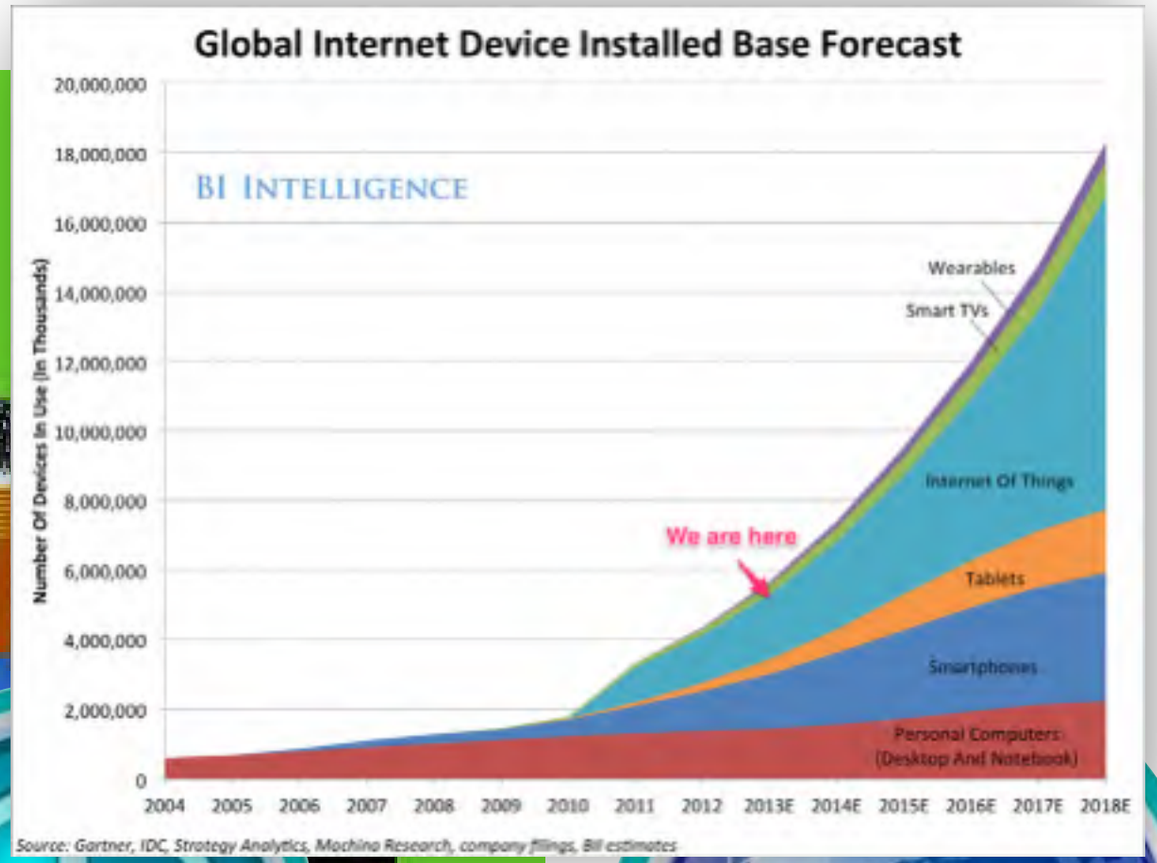


Video via IBM on IoT (Youtube)

Total digitization and ubiquitous connectivity will require new norms, rules and markets, and new social contracts

“Today more than 11 billion sensors are attached to natural resources, production lines, the electricity grid, logistics networks and recycling flows, and implanted in homes, offices, stores and vehicles, feeding big data into the Internet of Things. By 2020 at least 50 billion sensors will connect to it. Cisco By 2022, the private sector productivity gains wrought by the Internet of Things will exceed $14 trillion (Cisco). GE estimates that productivity advances from the Internet of Things could affect half the global economy by 2025.” (Jeremy Rifkin, NYT)

Broadband Internet of Everything Everywhere Everyone



Social Local Mobile Cloud OTTVideo BigData IoT M2M AI (list goes on)

BRICs CIVETS MINTS connectivity & digitization: expect leaps!

Unilever, Facebook's Internet.org partner to increase Internet in rural India

The partnership will carry out a study to examine opportunities to increase wider adoption in rural communities

Just 13% of the Indian population has access to the Internet. Photo: Hemant Mishra/Mint

