The Digital Revolution

Disruptive new business opportunities

Mehdi Quraishi
Senior Director / ICT

November 2013

In the future, *if it computes, it connects*. From the simplest embedded sensors to the most advanced cloud datacenters, we're looking at techniques to allow all of them to connect without wires - *Intel CTO, Justin Rattner, 2012*

No Matter What the Industry

YOUR BUSINESS
MUST BE DIGITAL

Connecting rate of improvement and reach today …

$5 million vs. $400

Price of the fastest supercomputer in 1975 and an iPhone 5 with equal performance

$2.7 billion, 13 years

Cost and duration of the Human Genome Project, completed in 2003

230+ million

Knowledge workers in 2012

300,000+

Miles driven by Google's autonomous cars with only one accident (human error)

… with economic potential in 2025

2–3 billion

More people with access to the Internet in 2025

$100, 1 hour

Cost and time to sequence a human genome in the next decade

$5–7 trillion

Potential economic impact by 2025 of automation of knowledge work

1.5 million

Driver-caused deaths from car accidents in 2025, potentially addressable by autonomous vehicles

Disruptive technologies: Advances that will transform life, business, and the global economy

Mobile Internet

Increasingly inexpensive and capable mobile computing devices and internet connectivity

Autonomous and near- autonomous vehicles

Vehicles that can navigate and operate with reduced or no human intervention

Automation of knowledge work

Intelligent software systems that can perform knowledge work tasks involving unstructured commands and subtle judgments connectivity

Advanced robotics

Increasingly capable robots with enhanced senses, dexterity, and intelligence used to automate tasks or augment humans

The Internet of Things

Networks of low-cost sensors and actuators for data collection, monitoring, decision making, and process optimization

Next-generation genomics

Fast, low-cost gene sequencing, advanced big data analytics, and synthetic biology (“writing” DNA)

Source: McKinsey global institute analysis

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Cloud technology

Use of computer hardware and software resources delivered over a network or the Internet, often as a service

Energy storage

Devices or systems that store energy for later use, including batteries

3D printing

Additive manufacturing techniques to create objects by printing layers of material based on digital models

Renewable energy

Generation of electricity from renewable sources with reduced harmful climate impact

oil & gas exploration and recovery

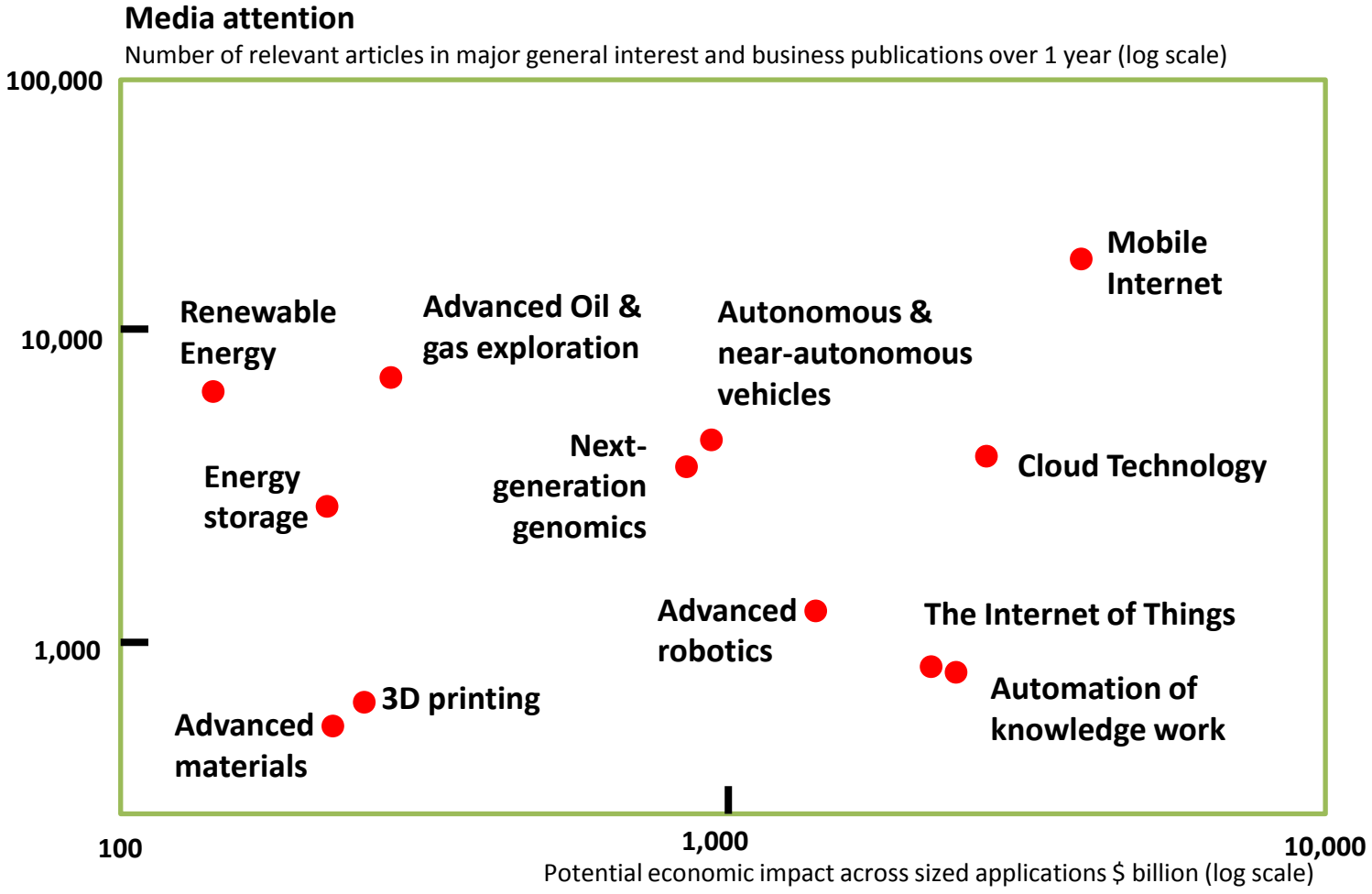
exploration and recovery
Exploration and recovery techniques that make extraction of unconventional oil and gas economical

