



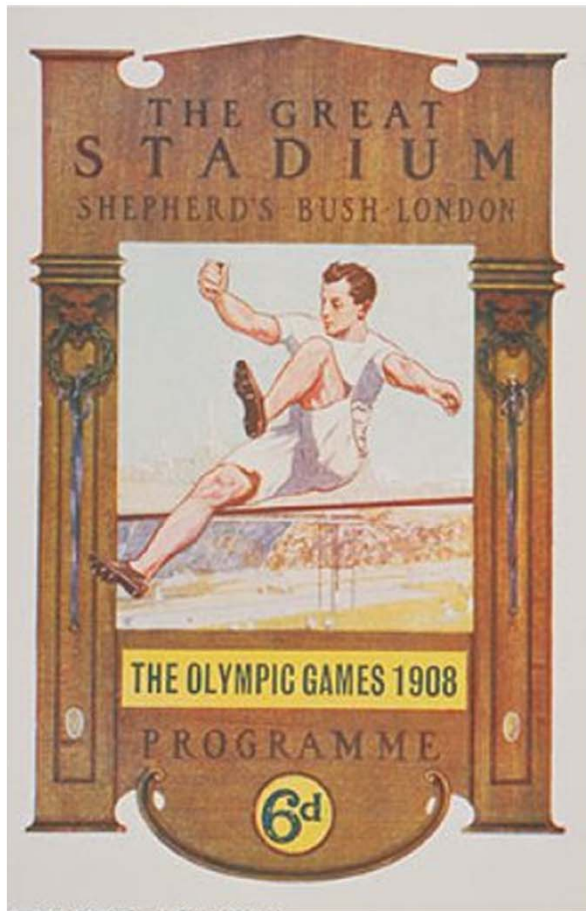
# Applications, anywhere, anytime?

Mike Short

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President, Institution of Engineering  
and Technology

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1.5 Billion Fixed Lines

Over 5 Billion Mobile Connections

Mobile Is Connecting The World





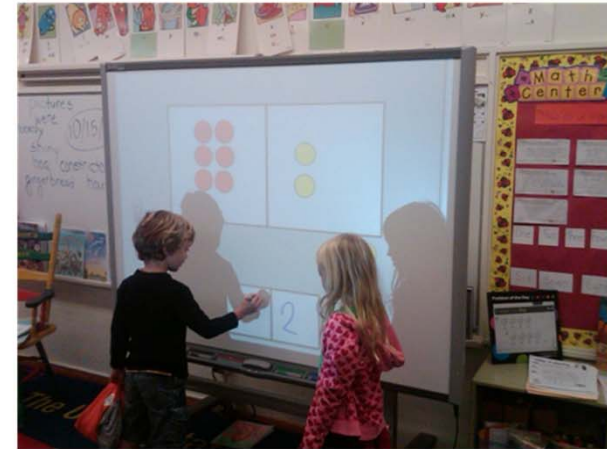
**Communications technology has changed the world...**