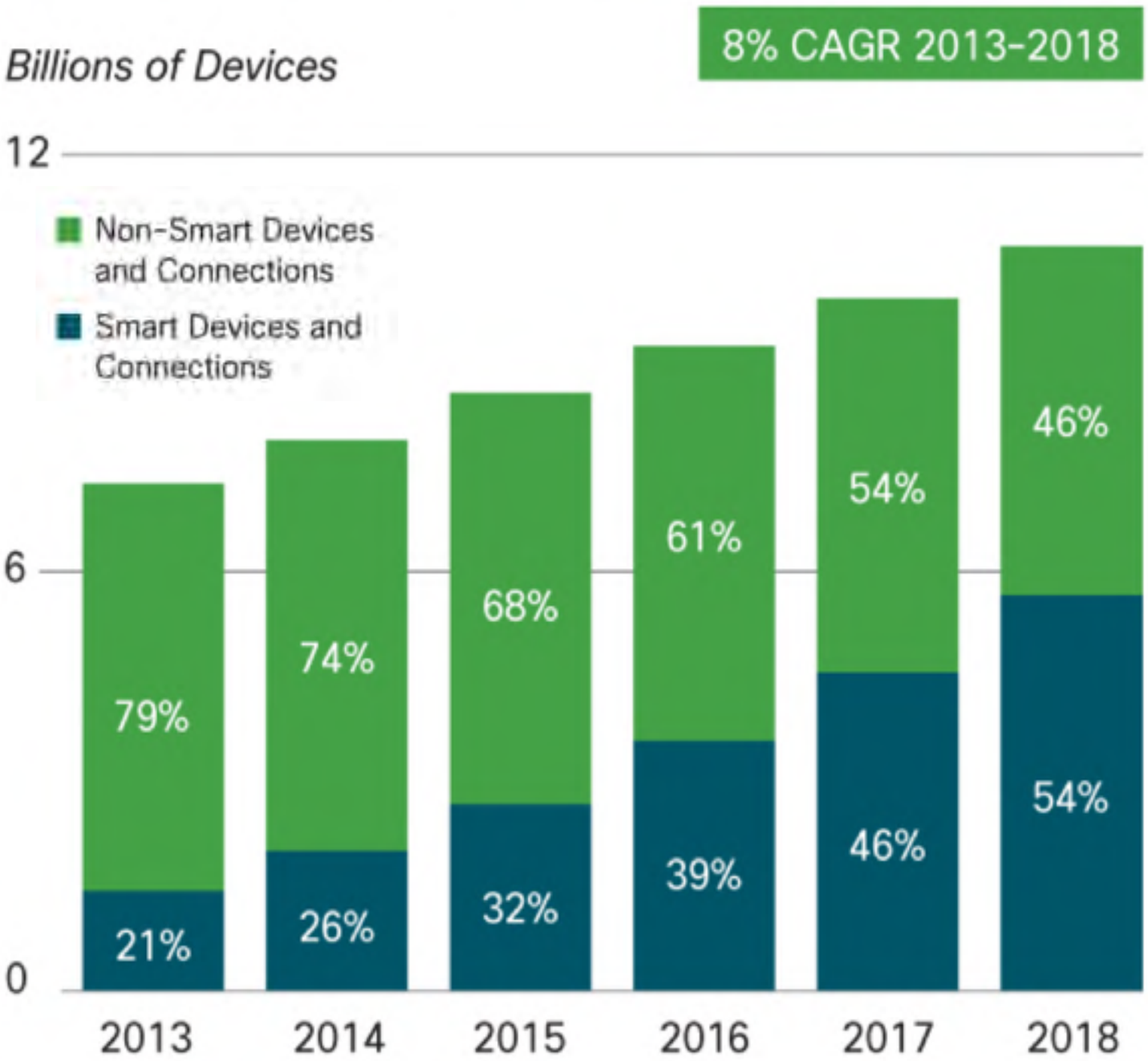
Mumbai: Unilever Plc, the Anglo-Dutch parent of India's largest consumer packaged goods company Hindustan Unilever Ltd (HUL), and Internet.org, a Facebook Inc-led alliance, on Monday announced a partnership to reach millions of people across rural India.

Just 13% of the Indian population has access to the Internet and the Internet.org and Unilever partnership will carry out a comprehensive study to examine opportunities to increase wider adoption in rural communities, they said in a statement.

Some 3 Billion consumers / users from the so-called developing world will enter the middle class by 2030

Smart devices are becoming dramatically cheaper, access must follow!

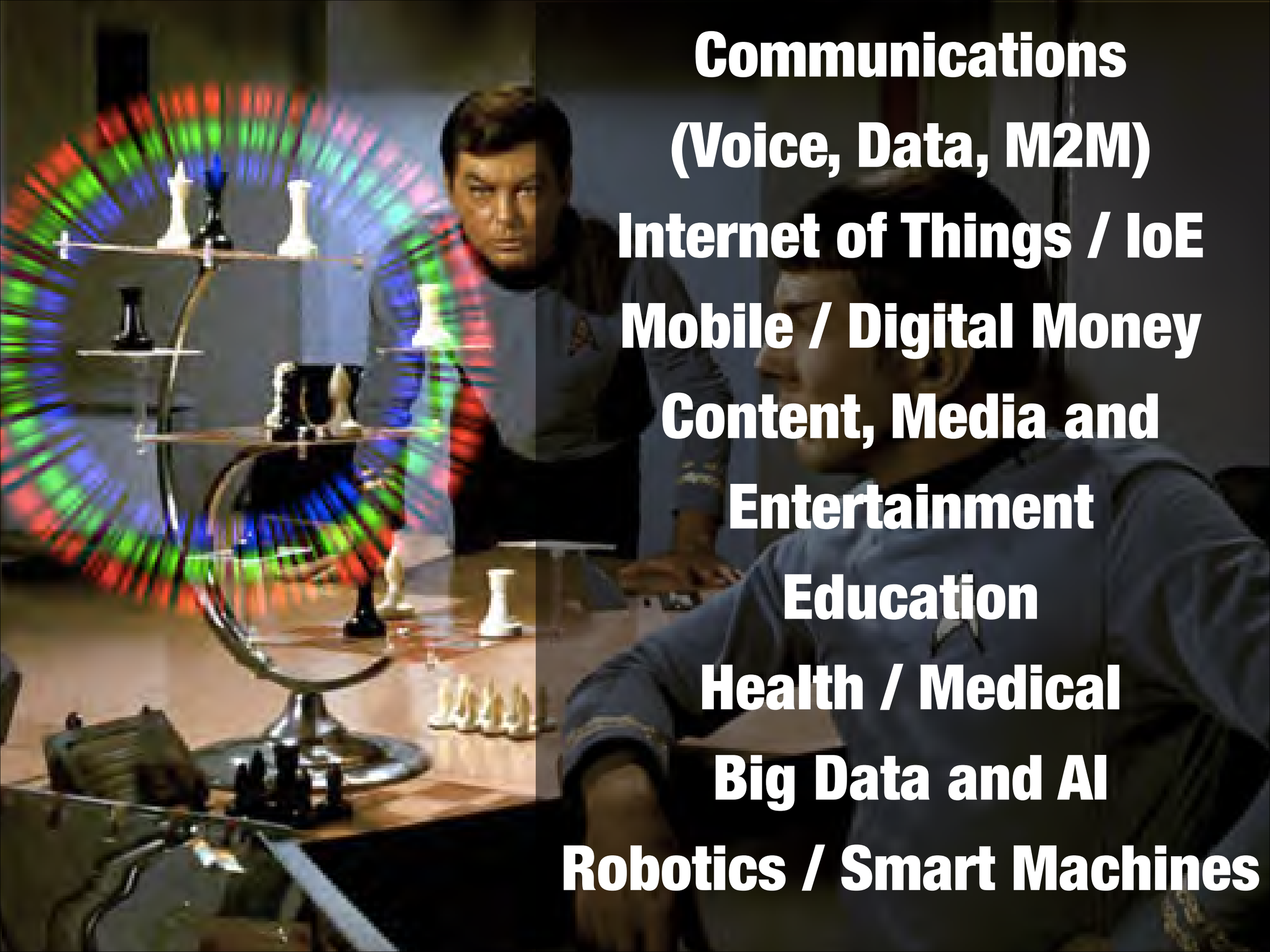
Figure 4. Global Growth of Smart Mobile Devices and Connections



Percentages refer to device or connections share.