Advanced materials

Materials designed to have superior characteristics (e.g., strength, weight, conductivity) or functionality

**Source: McKinsey global institute analysis*

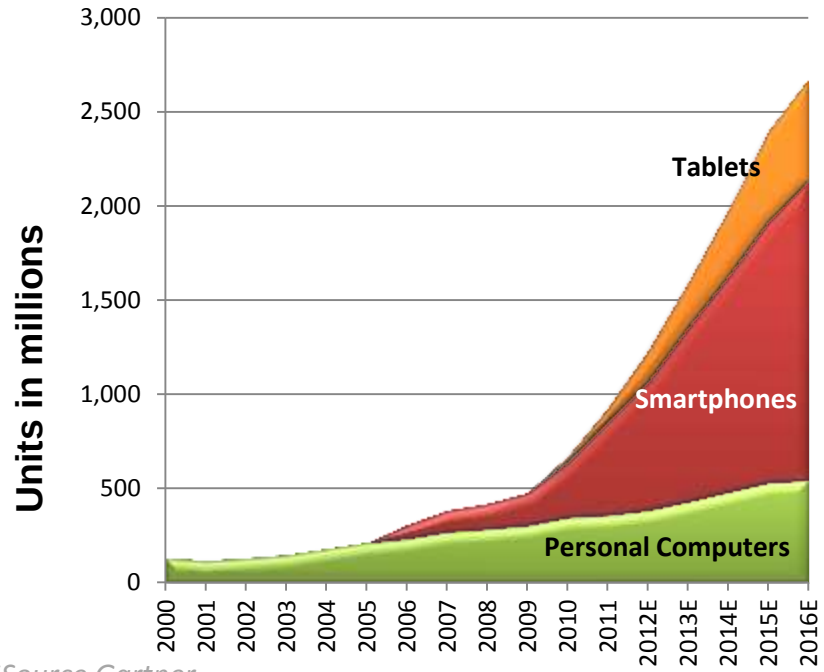
The relationship between hype about a technology and its potential economic impact is not clear



