



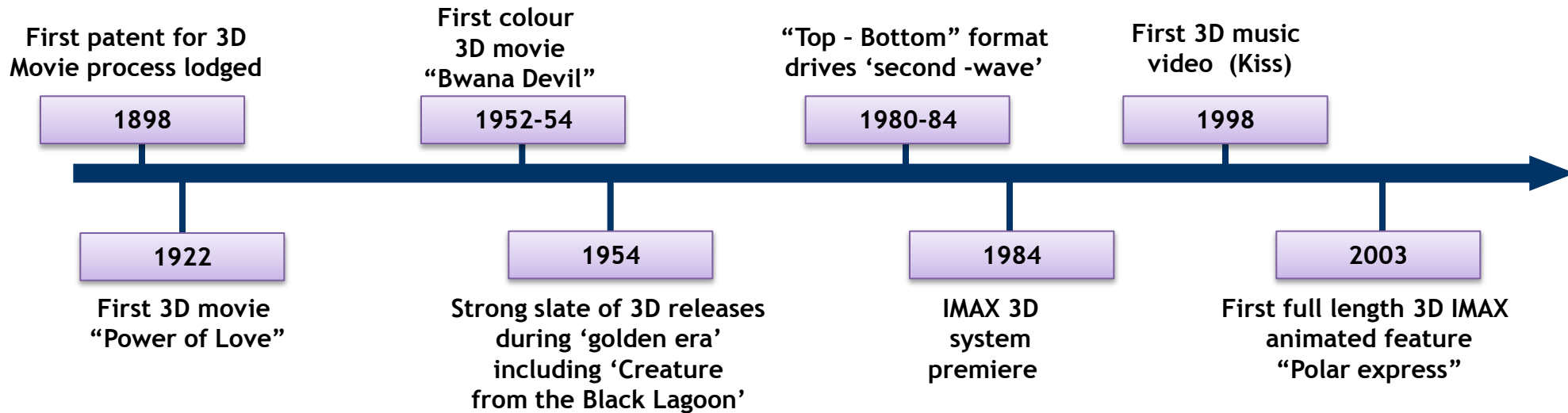
# The Impact of 3D on the Blu-ray Business

Jim Bottoms  
Director & Co-Founder

26<sup>th</sup> March 2010



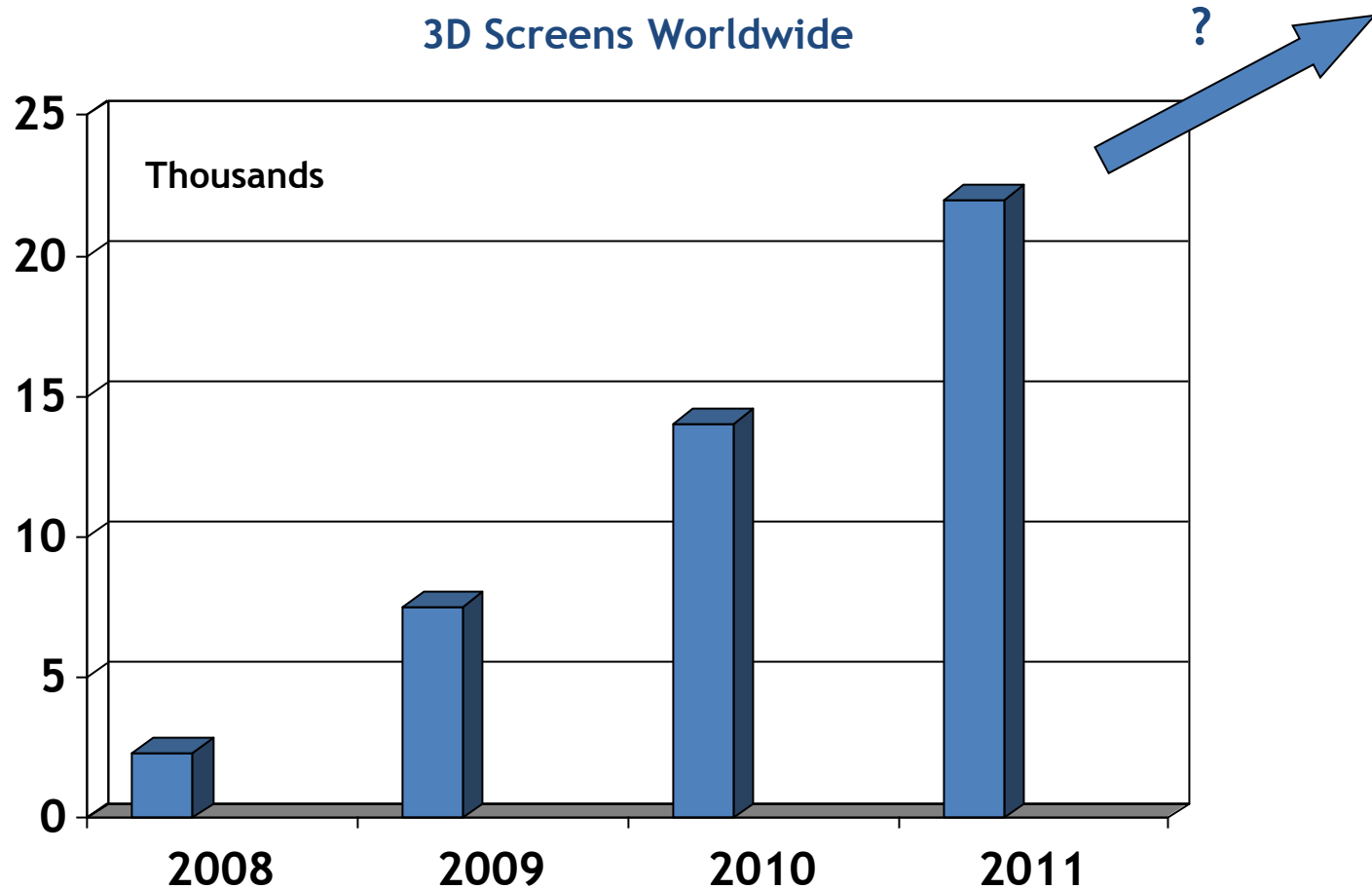
# 3D Has A Long History...