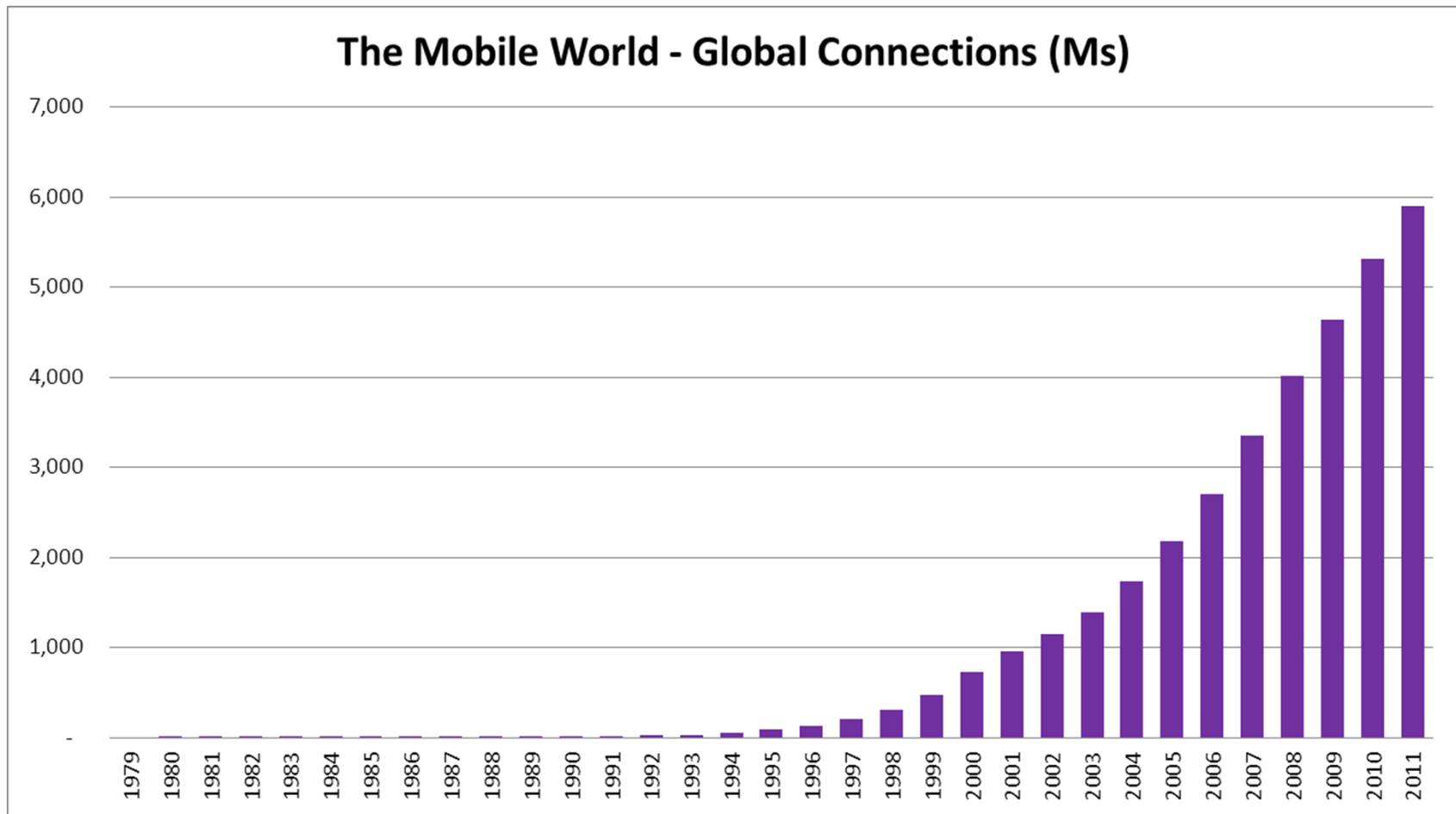


**... but the digital revolution has only just begun**

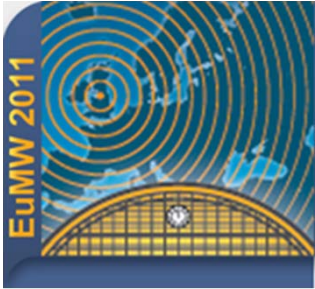


# Next generation networks will transform opportunities facing Europe

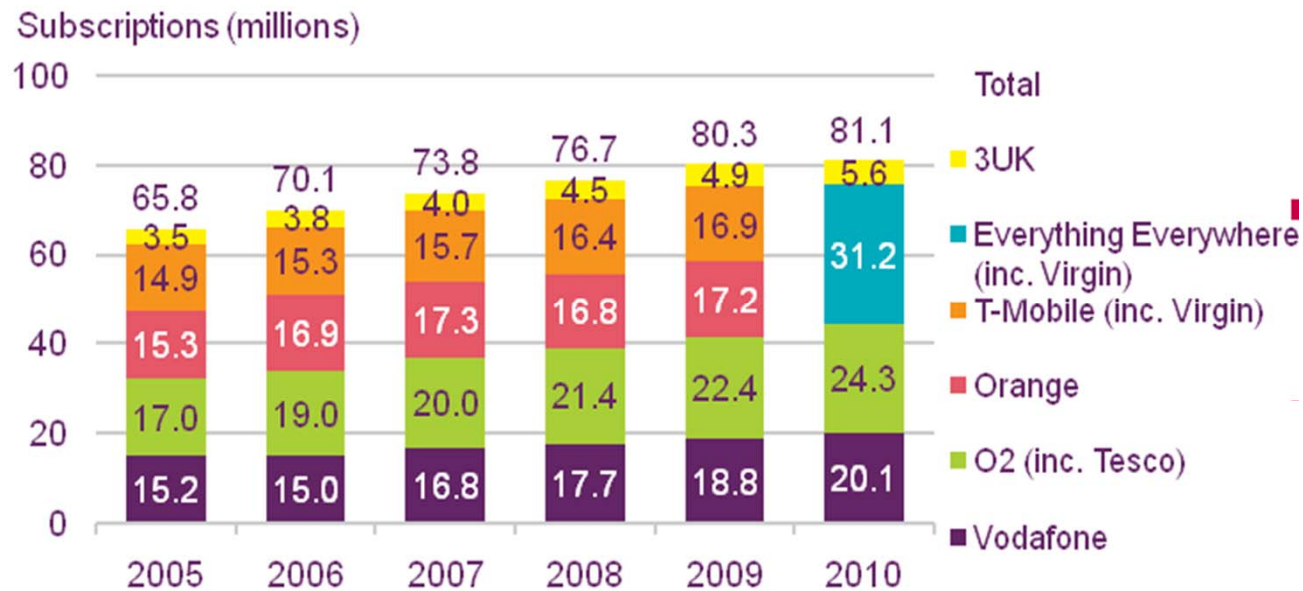




Source: [www.themobileworld.com](http://www.themobileworld.com)