Source: McKinsey global institute analysis

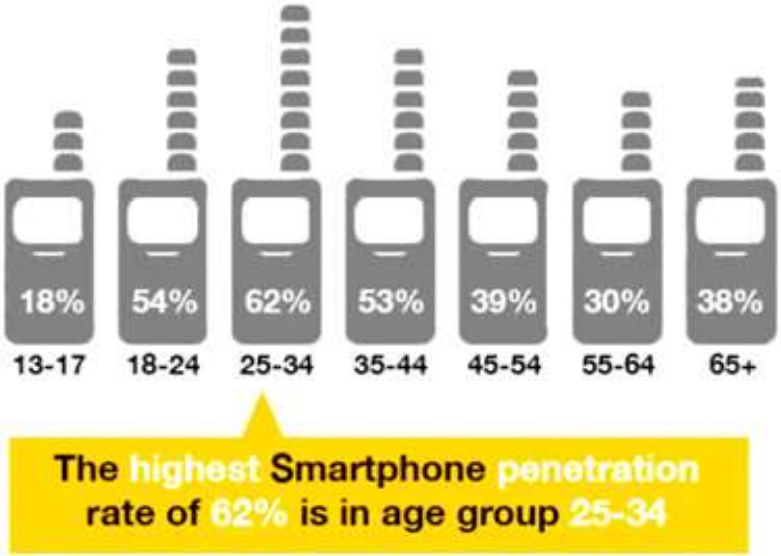
Shift in Computing

Personal Behavior Patterns Changing



*Source Gartner

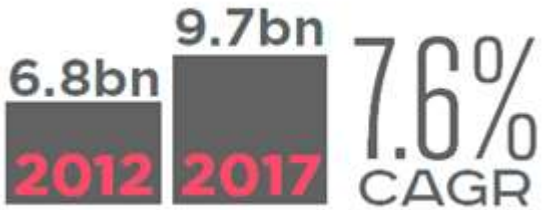
Smartphone Penetration by Age Group



*Source: go-globe.com

A Growing Mobile Workforce