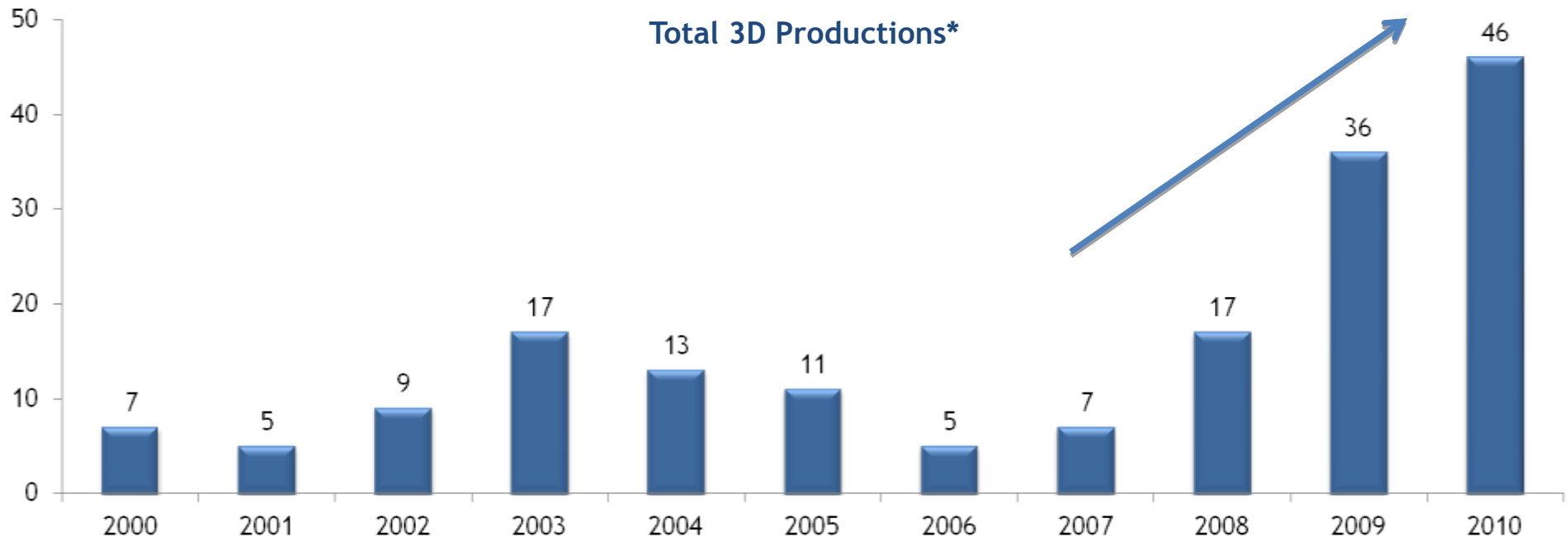
...But This Time We Think It's Here To Stay!

- Digital technology has enabled "modern 3D"
  - Moved from gimmick to viable, high quality solution
  - Anaglyph glasses replaced, therefore colour distortion eliminated
- Unparalleled level of cross-industry commitment.