Source: Cisco VNI Mobile, 2014

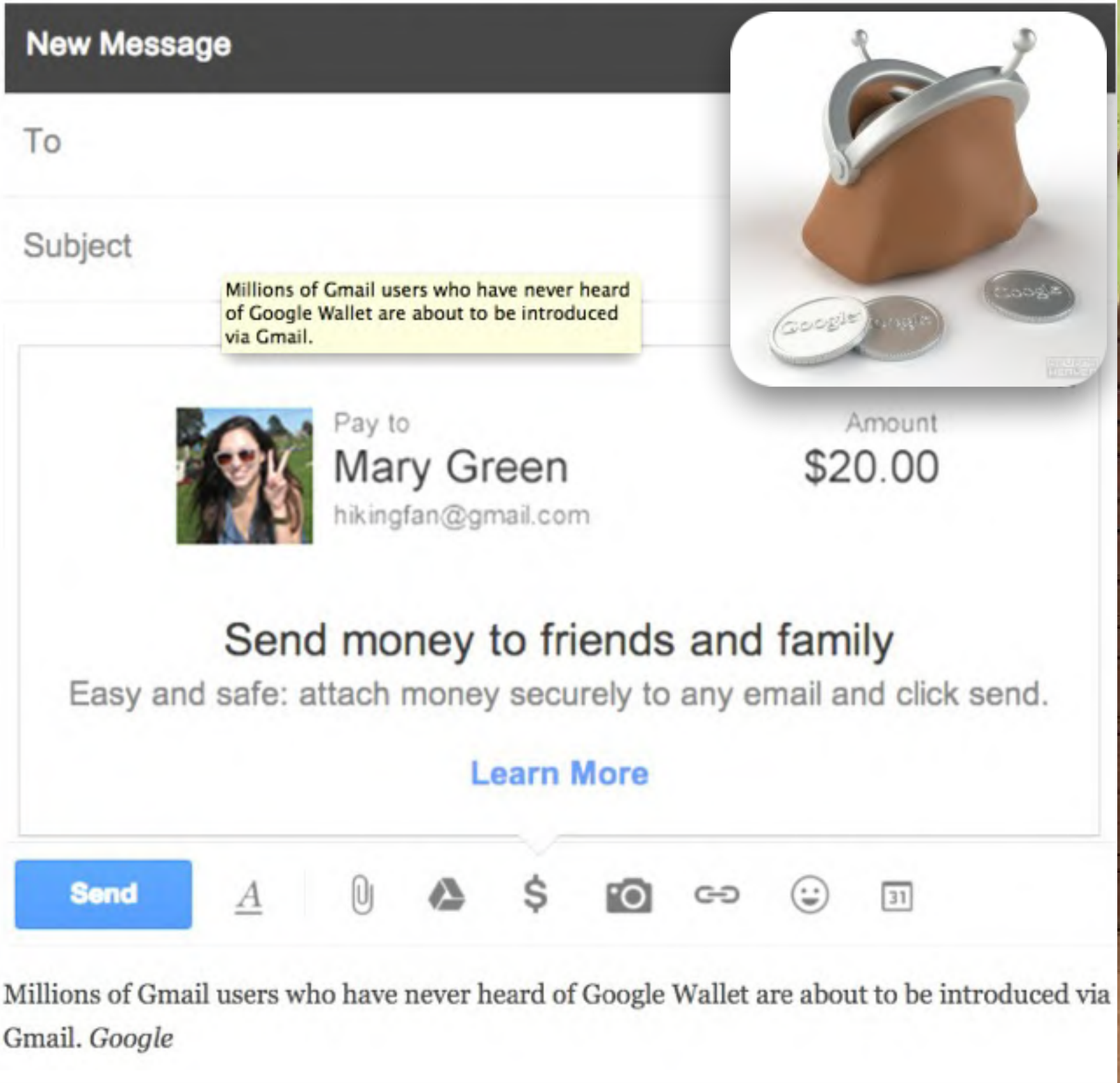
The business, culture and politics of broadband is changing



