

Verbal to visual Communications - Engineering the future'

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It's a New Ballgame out there

The Joy of Tech™

by Nitrozac & Snaggy



joyoftech.com

NATIVES v IMMIGRANTS

Digital Natives

Like receiving information quickly from multiple media sources.

Like parallel processing and multi-tasking.

Like processing pictures, sounds and video before text.

Like random access to hyperlinked multimedia information.

Like to network with others.

Like to learn "just in time".

Digital Immigrants

Like slow and controlled release of information from limited sources.

Like singular processing and single or limited tasking.

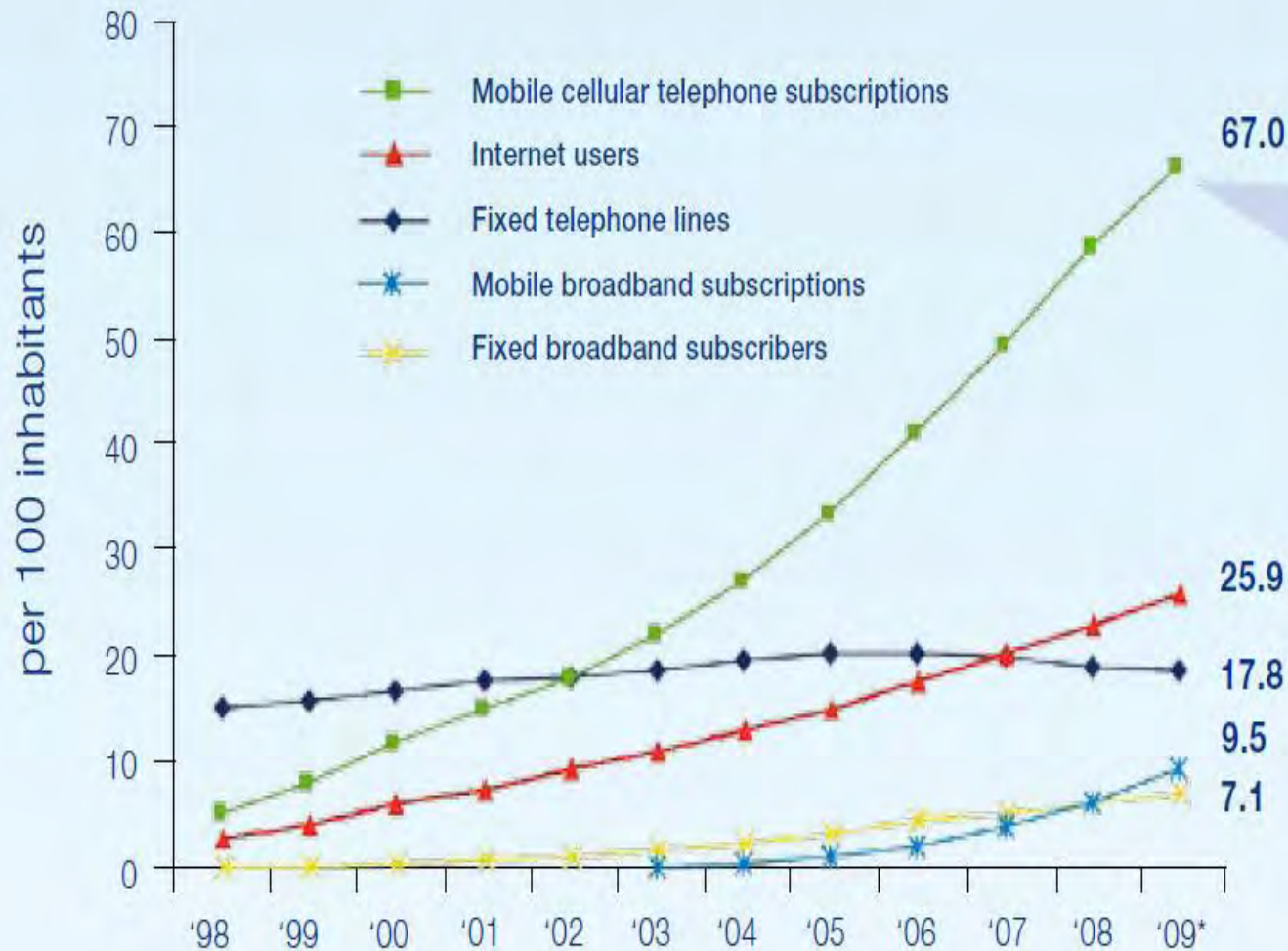
Like processing text before pictures, sounds and video.

Like to receive information linearly, logically and sequentially.

Like to work independently.

Like to learn "just in case".