# 3D Digital Cinema Rollout



# Movie Output Will Need To Be Sustained To Drive 3D



- Hollywood released 16 major 3D features in 2009 and this will increase to 20 in 2010.
  - ▶ Total 3D production for 2009 and 2010 shown above includes non-theatrical releases, shorts, specials, cartoons etc, including releases from independent studios.
  - ▶ Many releases for 2011 and 2012 are not yet announced or finalised.
- Animation currently dominates (55% of 2010 titles), but genre will broaden as 3D exhibition capacity continues to grow and a Home 3D market develops.

\* Includes shorts, special features and other non-theatrical releases

# Hollywood 3D Boom

- 16 major Hollywood 3D features in 2009, will release 20 in 2010.
- Number of cinema 3D screens is a limitation, especially with Avatar.
  - ▶ Avatar has run for 16 weeks, 70% of US Box Office from 3D screens.
- Animation 70% of titles in 2009: new and re-releases.
  - ▶ All major new animations have a 3D version.
- Title availability will expand with more 3D cinemas and Home 3D.
- Live action Science Fiction, Horror, Musicals, Action all good in 3D.
- Classic re-releases possible e.g. The Matrix, Star Wars, Jurassic Park.



# Consumer Awareness and Interest in 3D

## Who Has Seen 3D at the Cinema?

*“Have you ever watched a 3D Movie at the movie theater/cinema?”*

	Yes	No
USA	61%	39%
Europe*	48%	52%

## Who Has Seen 3D on TV at Home?

*“Have you ever watched anything in 3D on TV at Home?”*

	Yes	No
USA	26%	74%
Europe*	15%	85%

## Do Consumers Want 3D at Home?

*“Soon you will be able to watch a new type of 3D in the home. You will need glasses, but not the red/green ones used in the past. The quality will be much better than in the past. How interested are you in watching 3D at home?”*

	Interested**	Not interested
USA	71%	29%
Europe*	70%	30%

## Will Consumers Be Willing To Get a New TV For 3D?

*“How likely is it that you would be willing to buy a new TV to watch 3D (assuming the TV is slightly more expensive than a regular High Definition TV)?”*

	Interested**	Not interested
USA	38%	62%
Europe*	45%	55%

Source: Living With Digital Internet survey - Futuresource February 2010 (2,470 Adults)

\* Aggregate of UK, Germany and France.

\*\* Reasonably, very or extremely interested

# Pay-TV Sees A New Opportunity in 3D

- Pay-TV will use 3D to differentiate and add subscription value.
- 3D movie VoD services: PPV and subscription.
- Premium sports: football, tennis, title fights, World Cup, Olympics.
- Concerts, wildlife docs, other specials also important.
- Commercial market (bars, pubs) + home as 3D-Ready sets become available.
- Uses existing infrastructure, STBs, compatible with new 3D TVs.