Global Connections

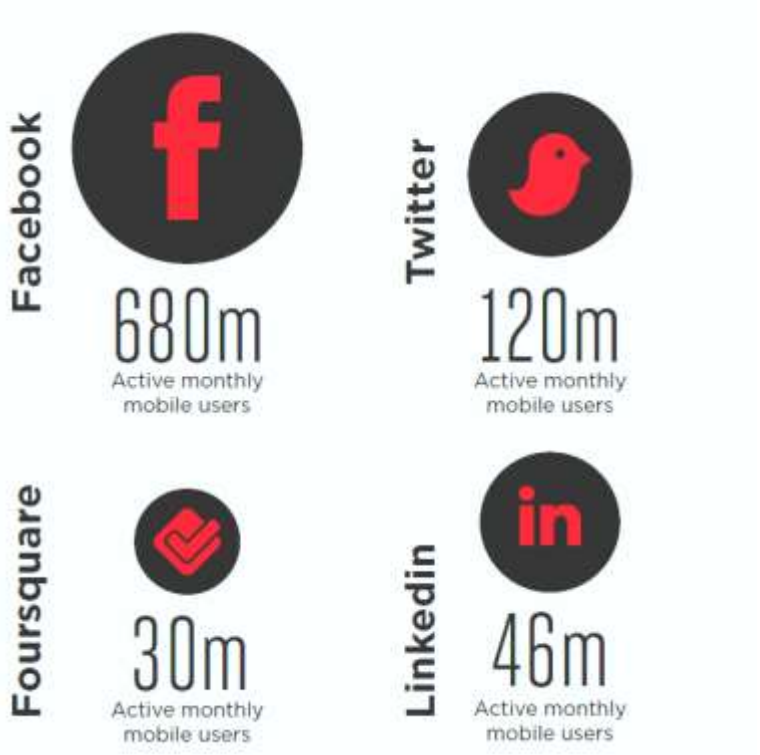


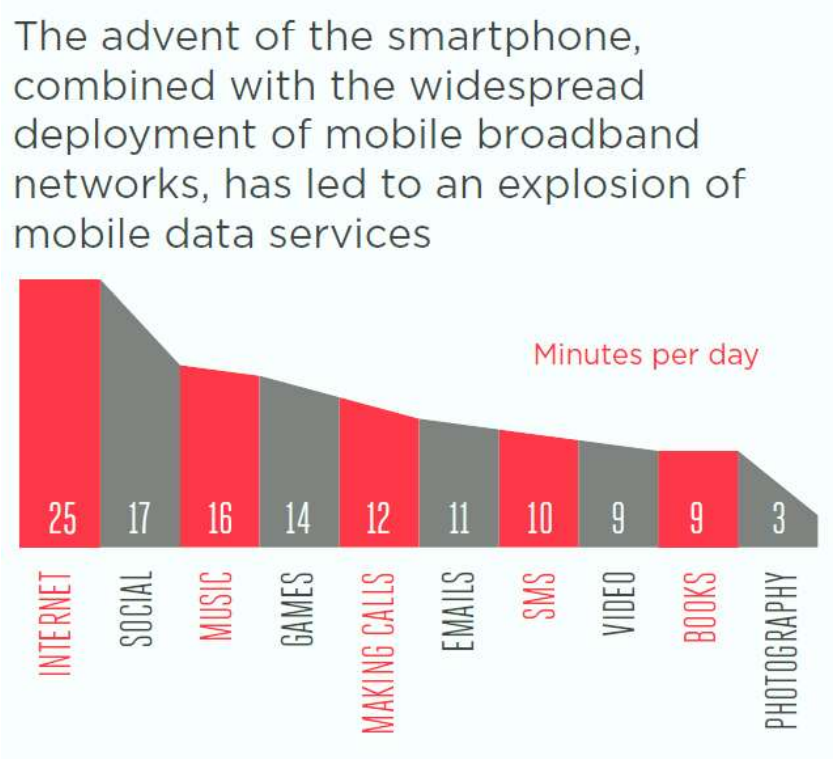
Mobile Broadband Growth

Global Subscribers

**Source: The Mobile Economy 2013 ATKearney*

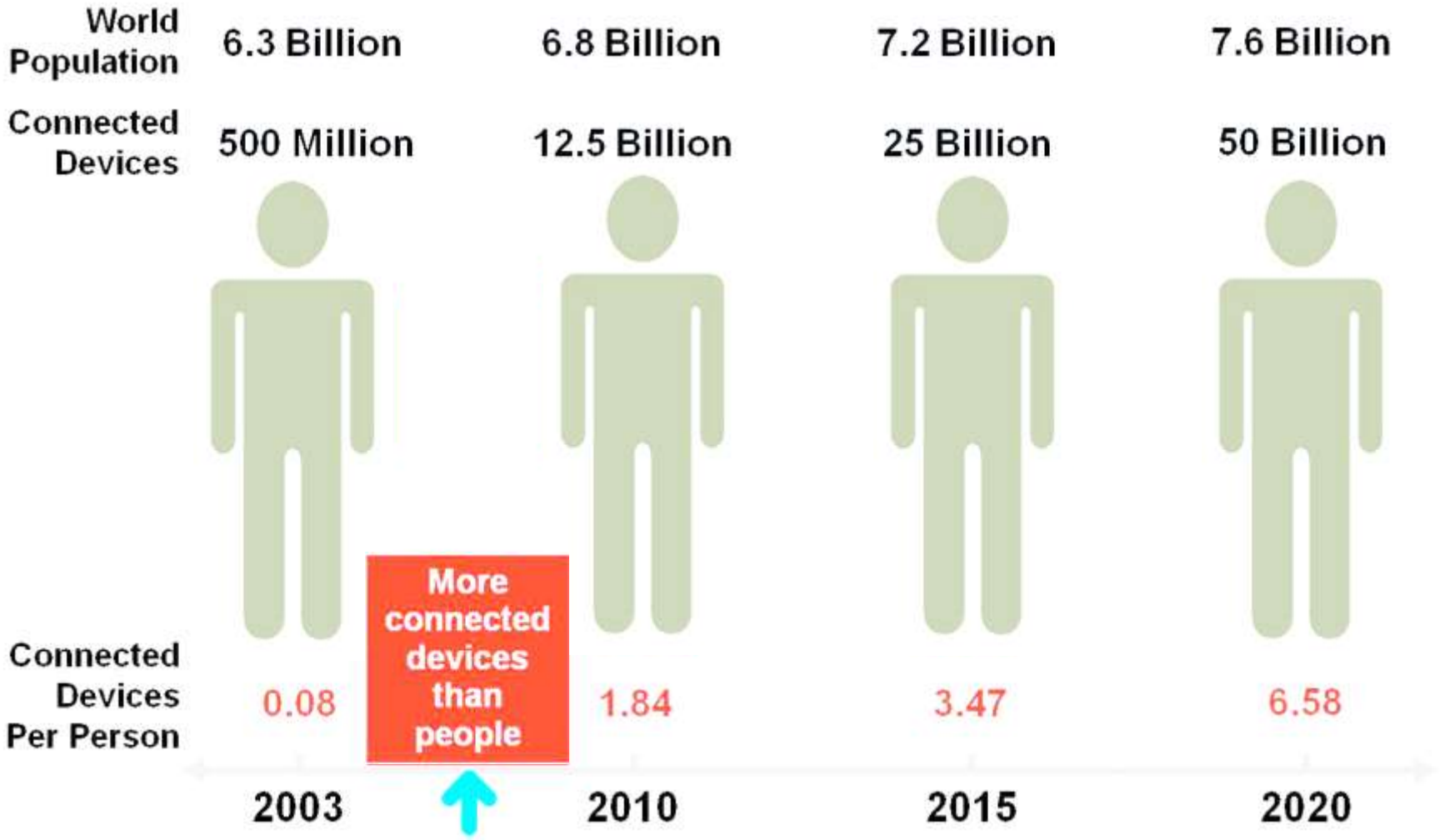
Explosion of Mobile Data Services and Social Media