A decade of ICT growth driven by mobile technologies

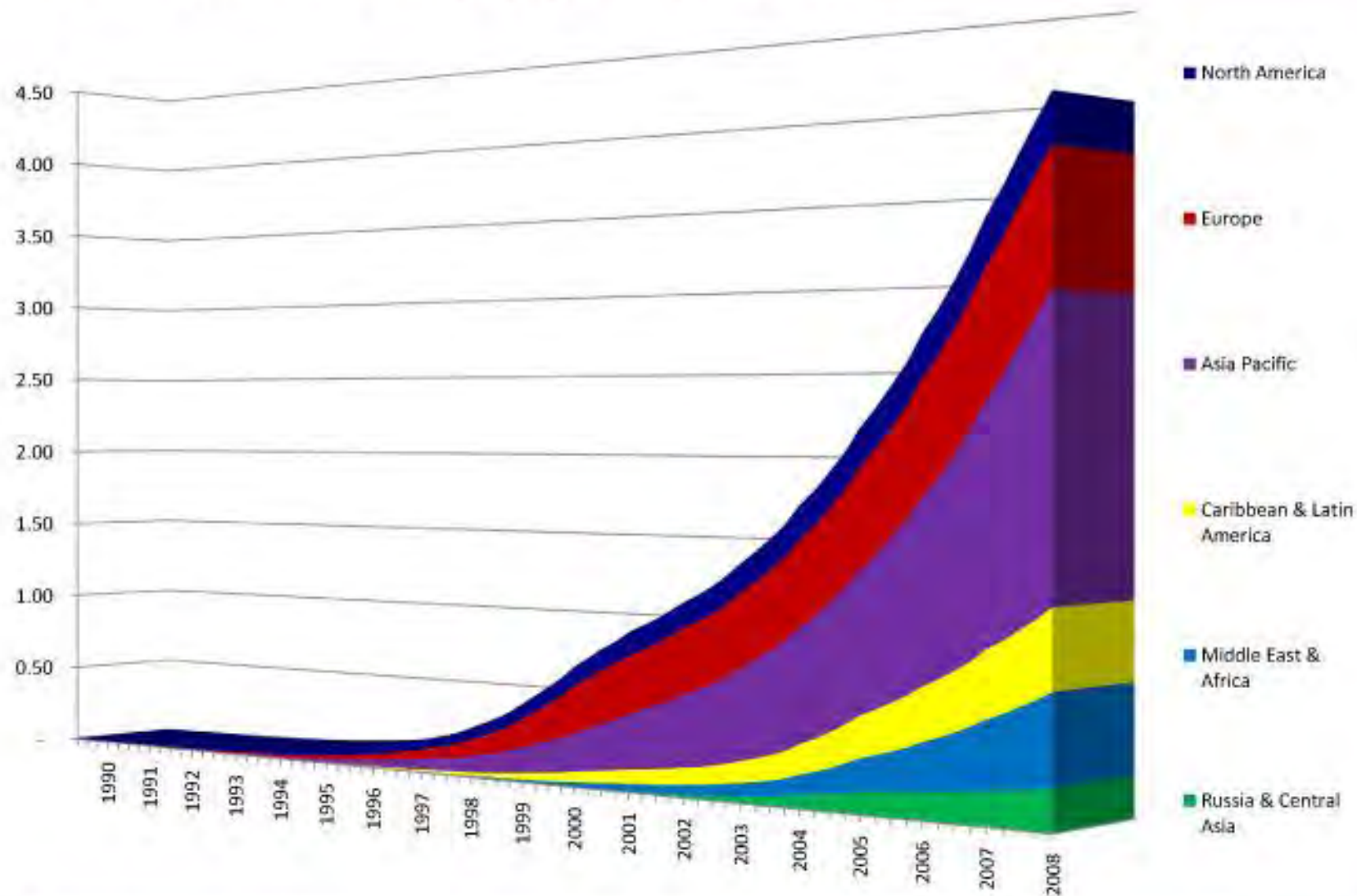


An estimated 4.6 bn subscriptions globally by the end of 2009

Source: ITU World Telecommunication/ICT Indicators Database.

* Estimates.

Global Mobile Connection Base (bn) by Region, 1990-2008



Handsets have changed...



Eyetrak glasses for watching DVD movies

Digital camera with built-in modem

In pocket: digital voice recorder, MP3 player, laser pointer . . . and a pencil

Digital watch that sets itself, holds calendar, address book and calculator



What is so great about a 'text'?

- You can almost guarantee a text **will be read** by the recipient
 - *How many emails are **unread** in your inbox right now?*
 - SMS is the springboard to **engaging interactivity/ compliance**
- SMS is the quickest and most efficient way in getting important messages out to your staff or patients
- More **retailers** are using SMS than ever before (Ocado, Tesco, Argos, DSGi, Selfridges, M&S, Next....)



Mobile Usage & Mobile Internet (GPRS & 3G)

- **15% MBB and 23% smartphone data access in 2009 ***
- There are around **25.5 million** 3G handsets in the UK *
- Brands can **no longer** afford to treat mobile browsing customers as an *optional extra* when defining their web strategy
- iPhone has changed the way in which people use the mobile internet.
- Smartphone growth is exploding and internet access will **overtake** PC usage



We all live in a 'Connected World'

Users are rapidly adopting new **habits**



More **powerful** and **enabled devices** will be available



Digital **contents** will continue **growing** and will **stored**



New **services** will **flourish**



New services coming...



Today



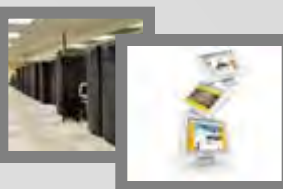
- Internet access
- Mobile data
- Text Messaging