## Operators/Content Providers



## Cable Networks

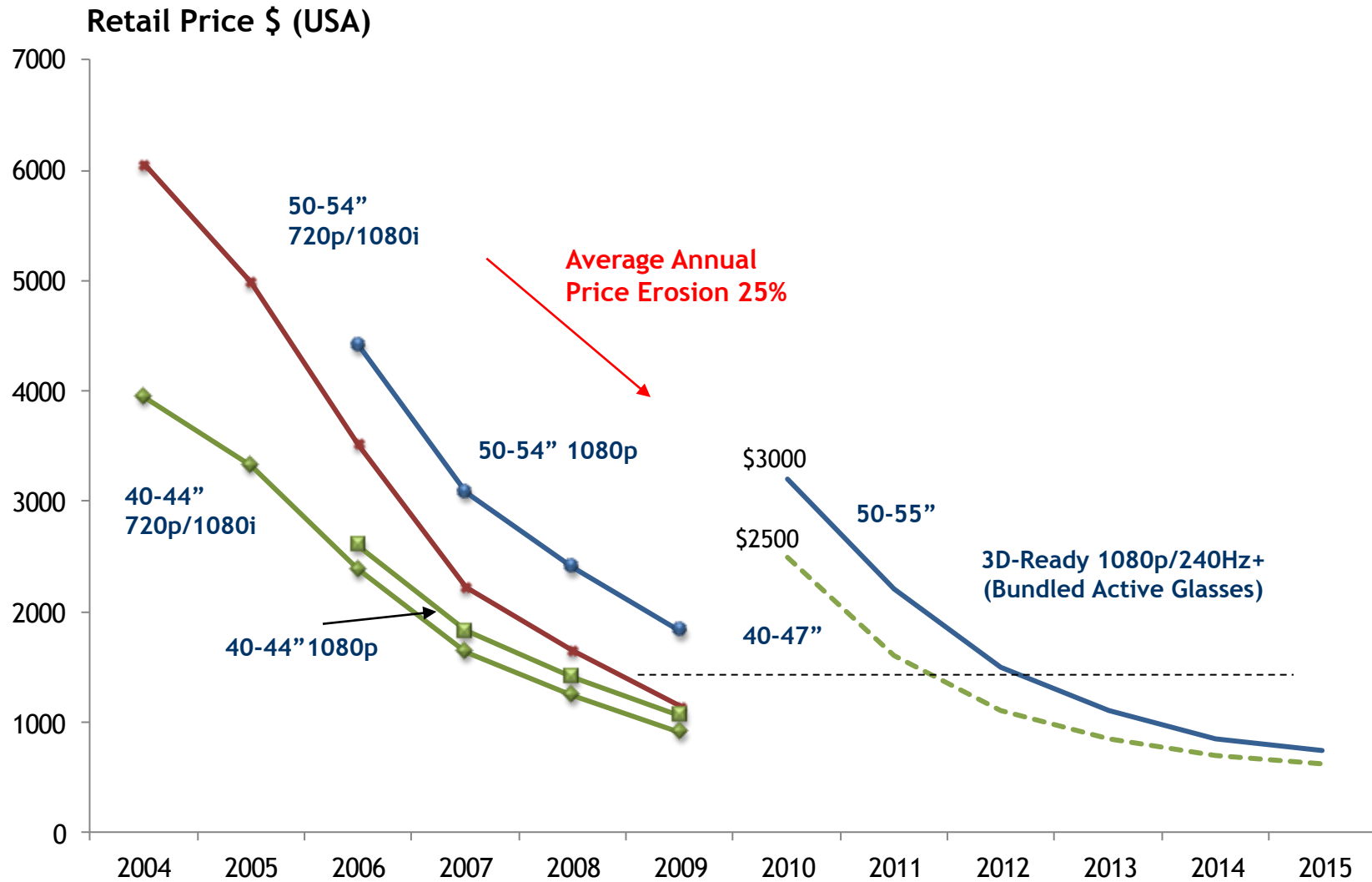


# 3D-Ready TV Products and Pricing

- 3D will be a feature on high end 200/240Hz LED LCD and plasma sets initially.
- Will support Full HD 3D Blu-ray and broadcast formats.
- Entry prices \$2,500-\$4,500, depending on screen size and bundled glasses.
- Minimum prices will fall to \$1,000 or less within 3 years.
- 3D standard on large screens by 2015, incremental chipset cost minimal.