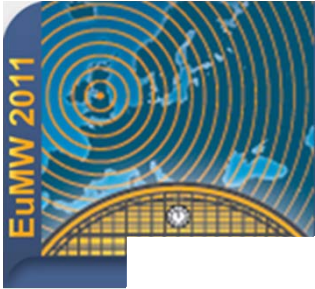


# Mobile subscriptions, by network operator

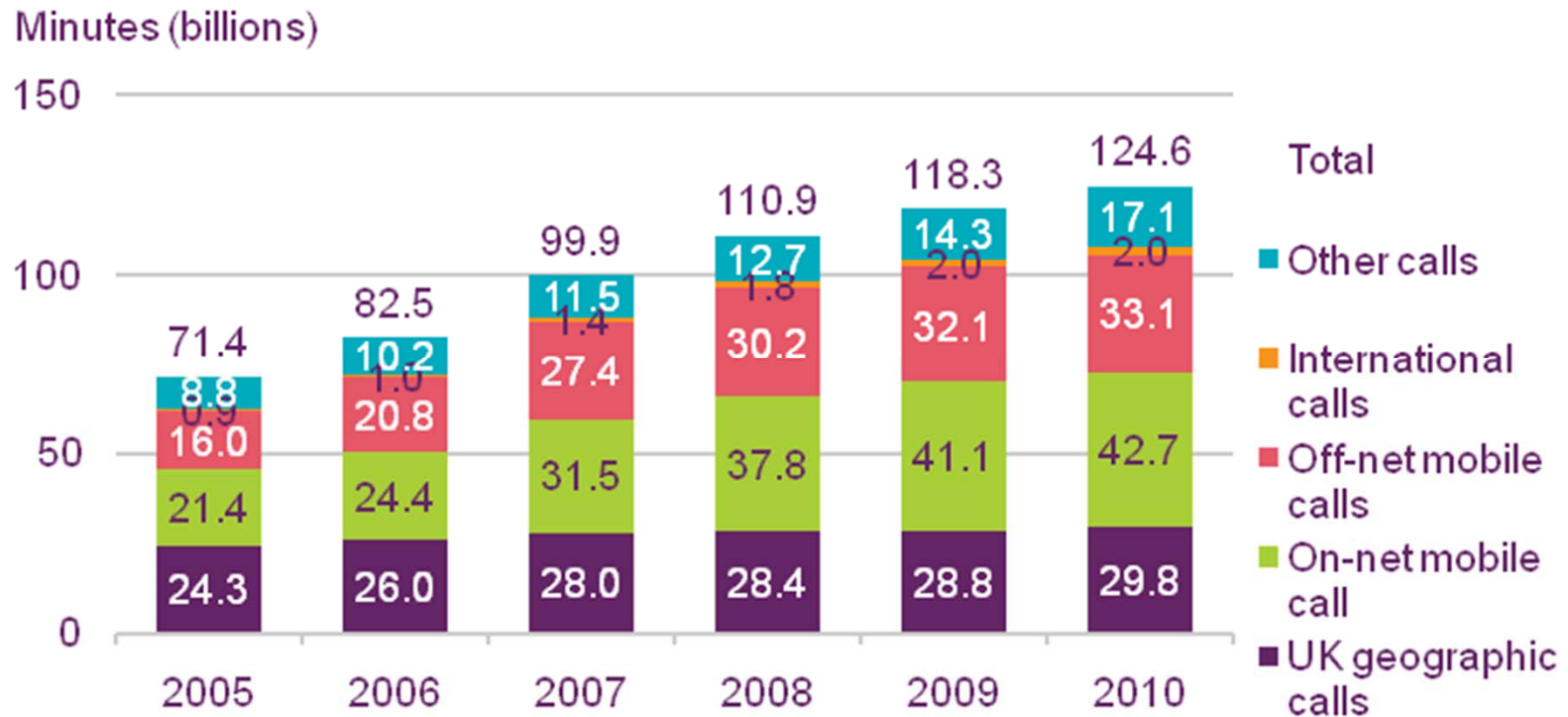


Source: Ofcom/operators (5.54)