- Instant messaging
- VoIP
- Podcasting

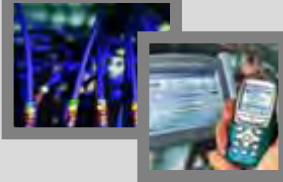


- IPTV
- Internet TV



- Hosting

Tomorrow



- Ultra Broadband Access (100Mb/s)
- High-speed Mobile Data
- Data Fuel Stations



- HD Videocalls
- HD Telepresence



- Personal TV
- HD TV, 3D TV
- Augmented Reality



- Virtualization
- Web mashing, Data Mining

Driving innovative new services

Connected Roads



Connected Homes

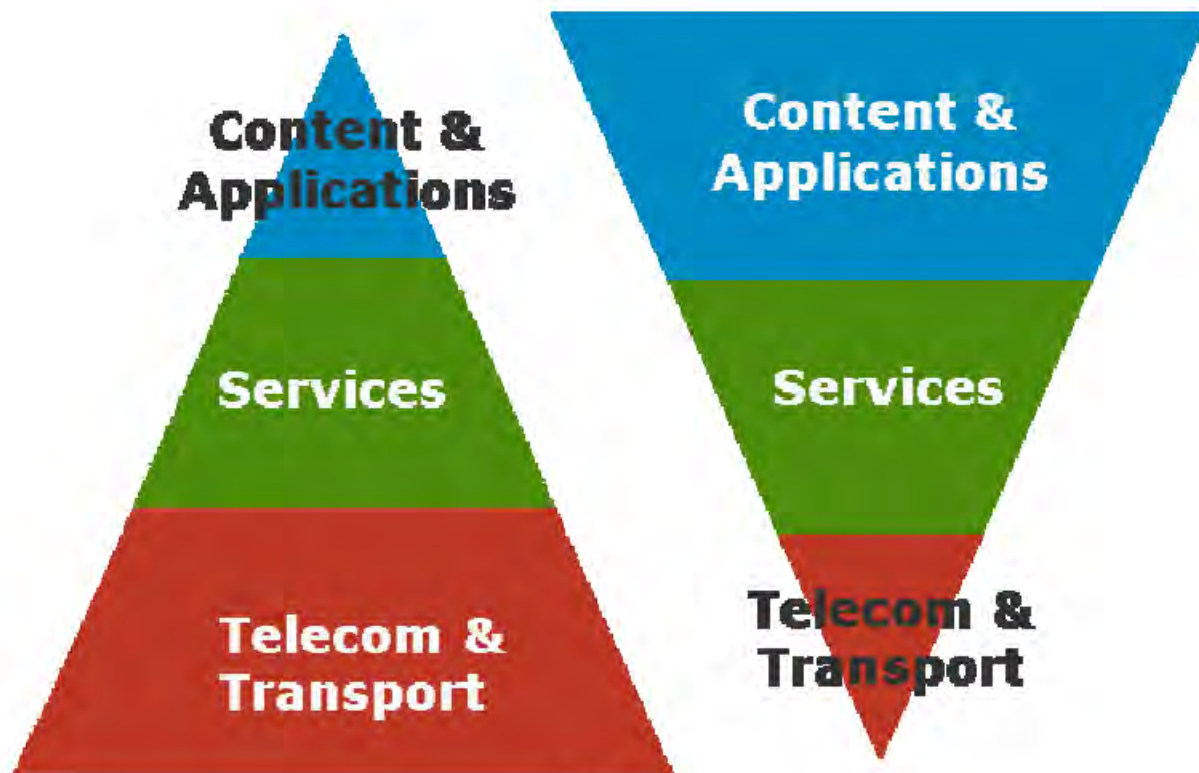


Connected Cars

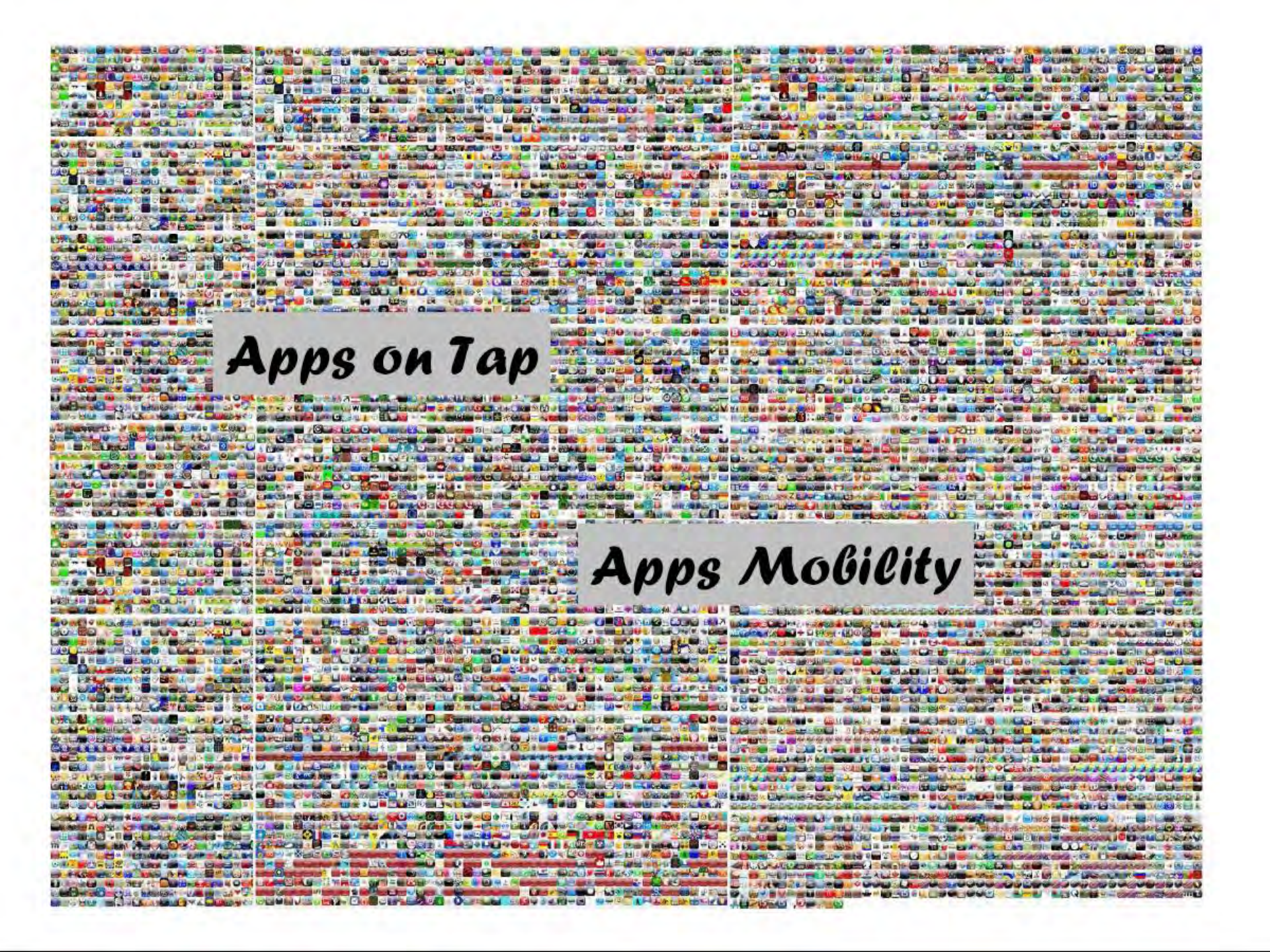


Connected Learning





Informa



Apps on Tap

Apps Mobility

Message to the Mobile Industry



Basics

The Three D's of 3D (dimensions)