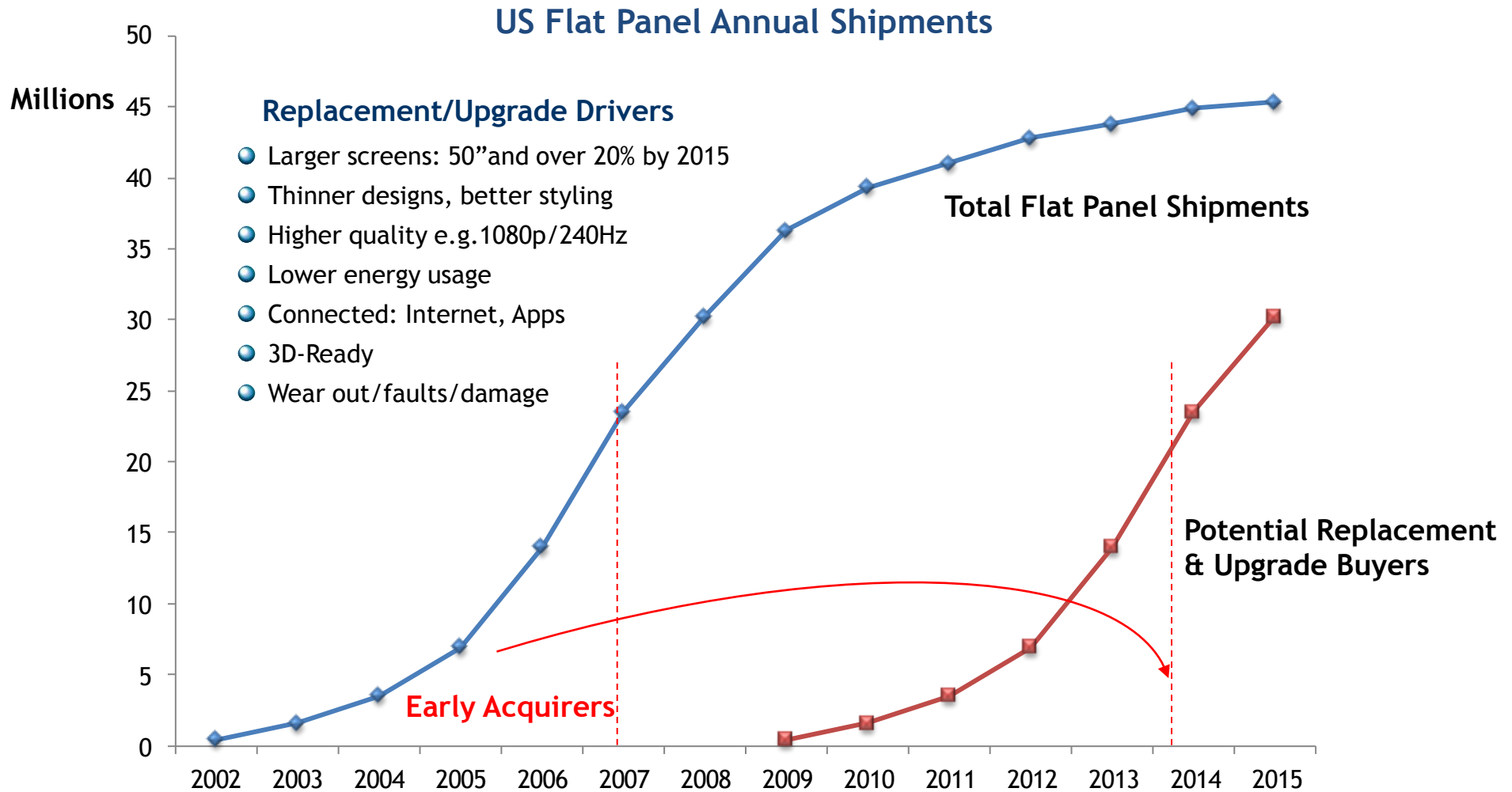


# 3D-Ready TV Prices Will Follow Existing Benchmarks

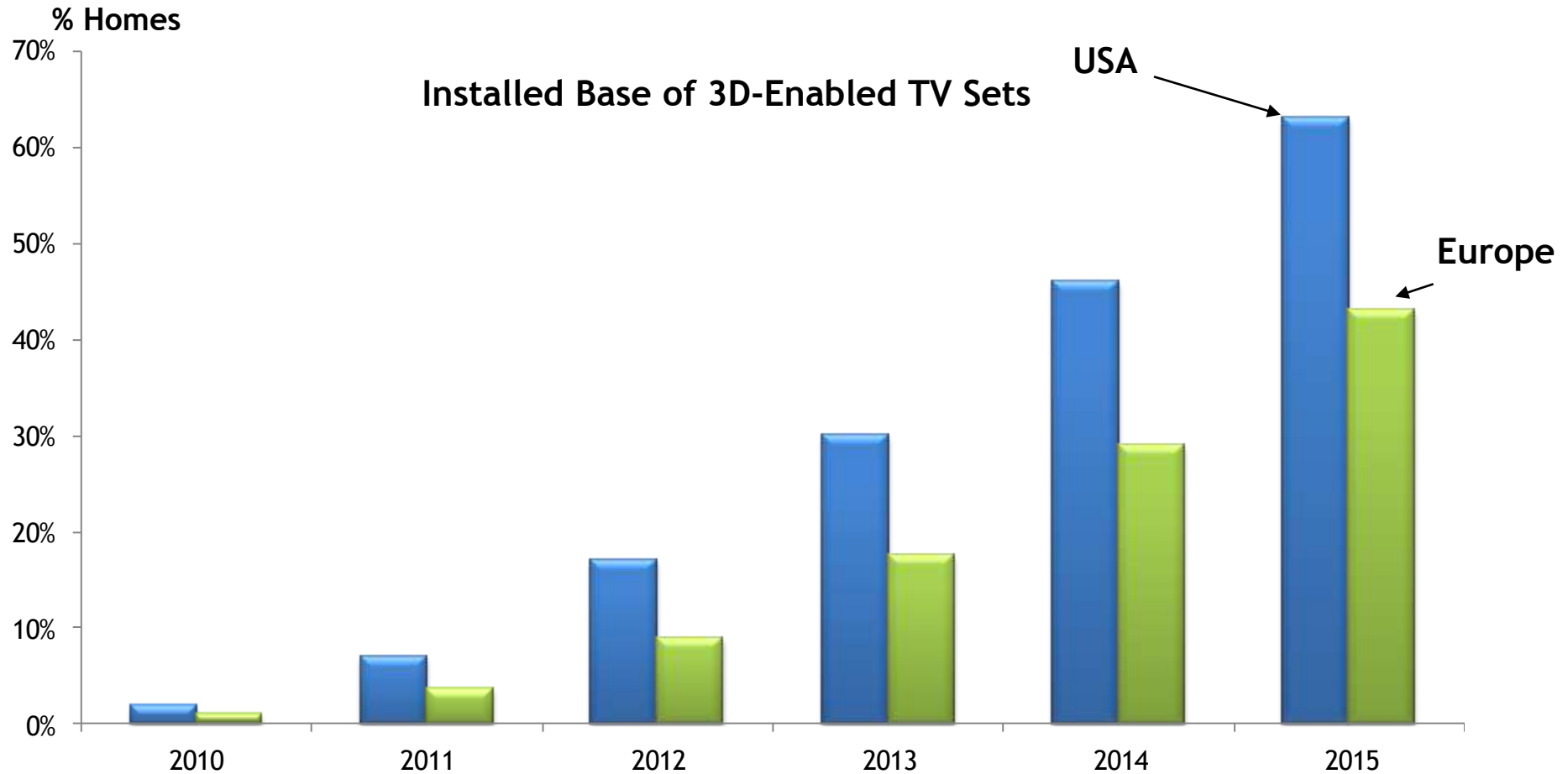


Source: Futuresource CE Price Tracker

# Why Will Flat Panel TV Owners Upgrade to 3D-Ready?



# '3D Ready' TV Receivers Will Prime The Market as 'HD Ready' Did 5 Years Ago



# 3D Eyewear



- Consumer 3D-Ready TV will generally use active (shutter) glasses.
  - Set uses standard 2D display.
- Glasses will be \$50-100 initially, prices will fall to <\$25 in volume.
- Button cells (250-300 hours), rechargeable possible?