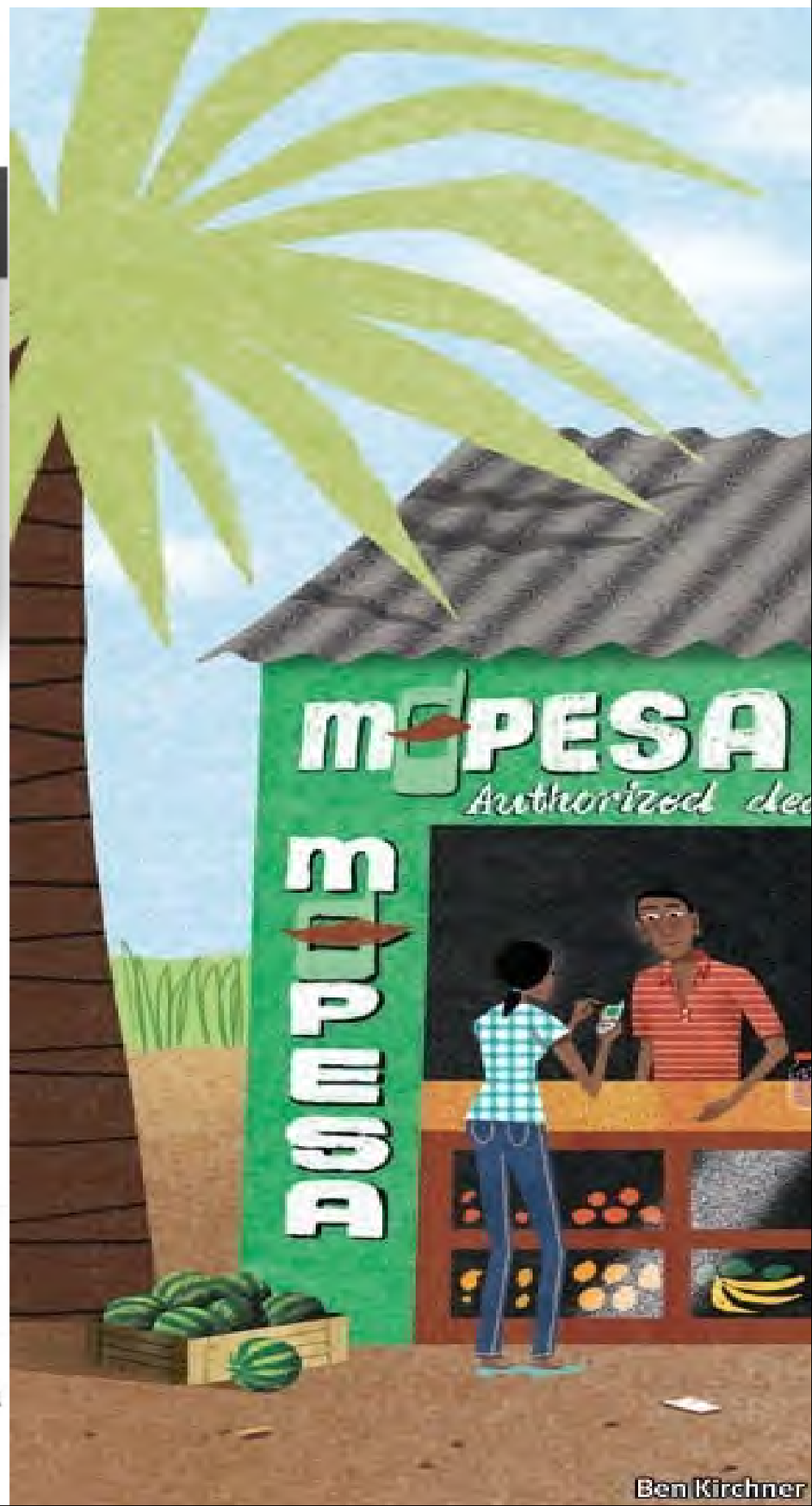
Communications (Voice, Data, M2M)
Internet of Things / IoE
Mobile / Digital Money
Content, Media and Entertainment
Education
Health / Medical
Big Data and AI
Robotics / Smart Machines

Digital money is a certainty; the 2 Billion ‘unbanked’ join via mobile

Here’s a screenshot of the all-important process of first contact and initiation for new users, most of whom will almost certainly never have heard of the service:



Millions of Gmail users who have never heard of Google Wallet are about to be introduced via Gmail. *Google*



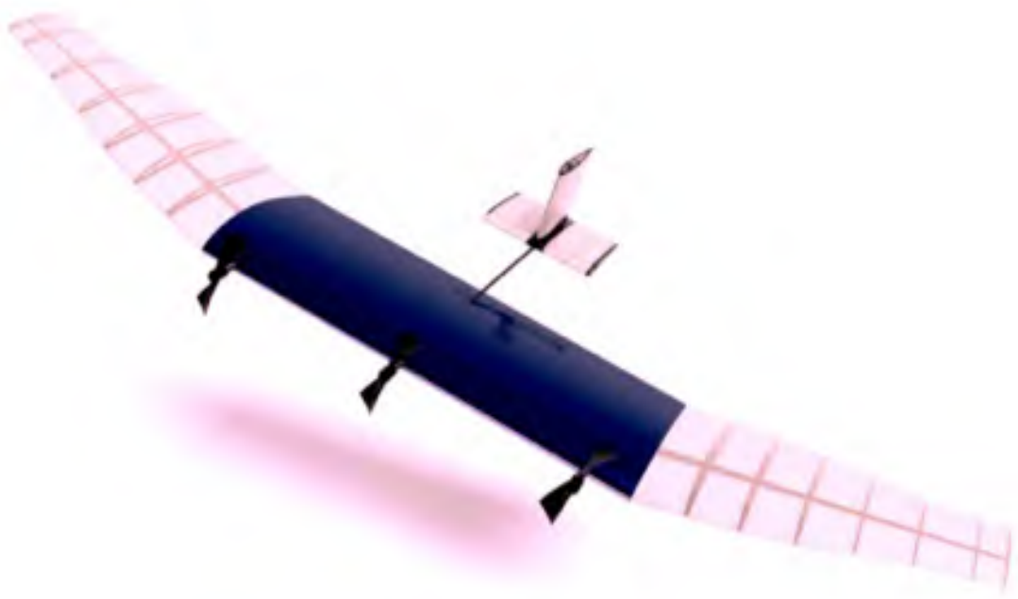
Wearable computing will probably become as common as smart phones

Moto 360 Android / Google

Massive global broadband growth will not just come from the incumbent providers: game changers are imminent

Facebook's Drones Will Battle Google's Balloons to Spread Internet Access

Via MIT Technology Review (yesterday)



High flyer: A rendering of an uncrewed solar-powered aircraft that Facebook wants to operate at an altitude of 20 km to distribute Internet access to areas below.

According to Facebook CEO Mark Zuckerberg and Google CEO Larry Page, the future of the Internet lies in the upper stratosphere.

Facebook announced today that it has set up a team to work on solar powered aircraft that would circle at a height of 20 kilometers to provide Internet access to suburban areas of the world where connectivity is scarce.

Google fiber

Is Connectivity a Human Right?

For almost ten years, Facebook has been on a mission to make the world more open and connected. Today we connect more than 1.15 billion people each month, but as we started thinking about connecting the next 5 billion, we realized something important: the vast majority of people in the world don't have access to the internet.