- **3D CGI**
- **Stereo 3D (flat screen)**
- **'Reality' 3D**

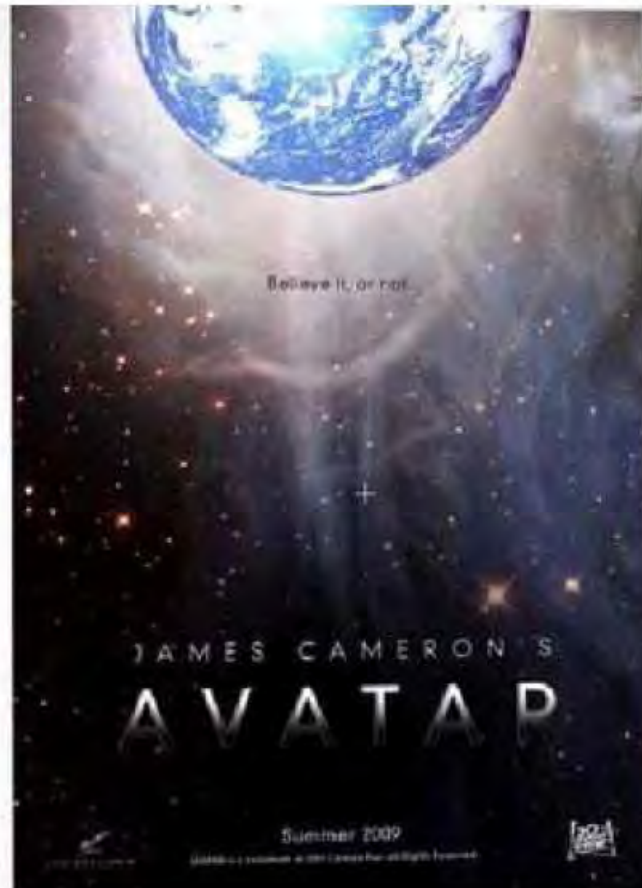
The Three C's of 3D

- **Content**
- **Capability**
- **Connectivity**

Consumer Desire



Blockbusters!



Not Just Blockbuster Movies!



Channel 4 Broadcasts 3D Programmes For A Week

16 November, 2009, by [Desire Athow](#)

[Show](#)

Channel 4 will broadcast three dimensional pi this week until next Sunday and is partnering v give away free 3D cardboard blue spectac

The g will be av: super November various are u docum are u announce



Denver Nuggets Game (CrossView 3D)

ADD TO FAVES BLOG THIS ALL SIZES ADD TO GALLERY



To view in 3D, cross your eyes until you see three images. Bring the center image into focus and it will appear in 3D.



3D Sports and Nature (yt3d enable=true) **HD**

Best viewed in 720p.... The 3D Film Factory's 3D Demo Reel. Footage includes nature scenes, football, surfing, skateboarding and

★★★★★ 4 weeks ago 302 views 3deefilm



Montreal Olympic Stadium in 3D Channel 4 3-D we... **HD**

Montreal Olympic Stadium in 3D. Its Olympic heritage www.rio.gouv.qc.ca inherited from the games of the XXI Olympiad, (1976) the Olympic Park is

★★★★★ 4 months ago 1,119 views photo3d



Cycle Dirt Sweden

Cycle Dirt stunts bmx jackass bam element kona backflip tailwhip super man seatgrab 360 barspin x-up! yt3d enable=true ... sports

★★★★★ 1 year ago 4,556 views manna222222



3D Wide Angle Night Drive (Twin GoPro HD Test N... **HD**

com ... "GoPro HD" "Wide Angle" Stereoscopic "YouTube 3D" yt3d yt3d enable=true yt3d aspect=16.9 yt3d left=0_0_1_0.5

★★★★★ 3 months ago 10,841 views incuel3D



Game Stop Shootout

sub! yt3d enable=true ... Game Stop Shootout this is really funny pwned fred nigahiga kyle busch die nascar stop motion yt3d enable=true yt3d ...

★★★★★ 9 months ago 4,018 views 619dow

World Cup 2010 to be broadcast in 3D

Thursday, 12 November 2009

Football fans could be watching World Cup matches next year and in 3D in plans being drawn up by FIFA, writes Adrian Jones exclusively for TVB Europe.



gov...
1d c...
ds o

NOW IT'S 4-3-3D

England's matches to be screened in 3 dimensions

By Robbie Collin, 10/11/2009

FOOTBALL'S a game of two halves... now it will soon be a game of three dimensions too.

England's 2010 World Cup matches will be broadcast in eye-popping digital 3D in our cinemas.

Cineplex are planning to not just LIVE 3D coverage of World Cup matches from next year's tournament in to selected cinemas.

An industry source said: "For all the fans who can't make it out in South Africa, this will be the next best thing to being there."

Thrill

The movie chain - which has 75 UK multiplexes, including five of the country's 10 most popular screens - is experimenting with brand new digital projectors that were installed in its cinema last January.

They took images twice as sharp as a high-definition Blu-ray.



2012 Olympics to go 3D

Comments: 12
By Maxine Shen
Last Updated: 3:20 AM, September 15, 2009
Posted: 2:02 AM, September 15, 2009

GET ready for a whole new way to experience the Olympics larger than life. Sports the UK's Guardian reports.

...in 3D.

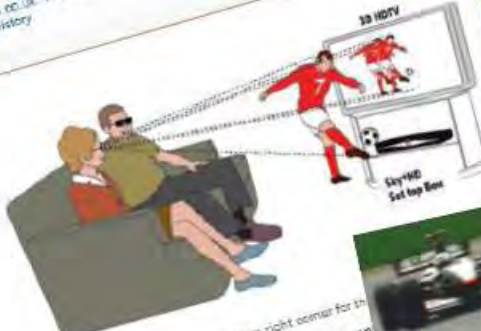
...thinking about mobile



News / Media / R/SkyB

Sky shows off new 3D TV technology

Owen Gleeson
Glasgow, Scotland, Thursday 18 December 2008 13:27 GMT
Article history



Sky's 3D system. Click in the bottom right corner for the...
...that broadcasting sporting even...
...in 3D will give it a comp...



BBC broadcasting Rugby Six Nations match in 3D

Richard Laxton

...BBC plans to test a 3D HD broadcast of a Rugby Six Nations match next month. A lot like the NBA's test with last year's Scotland and England will be captured by three cameras used by the NBA - to an audience watching with the companies forming 3DFRM, which is partnering with a new style of camera work and post production. We work excited about these tests (we'll just think it.)



3D in the Home

3D Glasses



www.ConfusedAbout3D.com !!

60" 3D Screen



What's Happening?