- Most TV makers will bundle one or two pairs.
- No standards - may not be interoperable between TV brands.
- Aftermarket accessory opportunity - styling, brands, multi-format.

# Drivers for 3D: Blu-ray Hardware



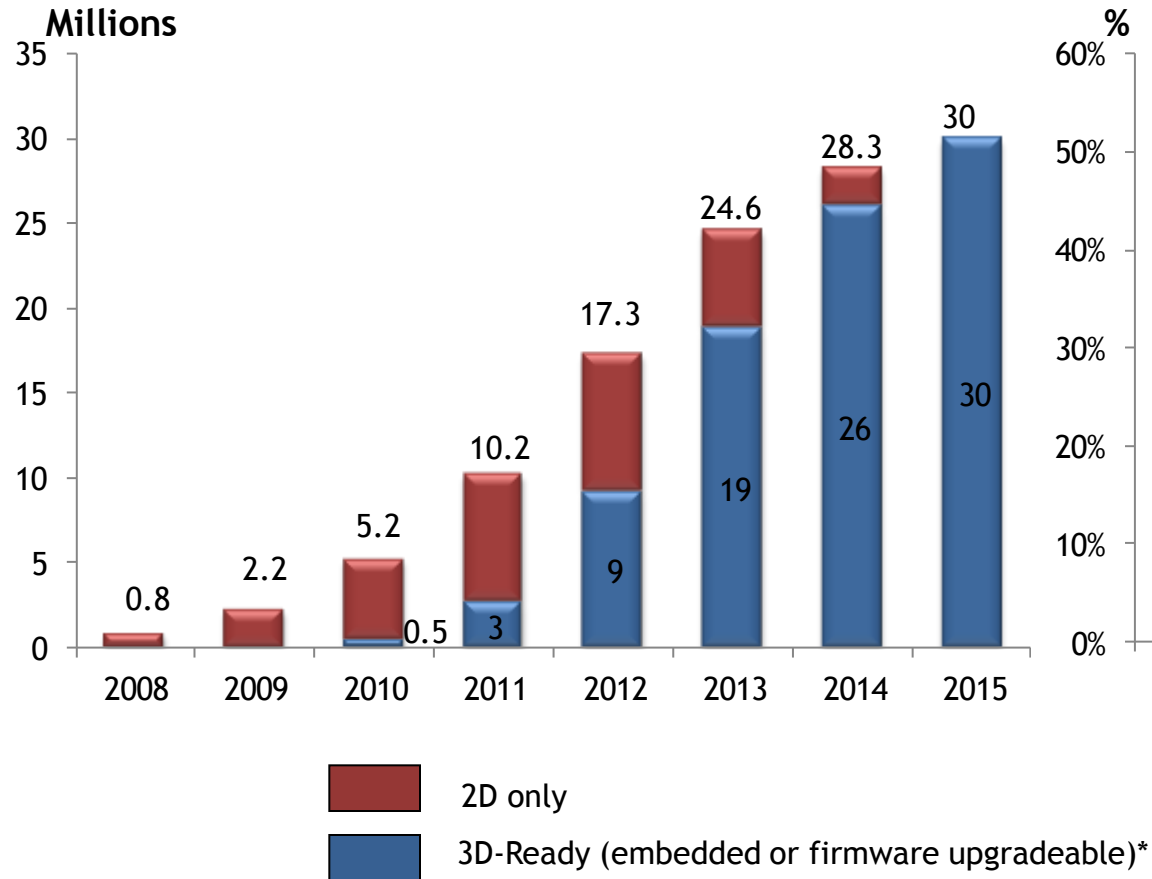
- Blu-ray ideal for high quality 3D at home.
- Vendors want premium pricing on players initially (\$300-600).
  - ▶ But Sony firmware-upgradeable model \$200 (€220) now.
- Sub-\$100 3D BD players by 2012.
- 3D a standard feature on virtually all players by 2015.
- 3D will help accelerate overall Blu-ray adoption