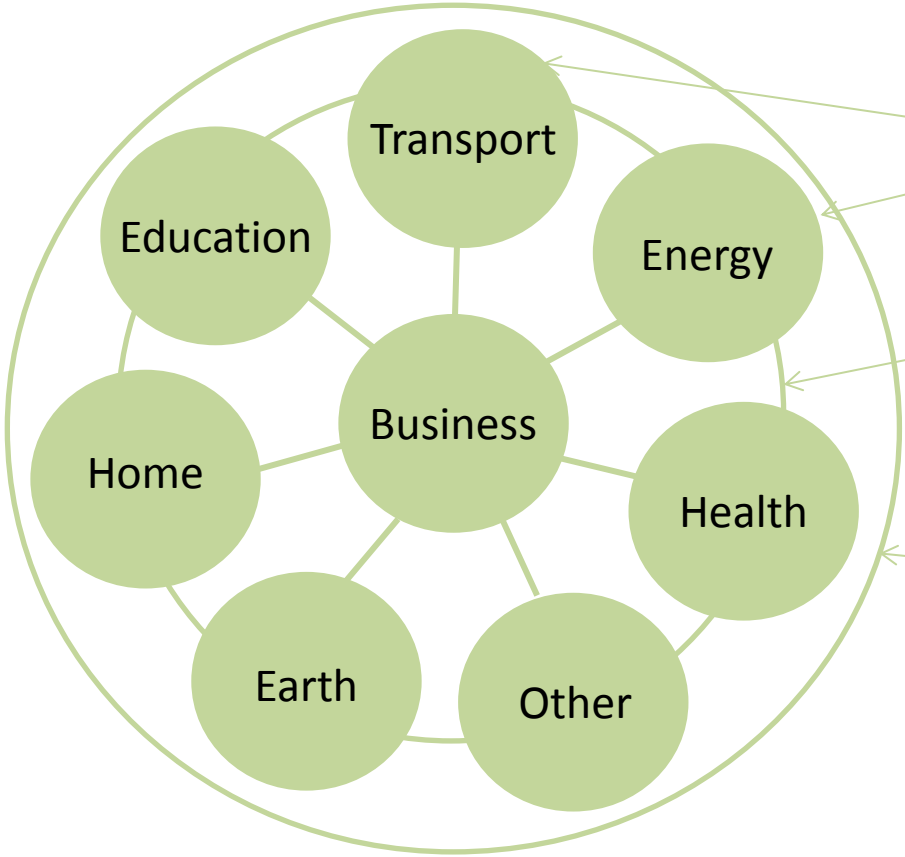
**Source: A.T. Kearney, Cisco 2013 Mobile VNI Study*

The Internet of Things Was "Born" Between 2008 and 2009



Source: Cisco IBSG

IoT Can Be Viewed as a Network of Networks



1. Individual networks

2. Connected together

3. With Security, Analytics & management

The Networked Readiness Index 2013

Benchmarking ICT Uptake and Support for Growth in a Hyper-connected World

Rank	Country / Economy	Score	2012 rank
1	Finland	5.98	3
2	Singapore	5.96	2
3	Sweden	5.91	1
4	Netherlands	5.8	6
23	Qatar	5.10	28
25	United Arab Emirates	5.07	30
29	Bahrain	4.87	27
31	Saudi Arabia	4.82	34
40	Oman	4.48	40

Source: The Global Information Technology Report 2013
World Economic Forum

The Networked Readiness Index (NRI) aims to measure the ability of countries to leverage information and communication technologies (ICTs) for improved competitiveness and wellbeing.
This ability depends on the following factors:

1) The role of digitization for economic growth
2) The description of a taxonomy of national broadband and ICT plans
3) The importance of national policy leadership
4) The role of fiber broadband for economic and social growth
5) The economic impact of next-generation mobile technologies
6) The need for better measurement to realize the potential of health information technologies
7) The role of ICTs for to regain its competitiveness, and
8) The potential of ICTs to support social inclusion.

Thank you

Q&A