Note: Includes estimates where Ofcom does not receive data from operators



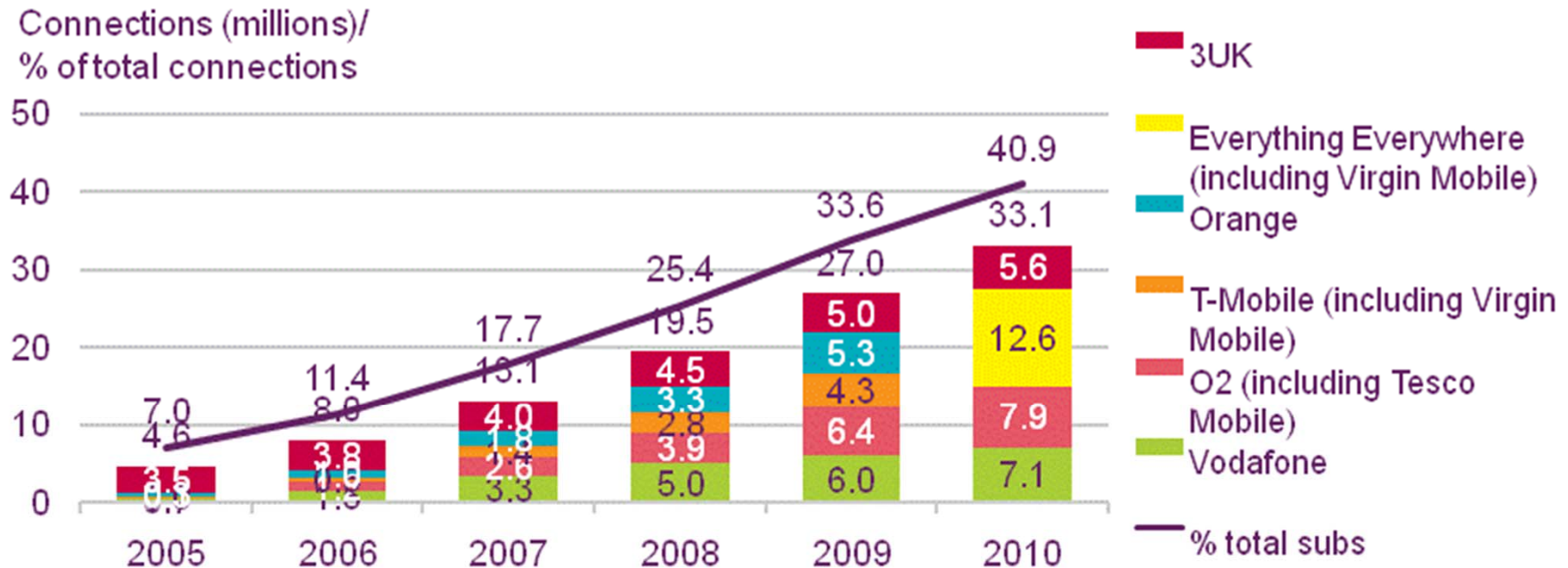
# Mobile originating voice call volumes



Source: Ofcom/operators (5.51)



# 3G connections, by network operator

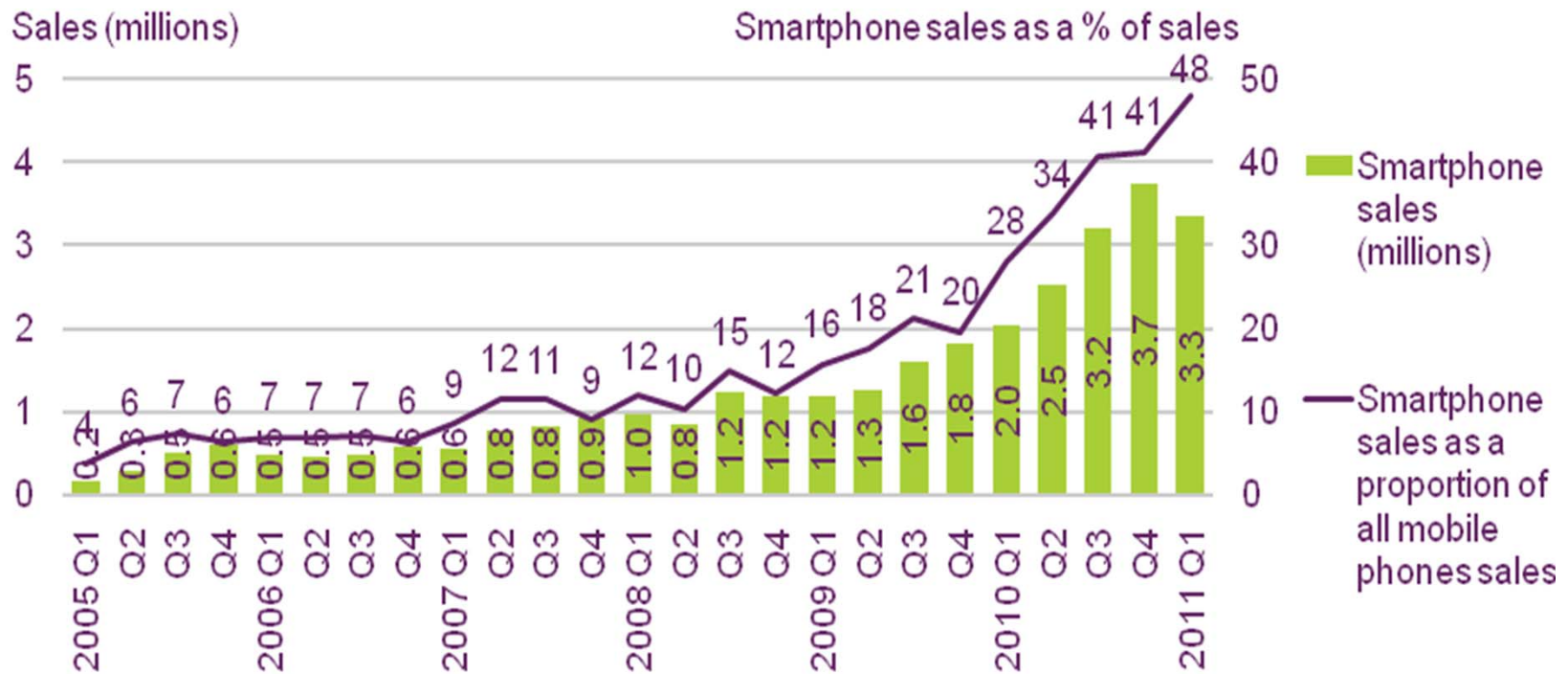


Source: Ofcom/operators (5.56)