Infinite Content

Delivery doesn't resemble broadcast – C2C, C2S, S2C

Screens Everywhere

...and they are not all nailed to the wall!

Mobile Device = Video Storage and Streaming Hub

...like what happened
with music



My iPhone Purple = Video

Viewing on best
screen available
...like music

What's Next?

S3D, Wii level games, VR, AR

3D over 3G to 5B?

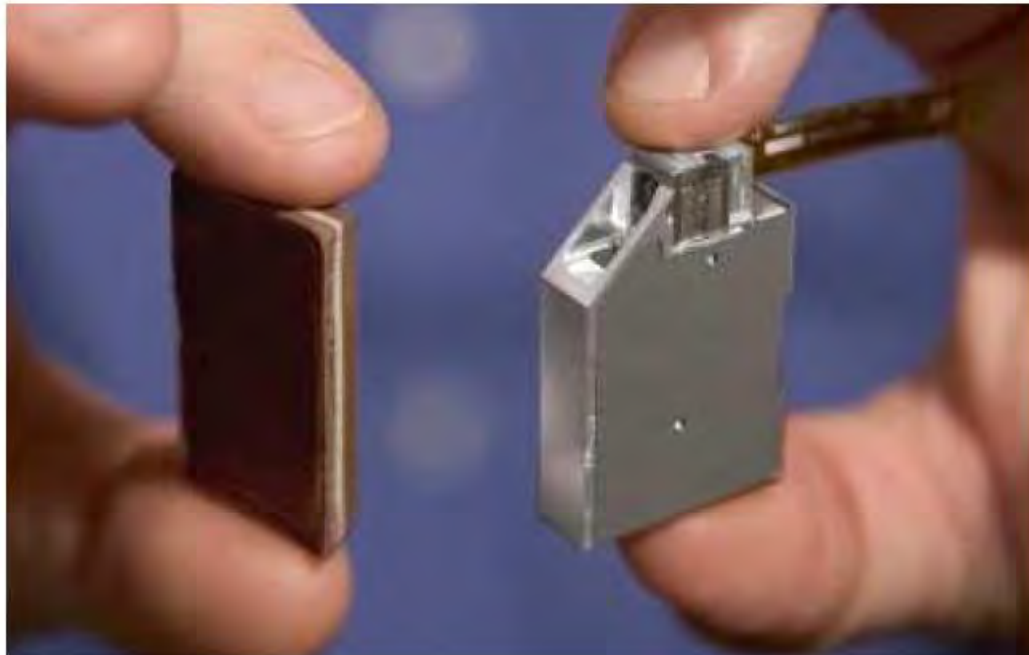
(where "B" = billion)

Needed:

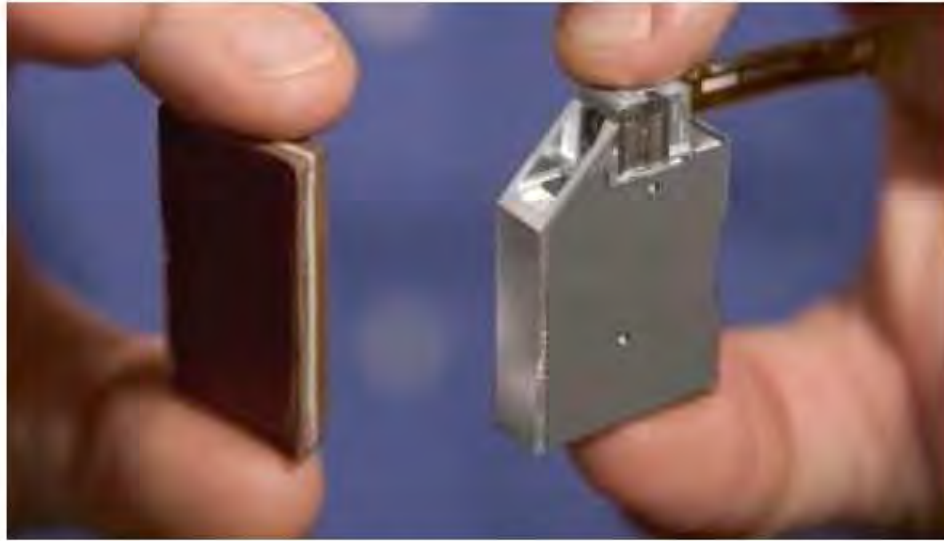
VLAS

Devices and

Accessories

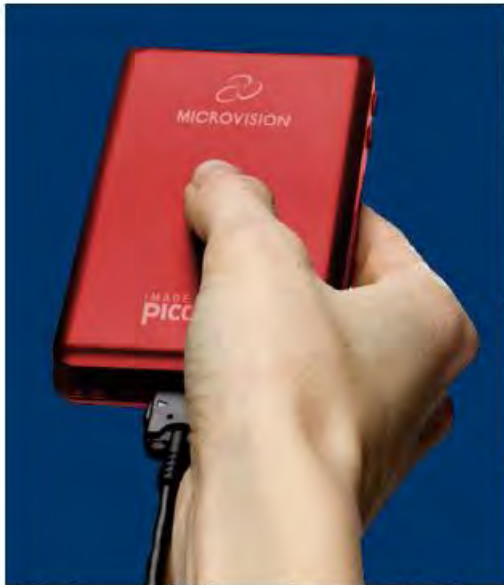


Capability and Connectivity



Virtually Large...Actually Small





Virtually Large...Actually Small



3D?


MICROVISION

<http://tinyurl.com/45mv3u>



Virtually Large...Actually



 **VUZIX®**
View the Future®

It all starts here

To produce moving images that appear to be three-dimensional, two separate images need to be captured at the same time. The cameras used are standard high definition cameras, which act like a pair of eyes and focus on the left and right angle of an image.



WHAT EACH CAMERA SEES

Camera 1 focuses on the left angle of a moving image



Camera 2 focuses on the right angle of a moving image



The two images from both cameras are then edited so that the colours match exactly and focus and depth are consistent to ensure smooth transitions between the two images. The images are then converted into one three dimensional image via a 3D processor.



3D Processor

A digital MPEG HD encoder converts the three dimensional image into a high definition quality digital image which can then be transmitted over to the Sky Satellite in space.