Today, only 2.7 billion people are online — a little more than one third of the world. That is growing by less than 9% a year, but that's slow considering how early we are in the internet's development. Even though projections show most people will get smartphones in the next decade, most people still won't have data access because the cost of data remains much more expensive than the price of a smartphone.

Making the internet affordable

Internet.org is a global partnership dedicated to making affordable

In the meantime, supporting everything and anything that makes Internet access possible is a good idea!

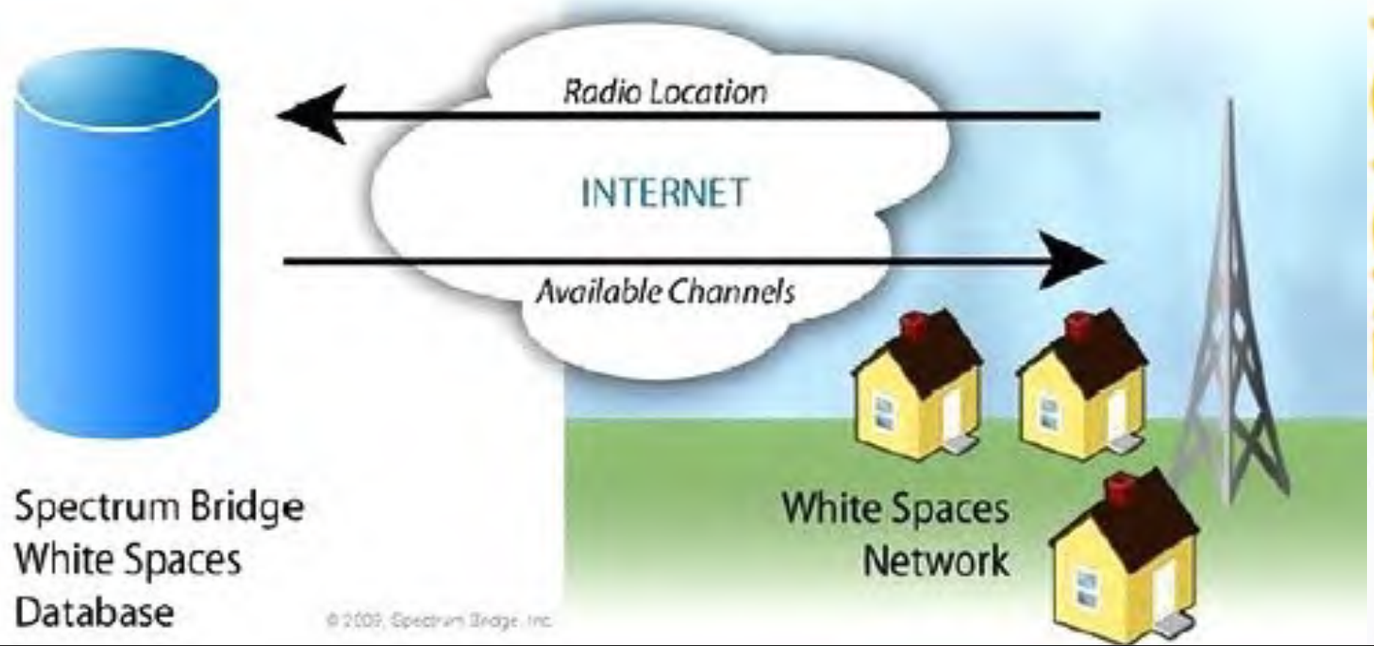
...and give access to airwaves where available

Kenya: Project 'Mawingu' Opening Up More Opportunities in Nanyuki

by Lilian Mutegi, allafrica.com — November 18

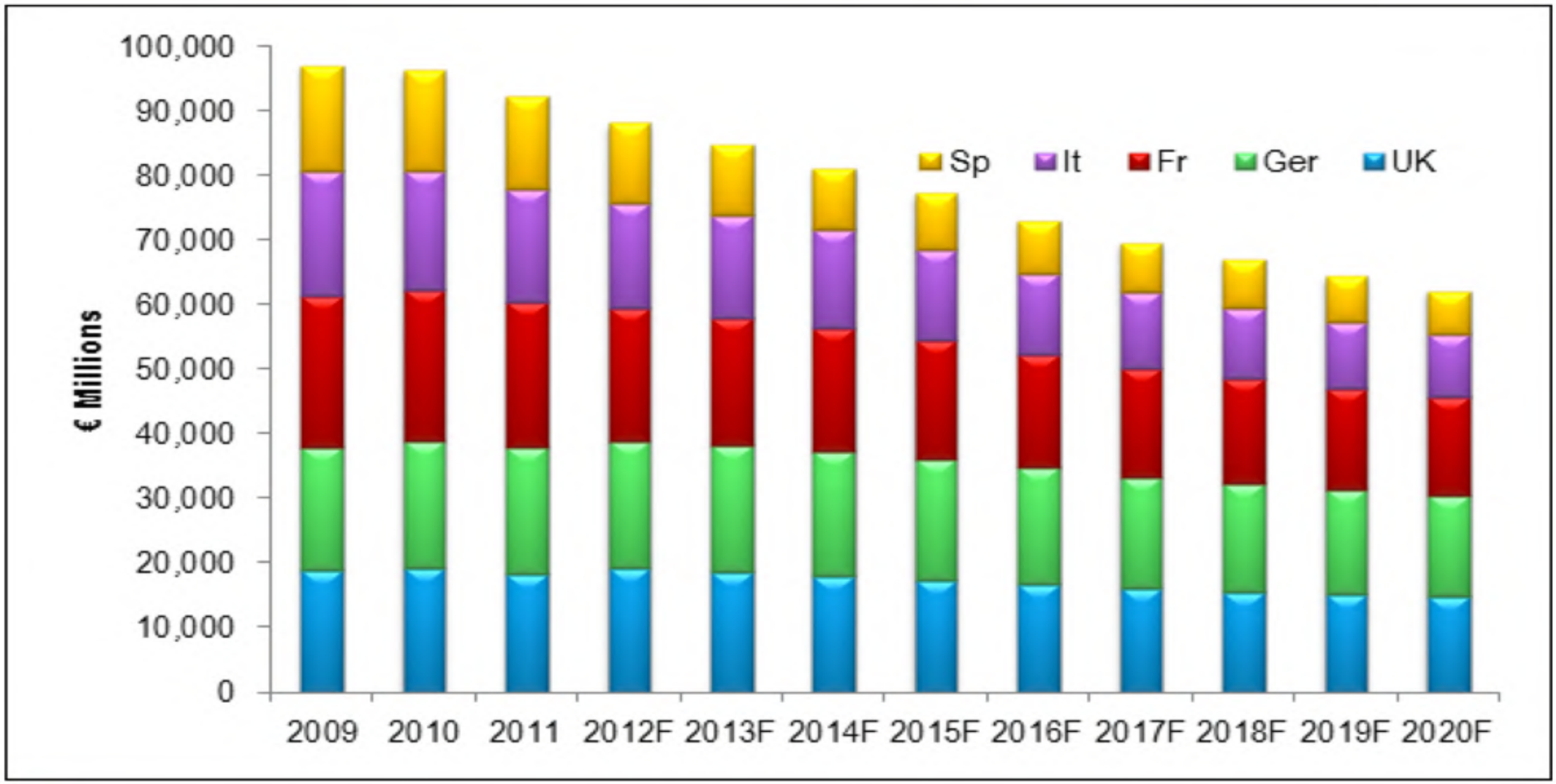
Project Mawingu is the first deployment of solar-powered based stations together with TV white spaces, a technology partially developed by Microsoft Research, to deliver high-speed internet access to areas currently lacking even basic electricity.