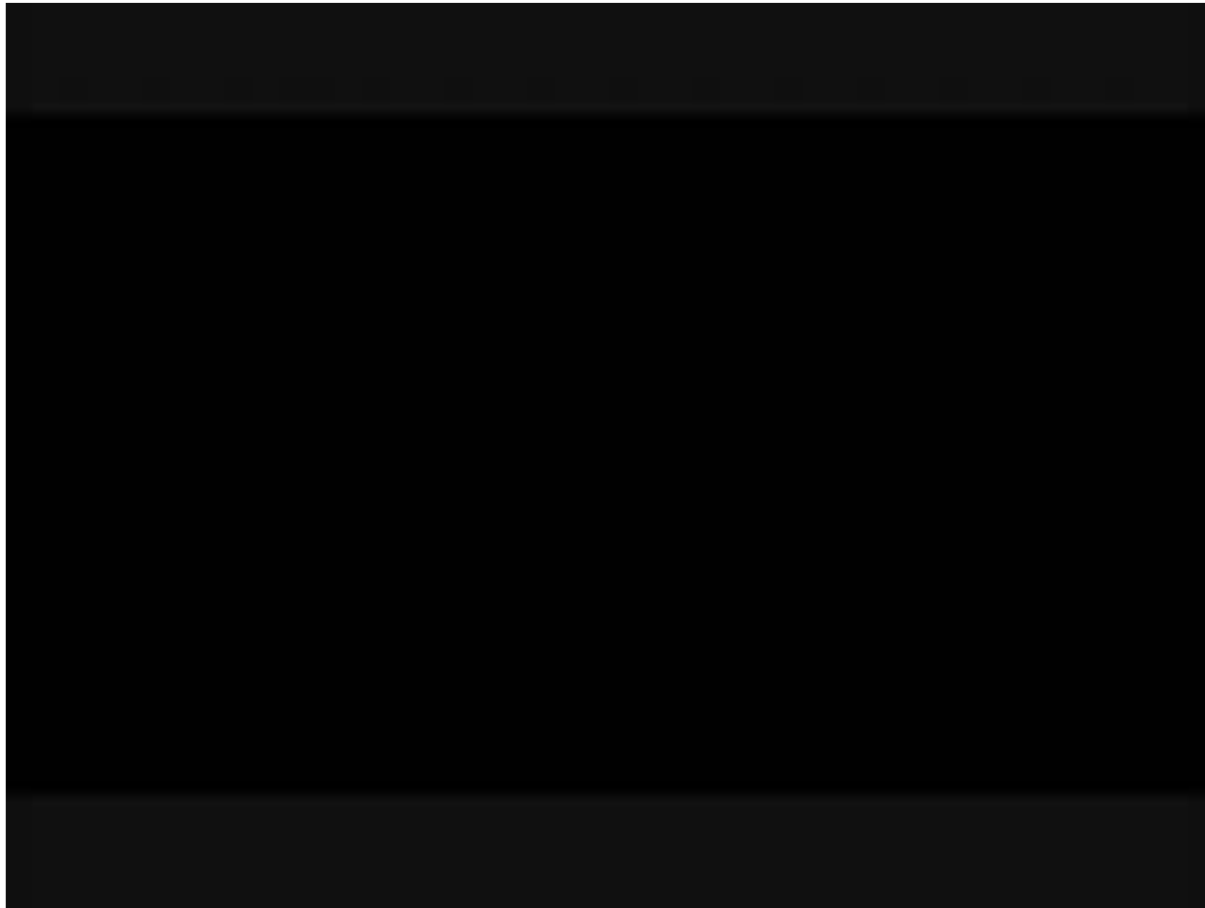
Note: 3G includes connections made via laptops/dongles as well as mobile handsets



# UK smartphone sales



Source: GfK Retail and Technology Ltd, based on factual point-of-sale information (5.20)





# The Power of Mobile



Three quarters of mobile phone users will not leave home without their device

Nearly half go to bed with their phone nearby

There will be more smartphones in the world than PCs by 2013

Half a billion people accessed the mobile Internet worldwide in 2009: Usage expected to double within five years



# The Power of Devices



Apple  
iOS



Android



RIM



Windows  
Phone 7



HP Palm  
OS



MeeGo

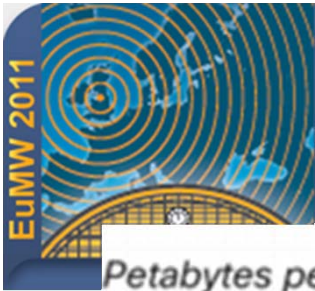
~100 million smartphones shipped in Q1 2011 (27%)  
50% of Americans will have smartphones by the end of 2011