Digital HD encoder



Transmitter

Sky Satellite

The Sky Satellite in space sends a signal of this digital image to the Sky Mini Dish and Sky+HD box in the home. Sky+HD set top boxes already have the necessary processing power to be able to receive the 3D digital signals, store them and then deliver them to a 3D TV.



Sky+HD Set top Box



To view the three dimensional image the viewer needs to wear 3D TV glasses which present the left eye from seeing the image intended for your right eye and vice versa. The brain then processes each image to create one combined picture providing a level of depth which means that the content is able to appear in front of and behind the glass TV screen, therefore appearing three dimensional.

And finally ends up on your TV

OSR qmW

Personal Viewing of 3D

3D Glasses



www.ConfusedAbout3d.com !!

60" 3D Screen



3D Glasses
(60" 3D screen inside)



**What could be
more mobile
than that!**

What about Augmented Reality?

Mobile Augmented Reality and Location, Image and Scene Aware Applications

- Moving map, gaming, location-based marketing training and plain old video
- Potential to re-define education and gaming

Books, Magazines and Print Media “coming to life”

....Lots More!





amazonkindle

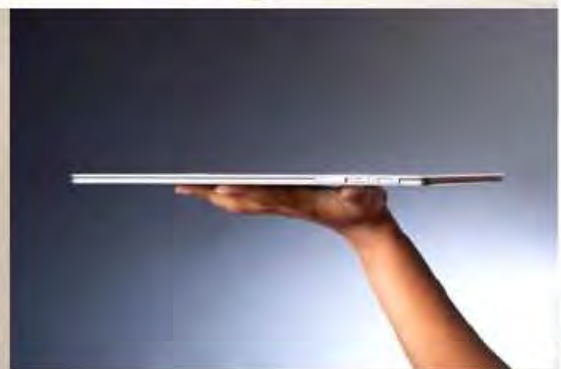




Image Recognition

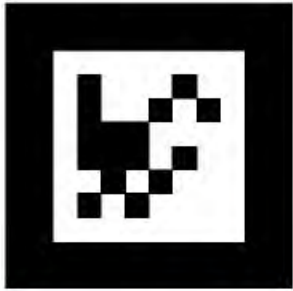
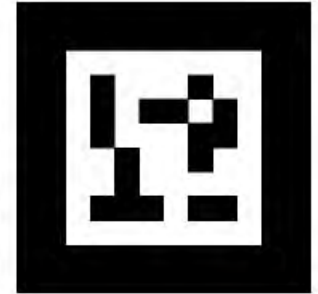


Image Recognition



This is an
Interactive Image



GALAXY
PORTAL

SAMSUNG
TURN ON TOMORROW

SAMSUNG

Lock this and
it's yours

KIT's notes

- A little gossip
- 'The' dress
- Coffee

Discover the perfect girls' day out.



GALAXY
PORTAL

SAMSUNG
TURN ON TOMORROW

SAMSUNG

Sofa

Taken away

Club

- More cash
- That' girl's number
- Watch the footie
- Cash

Discover the ultimate night out.



IBM SEER Application on Andriod

"Everything you wanted to know about Wimbledon"

<http://www.youtube.com/watch?v=7VZoDmqcZ34>



Wimbledon 2009 - IBM Seer Android Video



The Future Of Portable Video Is Upon Us

BBC documentary series called “Visions of the Future”



“In the Future the Internet will be everywhere, including your sunglasses...

...in other words, your sunglasses could be your future home entertainment centre.”

BBC - Michio Kaku



<http://tinyurl.com/94fy9a>



<http://www.allvideoglasses.com/>



Nokia World 2009



From ISMAR09

See Thru Video Eyewear - Many New Possibilities

Mobile Augmented Reality and location-aware applications

- Moving map, gaming, location-based marketing training and plain old video
- Potential to re-define education and gaming

Imagine books and magazines coming to life.



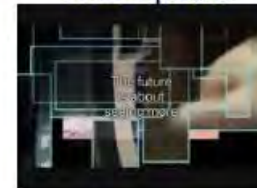
Virtual Avatars



Books and magazines



Geo-Spatial



Training

Convergence

Is the Consumer taking Charge?