During a recent visit to the various Mawingu project sites in Nanyuki , the residents of Nanyuki expressed their gratitude as they could now get low-cost, high-speed wireless broadband thus helping them create new opportunities for commerce, education, healthcare and delivery of government services across the Laikipia County where Nanyuki lies.



Telecom's traditional, infrastructure-centric business model is **quickly heading for irrelevance** (not if but when)

EU5: Brutal decline in core revenues (Voice, SMS, Data)



STL

WhatsApp Shows How Phone Carriers Lost Out on $33 Billion

Free social-messaging applications like WhatsApp cost phone providers around the world $32.5 billion in texting fees in 2013, according to research from Ovum Ltd. That figure is projected to reach $54 billion by 2016. The deal values each of its 450 million active monthly users at $42.

http://www.bloomberg.com/news/2014-02-21/whatsapp-shows-how-phone-carriers-lost-out-on-33-billion.html

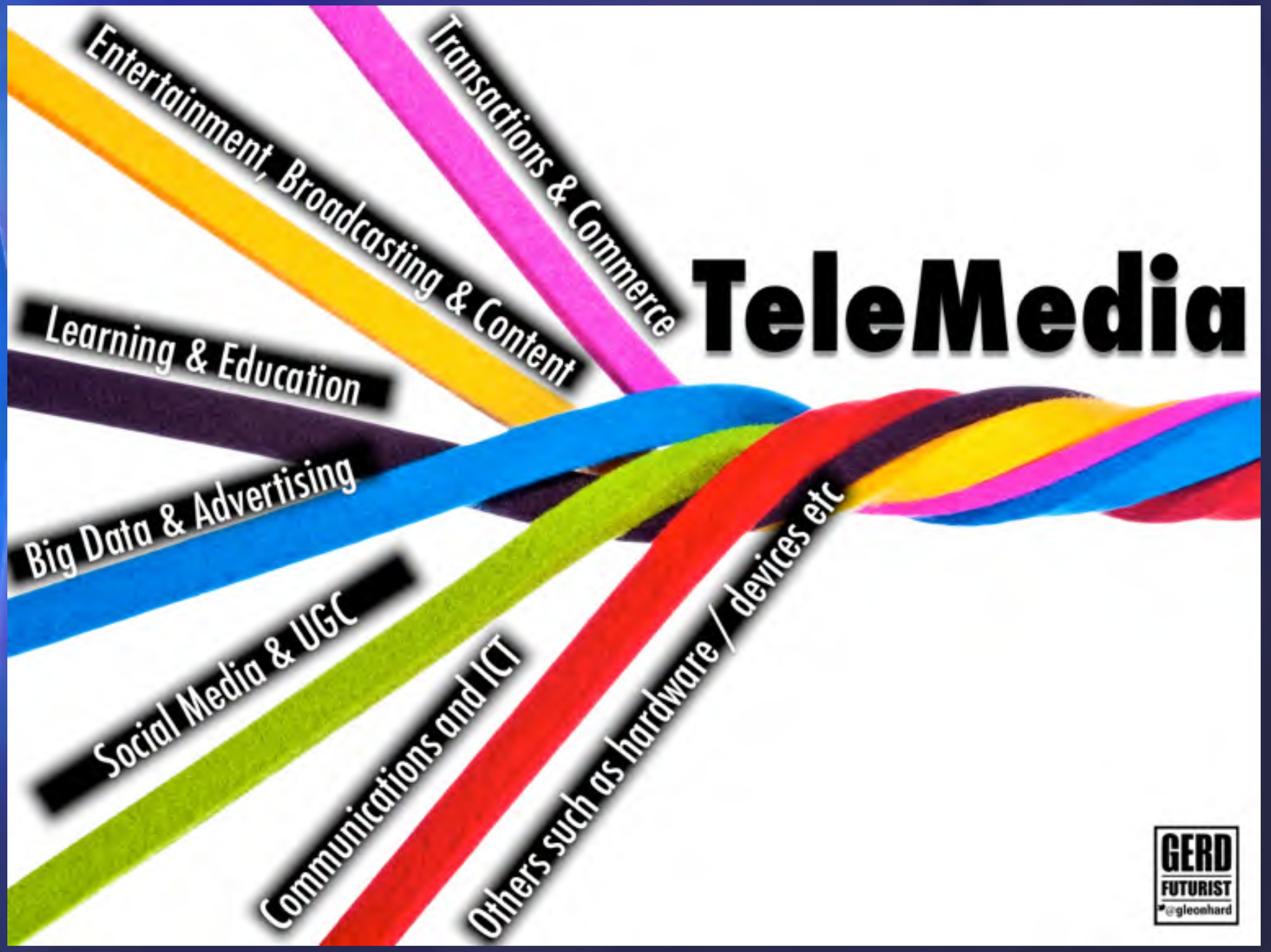
Gerd FUTURIST

In less than 2 years

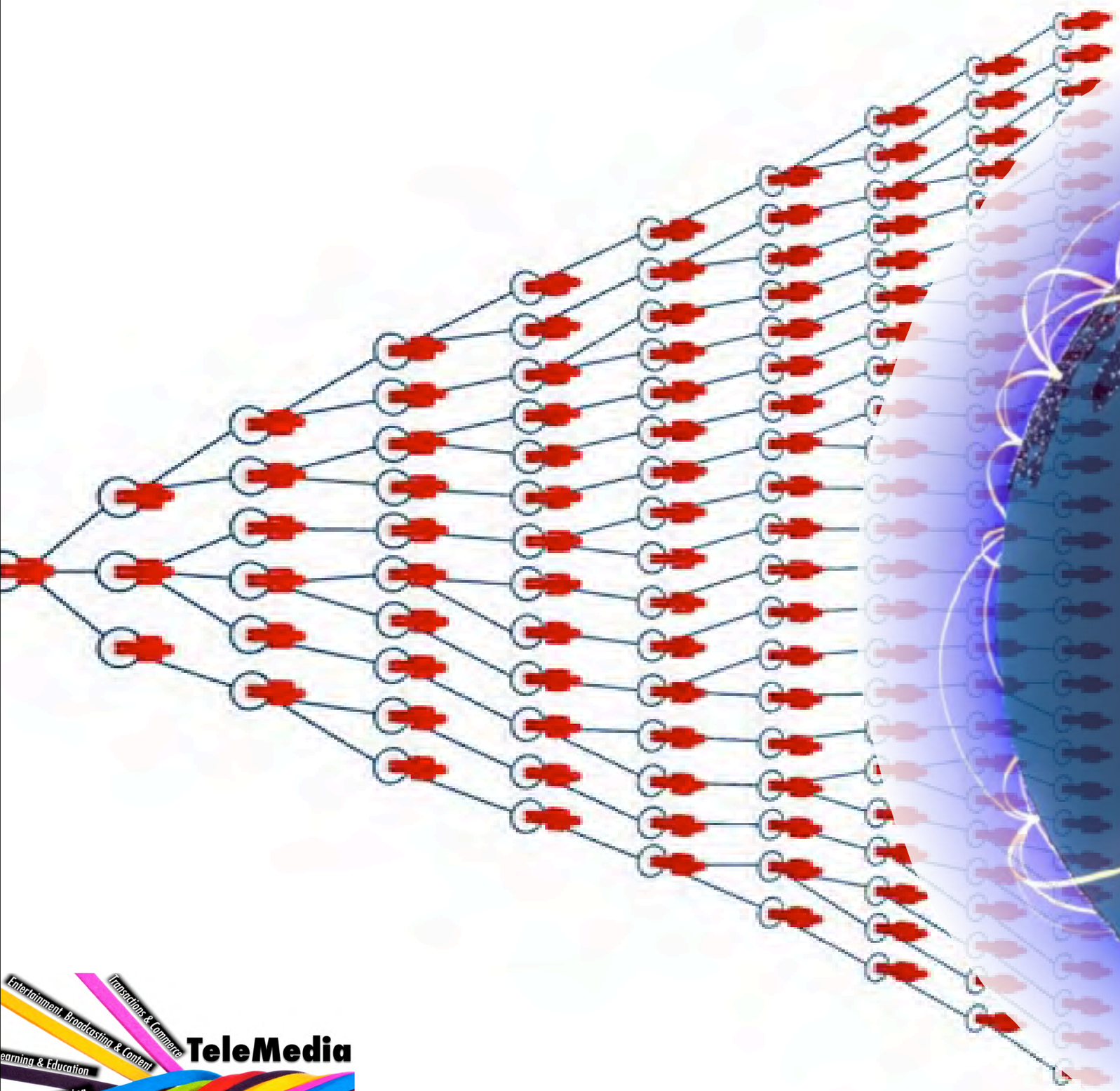
Social Media-Telecom-Broadcasters

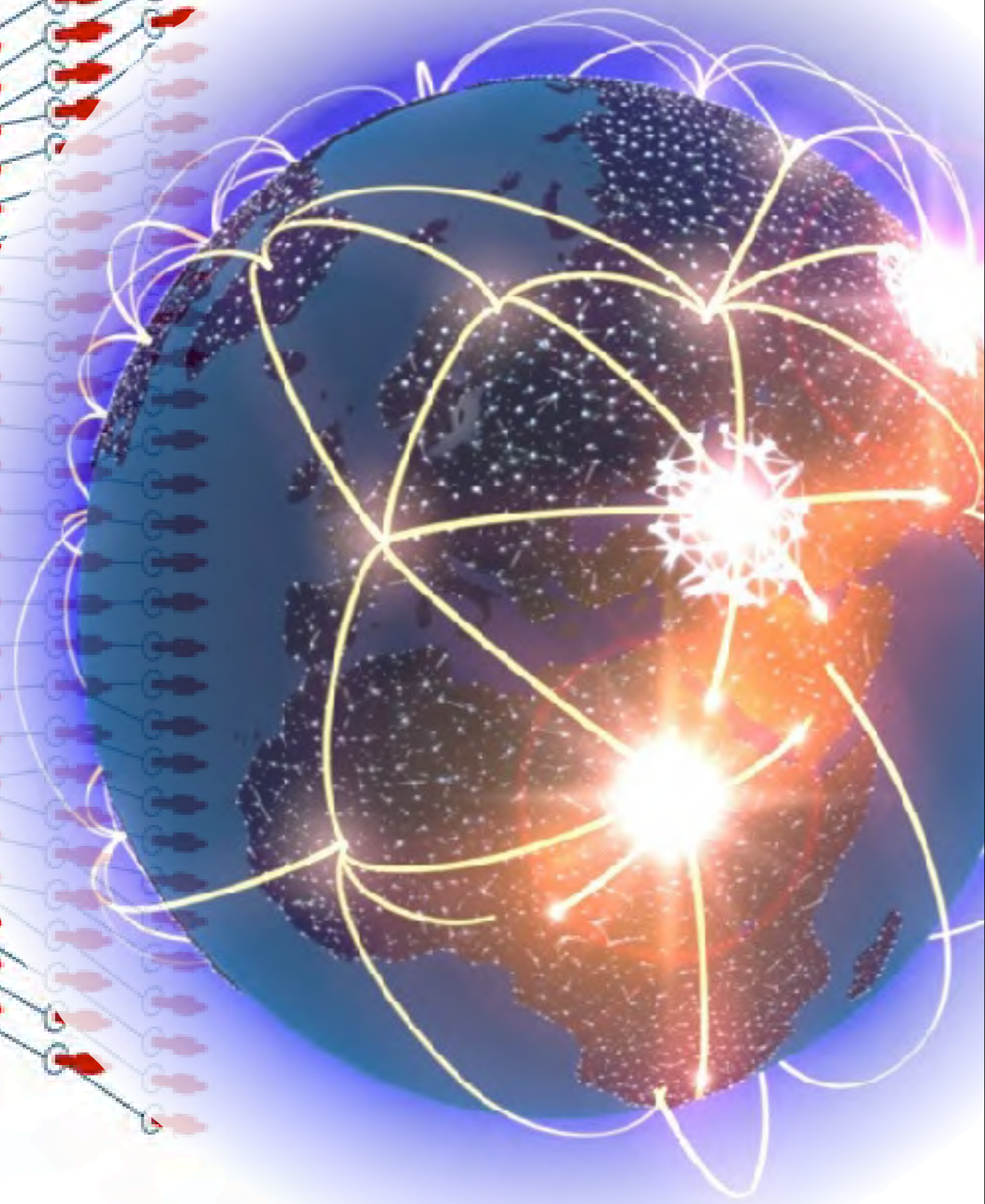
Facebook is paying more than double its annual revenue for a chat program that has little revenue. The purchase price is slightly more than the market value of Sony Corp. "Facebook is the leading global social-sharing utility. Now, it has a significant opportunity to be the leading global communications utility," RBC Capital Markets said in a note.