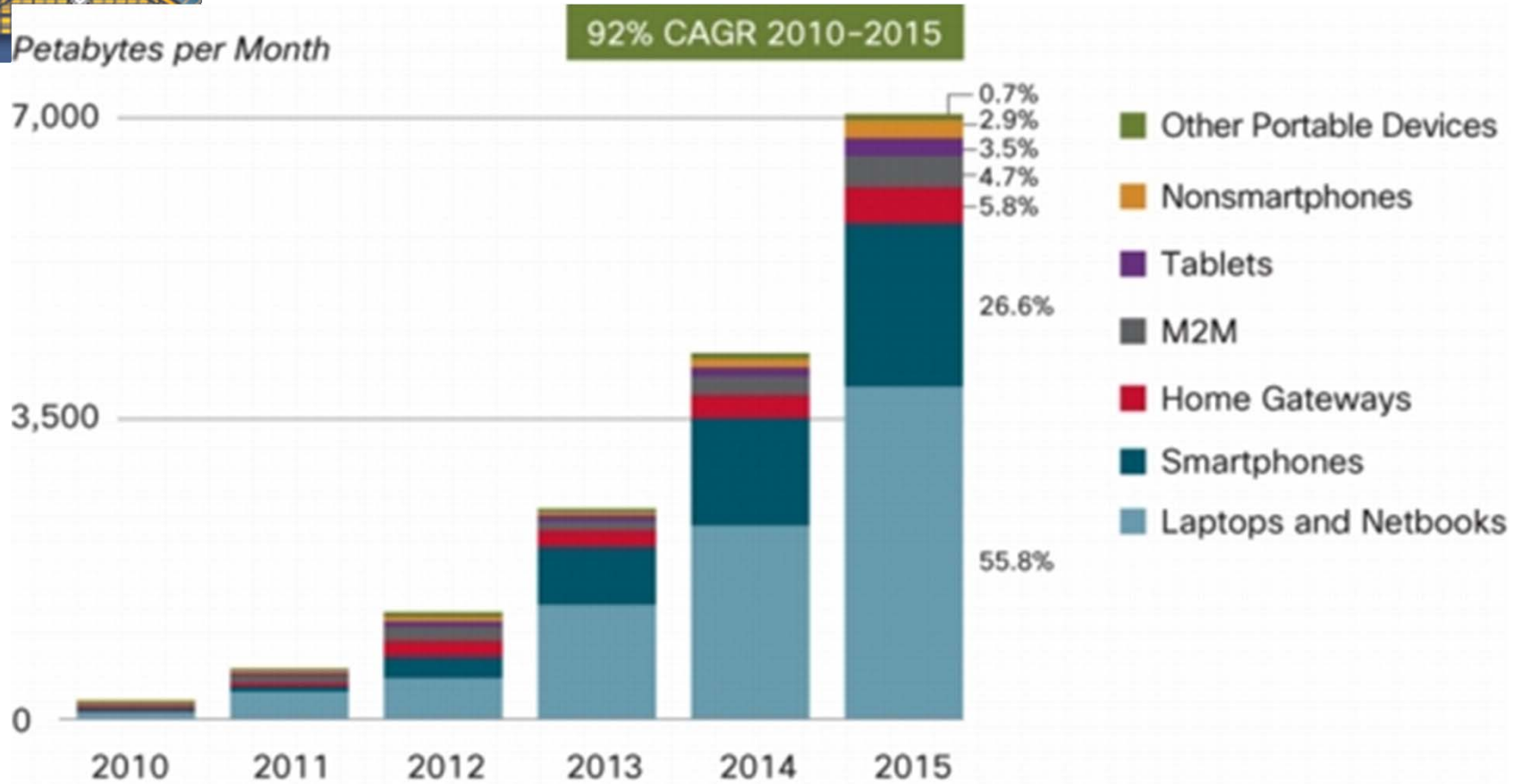
## Market Share - All Devices

	2010	2011 e	2012 e
<b>Nokia</b>	453m	395m	367m
<b>Samsung</b>	279m	319m	385m
<b>LGE</b>	117m	108m	103m
<b>Sony Ericsson</b>	43m	36m	36m
<b>Motorola</b>	37m	39m	38m
<b>Apple</b>	48m	87m	112m
<b>RIM</b>	49m	55m	65m
<b>HTC</b>	25m	50m	66m
<b>ZTE/Huawei</b>	93m	134	169m
<b>Others*</b>	394m	448m	510m
<b>Total</b>	<b>1,538m</b>	<b>1,670m</b>	<b>1,850m</b>

Source: Arete Research Sept 2011 estimates. \* Others incl. Japanese OEMs, ODMs/OEMs using MTK and Spreadtrum, and PC vendors.