**Is Technology enabling
convergence at the edges?**

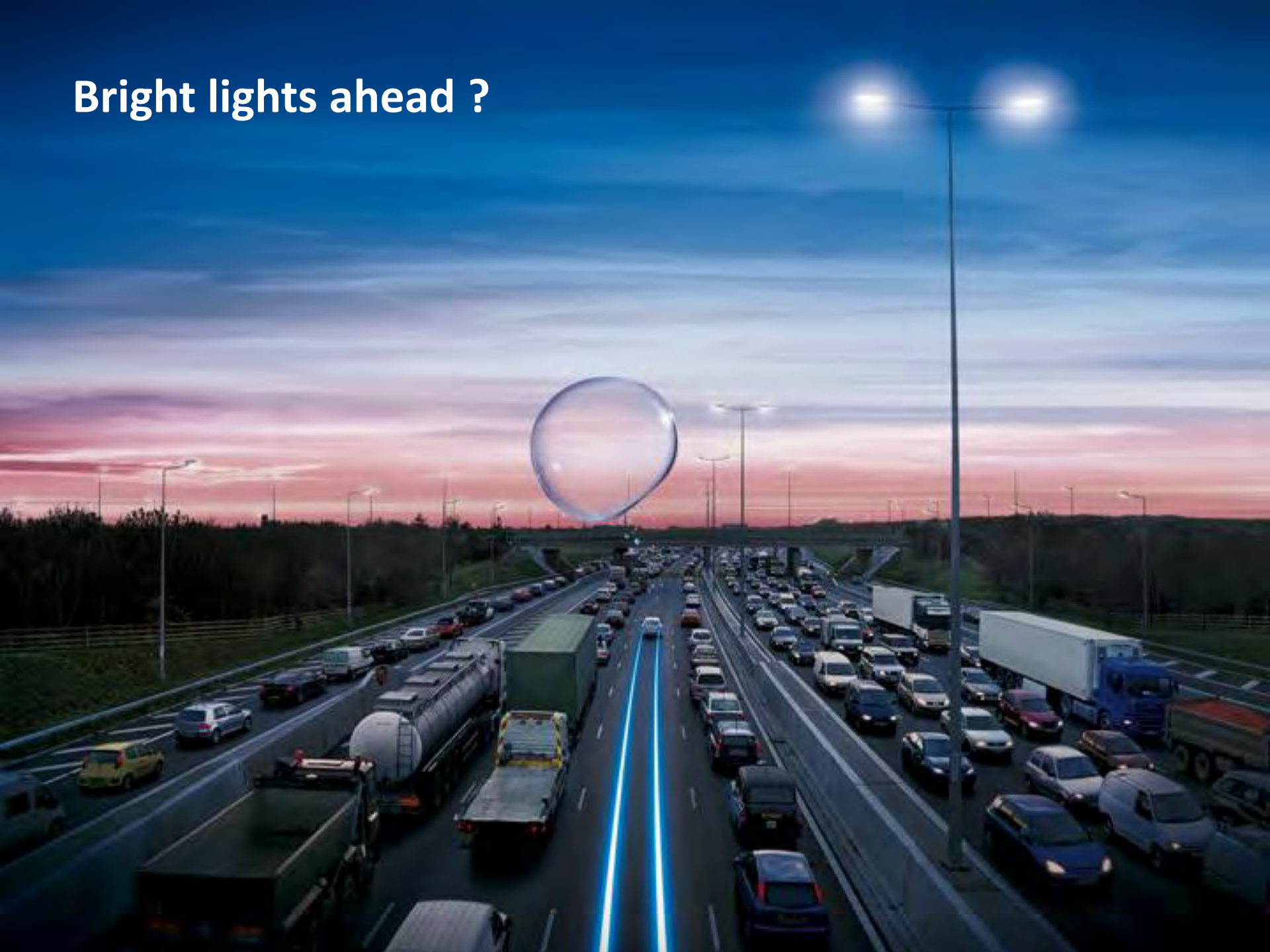
Outlook for 2012?

- **3D mainstream across the board**
 - Lots of content – all types, all levels
 - Sports are a ‘killer application’
 - 3D cameras available now for consumers, more by 2012
 - A screen deficit will probably restrict consumer viewing
 - 3D via 3G phones – available now
- **AR mainstream in Mobile**
 - High penetration of capable phones
 - Location + compass pointing now
 - Image & object recognition well developed
 - See-through glasses available
(probably not mainstream by 2012)
- **A few observations from CES and Mobile World Congress**
 - Lots of image recognition options (AR enabler)
 - LTE probably a given – Stadium and Tube coverage advances
 - Lots of new connectivity options for consumers
 - Games, Games, Games!
 - Health, medical, fitness Apps galore!
 - Wearable technology (“sensors, sniffers and peepers”)

Conclusions

1. The only constant is change
2. Ease of use / Human factors remain vital
3. Wireless and Internet solutions will both have a growing role
4. Growing role for 3D and AR
5. Smarter homes, smarter cities
6. By 2020 estimates vary - between 20 and 50 Billion Internet capable devices

Bright lights ahead ?



A Portland forecast

- **Touch screens will be the new newsprint**
- **Location, location, location**
- **Search will go social**
- **More and more news will be crowd sourced**
- **Twitter will be even bigger...**
- **Content will be unlocked**
- **Digital will be front line in crisis comms**
- **Content will be king again**
- **Social media as the new water cooler**
- **Self-improvement digital style**

Follow Mark at www.twitter.markflanagan2 , Portland Communications – Jan 2011

www.3D4Me.tv
www.AR4Me.com
www.Visionsof2015.eu



WebMobility Ventures
Sixty Second Due Diligence
End User Focus

Self Evidence
Familiarity – “I know what it is!”
Conspicuous Value
“Wow, that would be useful/fun”
Profound Simplicity
“Eureka! I can make it work!”