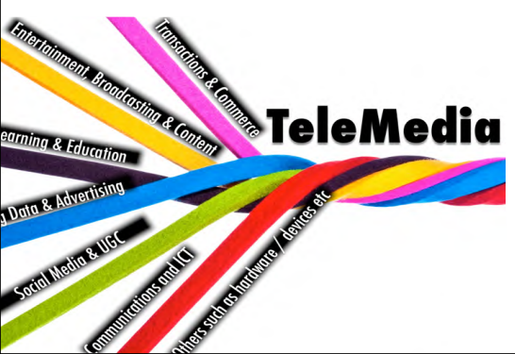
“Identifying viable new operating and financing models”



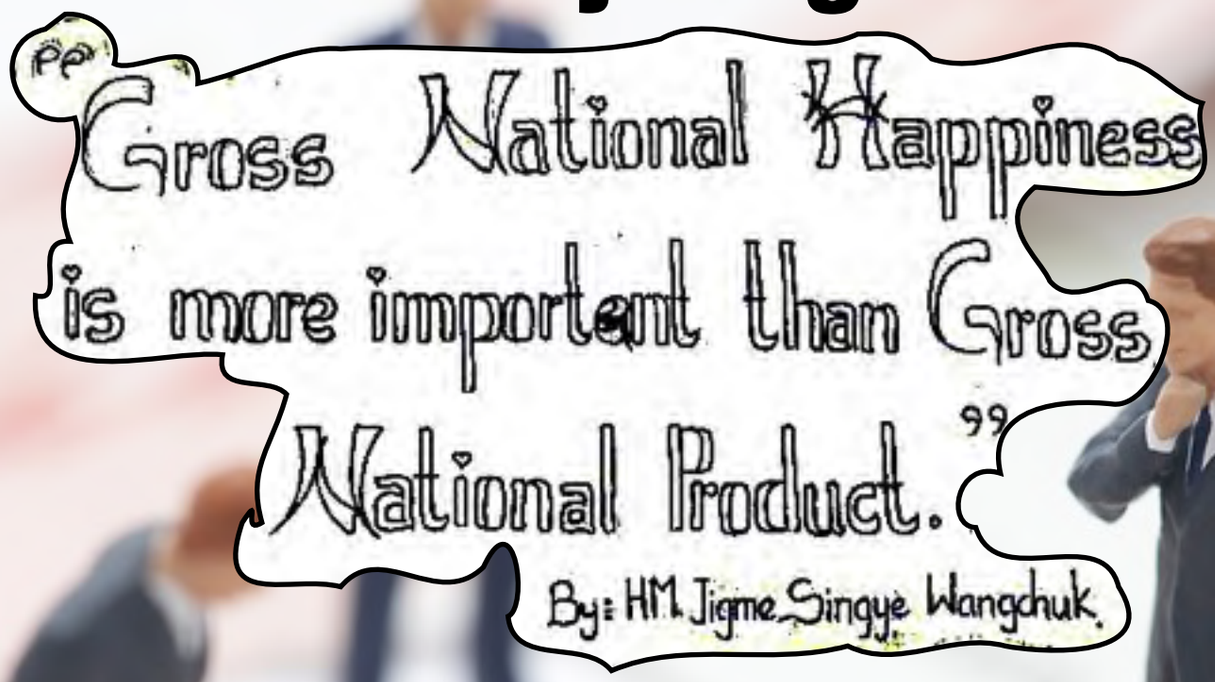
Focus on harnessing convergence & network effects







Broadband should not just grow GDP but also GNH



Inclusion

Access

Collaboration

We will also need to think about how to ensure a balanced ‘broadband lifestyle’ i.e. to remain human and connected

~~Machine Thinking~~

Sustainable broadband transformation:

co-create new Ecosystems!

GERD LEONHARD: FUTURIST, KEYNOTE SPEAKER, AUTHOR
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Thanks for your attention!

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