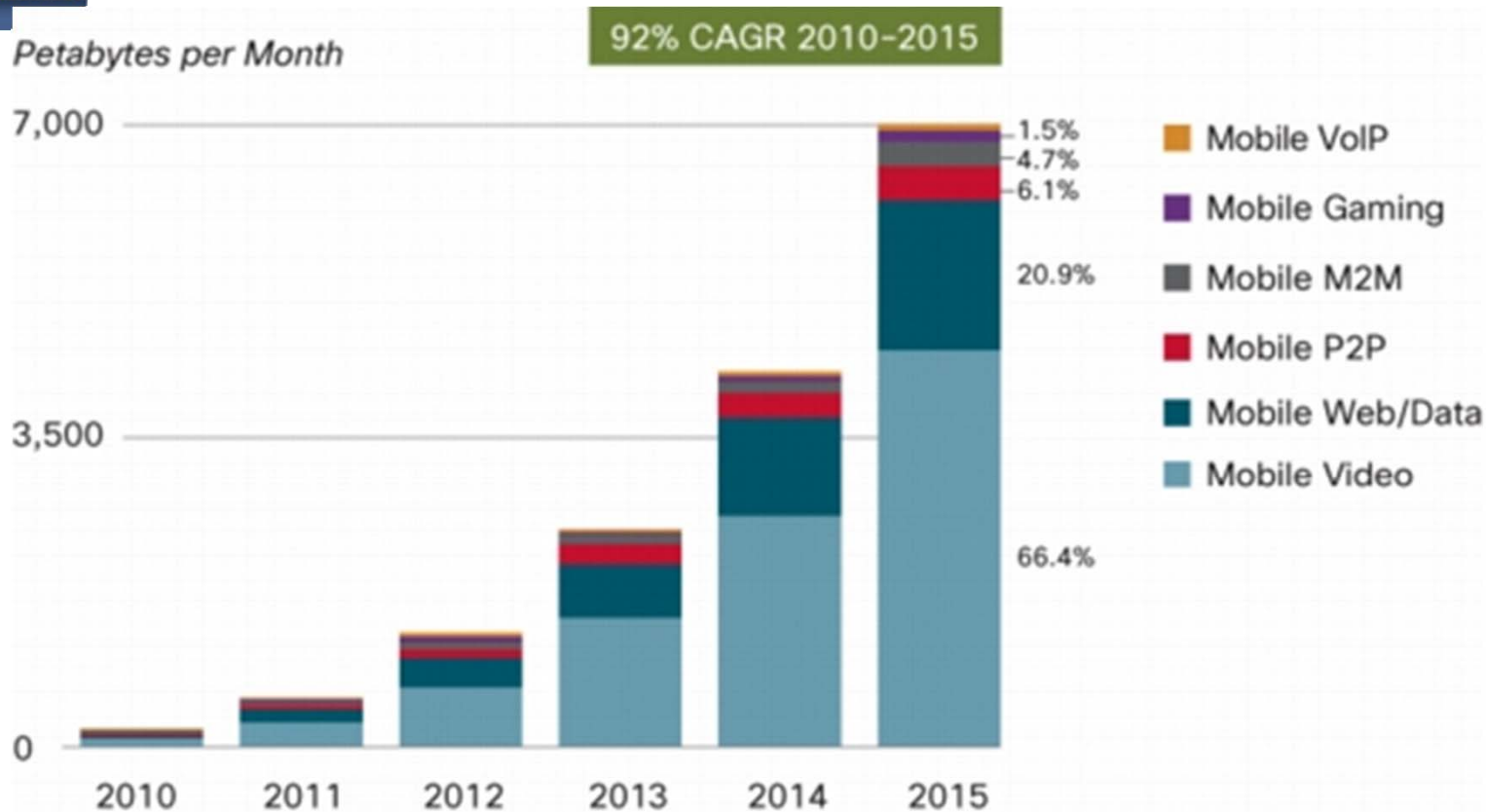
# Laptops and Smartphones Lead Traffic Growth



Source: Cisco VNI Mobile, 2011



# Mobile Video Will Generate 66 Percent of Mobile Data Traffic by 2015



VoIP traffic forecasted to be 0.4% of all mobile data traffic in 2015.