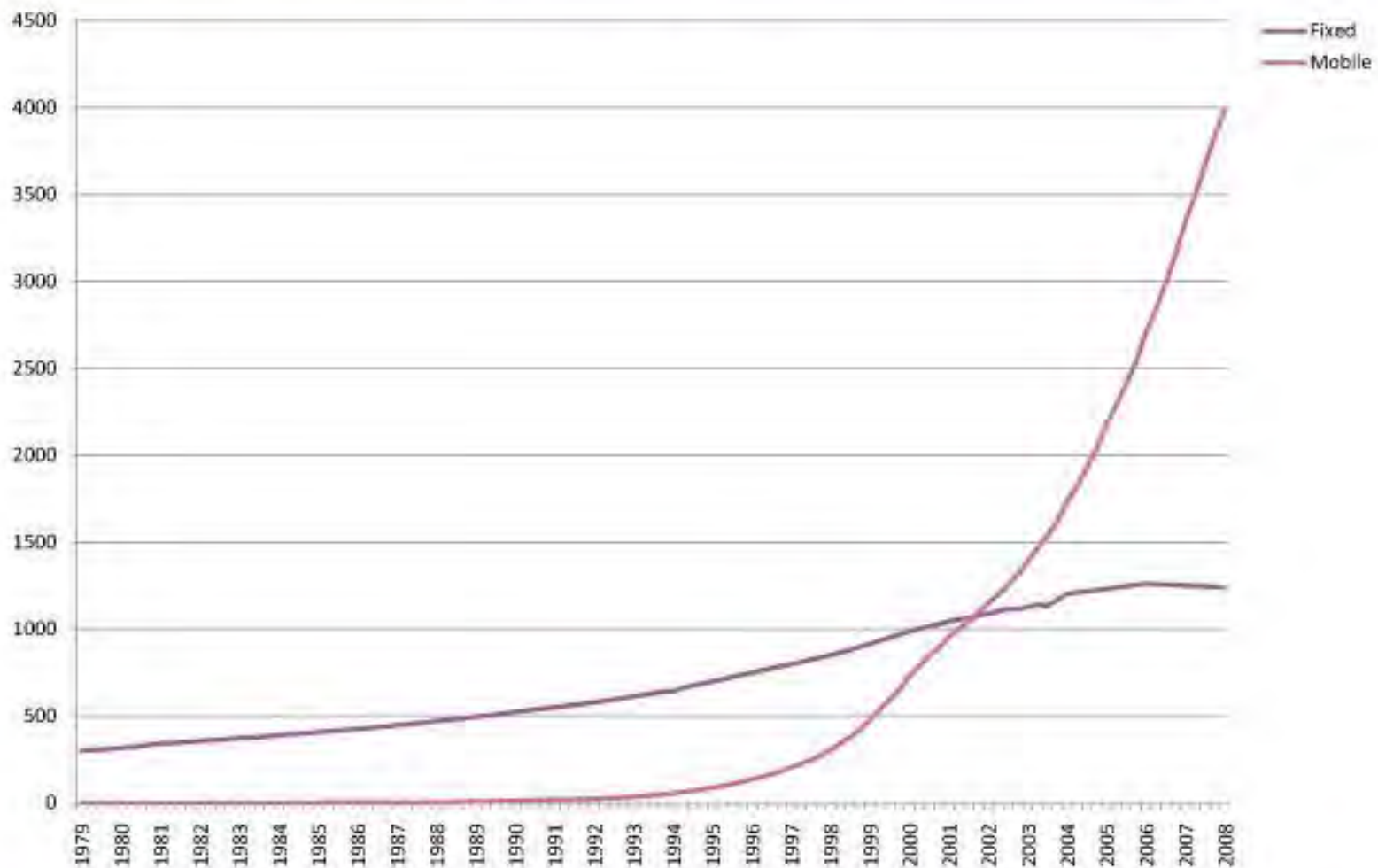


Ken Blakeslee
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Eyewear, 3D screen, AR and other Mobile video references

- [10 sources from 2010/11 :](#)
- <http://www.techradar.com/news/world-of-tech/10-tech-trends-to-watch-in-2011-915152>
- Note the www.confusedabout3d.com slide. Q1 2010 .
- Collection of articles on 3D, AR, Personal Mobility, etc. - www.pocketlook.com
- See <http://news.bbc.co.uk/1/hi/8695460.stm>. - interesting BBC segment on Pico Projectors and Video Eyewear
- <http://www.movidius.com/>
- <http://questvisual.com/>
- <http://www.youtube.com/watch?v=yyzRMDZDB4Y>
- <http://www.youtube.com/watch?v=WANpzCJHcvU&feature=related>
- <http://www.youtube.com/watch?v=aPUhHX3G8IY>
- <http://ngm.nationalgeographic.com/big-idea/14/augmented-reality>

Global Connection Base (m), Mobile vs Fixed, 1979-2008



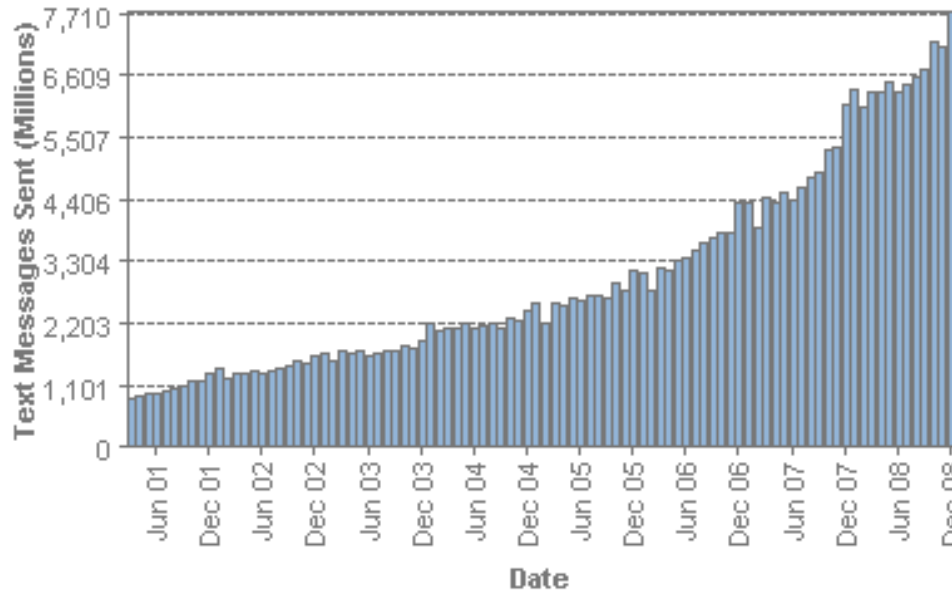
Mobile Usage & SMS (UK Data)

There is now **132%** mobile penetration in the UK – around **80.3million** handsets *

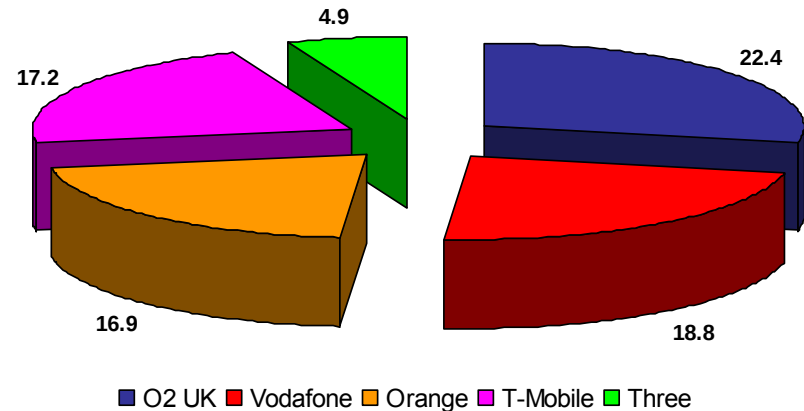
104 billion SMS messages sent in 2009 – compared to **1/56.9 billion** in 1999/2008 *

Average 4 SMS messages per person sent every day in the UK in 2009

There has **never** been a better to time for you to engage with your customers via their mobile!



2009 connections: 80.3 Million



* source: OFCOM Aug 2010 / MDA

Agenda

1. International reach of ICT
2. A Digital connected world
3. Mobile and 3D
4. Mobile and AR
5. Applications anywhere anytime





Convergence

A Consumer Phenomena?

***Voice, Messaging and
Media on the Move?***



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