Source: Cisco VNI Mobile, 2011

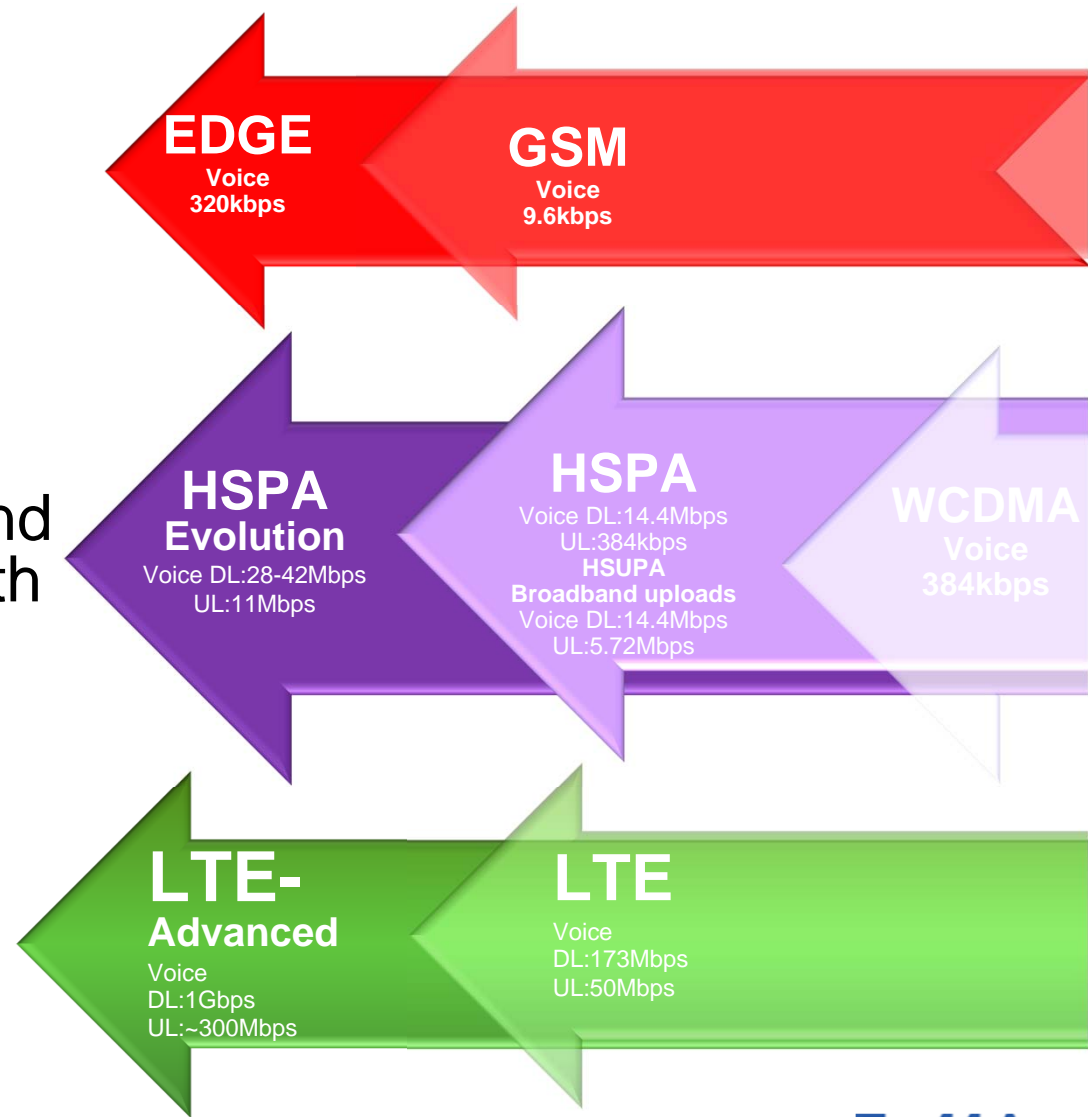


# The Power of Networks

6 billion connections by the end of 2011

500 million HSPA Mobile Broadband connections and adding 19 million per month

21 commercial and 206 planned LTE networks





# Three Waves of Mobile



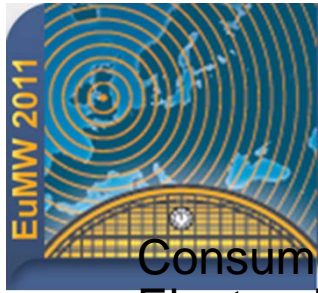
The first wave of mobile was connecting people  
The strength of mobile was its ubiquity, underpinned by its global interoperability



The second wave of mobile is connecting the world's population to the Internet  
The strength of mobile was the exponentially increasing power of its networks



The third wave of mobile is connecting everything in our lives  
The strength of mobile is its ubiquity, its interoperability and the increasing power of its networks



Consumer  
Electronics

## Connected Things: Embedded Mobile

Healthcare

Government

Automotive

Utilities



We will move from over 5 billion connections today to over 15 billion connected things by 2020

Devices from many verticals will be made more compelling by the addition of mobile connectivity

The Embedded SIM will allow for remote management of operator credentials while retaining the 'physical entity' to ensure maximum security

The Embedded SIM will accelerate this market and feature in devices from 2012



# Creating the Connected Life!



NFC



Mobile Advertising



Rich Communications



Embedded Mobile

Creating compelling, secure & interoperable services



# The digital revolution offers endless opportunities...

## Knowledge is power

Enabling consumers to make better informed choices and citizens to hold governments to account

## Time is money

Making B2B transactions quicker, easier, and more efficient

## Spreading best practice

Much easier for the public and private sector to learn about best practice elsewhere

## An all digital world

From smart phones to smart homes – everything becomes connected

## Empowering communities

New opportunities to create communities and bring about positive change

## Entertainment

The ability to create and consume content – from ebooks to the iPlayer

## Improving public services

Improving access and delivery of public services – and saving money

...these are just a few

# Stronger together

- Digital transformation in every sector
- Key lessons globally in scale and solutions
- Next generation networks open up new levels of innovation
- Investment and innovation redefine markets and regulation
- Still room for growth

→ The Web Is Your Oyster



## Acknowledgements:

**BT Archives**

[www.bt.com/archives](http://www.bt.com/archives)

**GSM Association**

[www.gsmworld.com](http://www.gsmworld.com)

**ICT KTN**

[www.ictktn.org.uk](http://www.ictktn.org.uk)

**Mobile Data Association**

[www.themda.org](http://www.themda.org)

**The Mobile World**

[www.themobileworld.com](http://www.themobileworld.com)

**Telecom TV**

[www.telecomtv.com](http://www.telecomtv.com)

**YouTube**

[www.youtube.com](http://www.youtube.com)

**Ofcom**

[www.ofcom.org.uk/2011/2008/2004](http://www.ofcom.org.uk/2011/2008/2004)

**Idate**

[www.idate.org](http://www.idate.org)

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