# Drivers for 3D: Blu-ray Titles

- Fast title build-up is key to maintaining consumer and retail interest
  - ▶ Initial 3D title releases expected this year (2010)
  - ▶ Likely to be focussed on Q4
- Format allows for 3D discs to play in 2D on legacy players
  - ▶ Studios prefer to package 2D and 3D disc together at premium 3D BD price
  - ▶ Will boost overall disc volumes
- Focus on 2D/3D releases is important to stimulate interest and enable consumers to ‘buy forward’
- Re-authoring of Classic 2D titles will help boost 3D title availability and catalogue BD sales.
  - ▶ Sony has already announced plans
  - ▶ Without theatrical release investment difficult to justify until player/TV sales expand

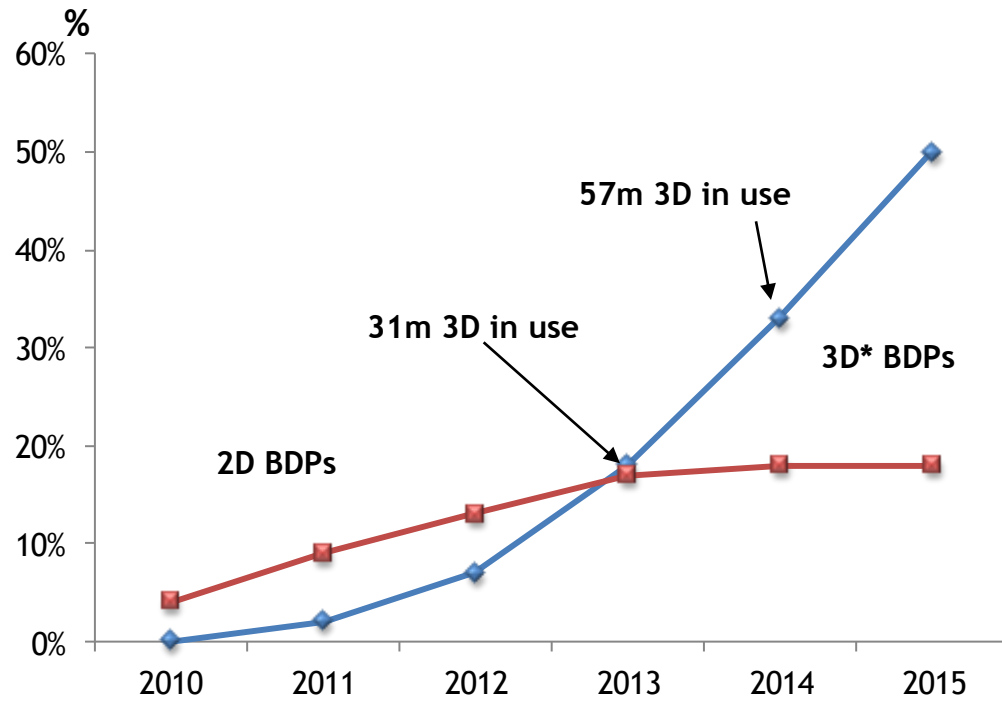
# 3D Blu-Ray Player Forecast: W Europe

## Annual European Blu-ray Hardware\* Shipments



\* Players, HTiB and Recorders

## 3D-Ready BDP Penetration of Homes



# 3D Blu-ray and Gaming

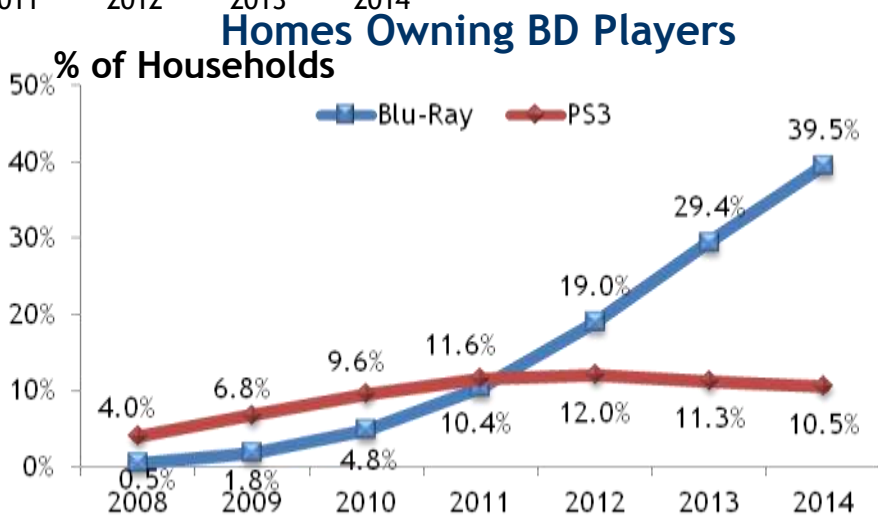
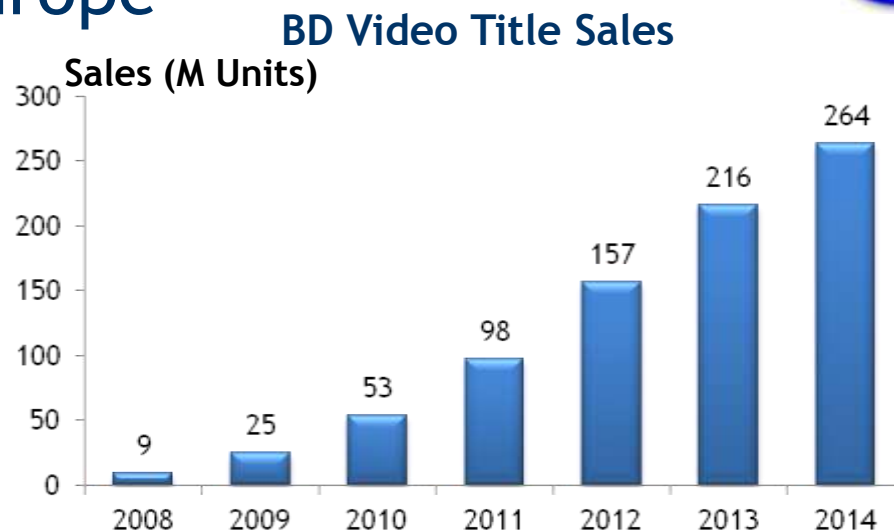
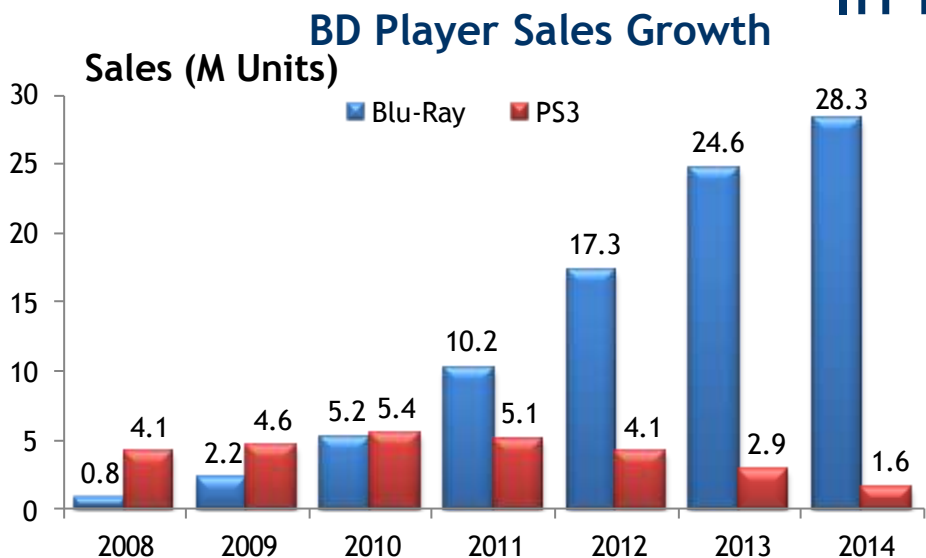
- Free firmware upgrade planned for existing PS3 to play 3D Blu-ray video.
  - ▶ Timeline Summer 2010.
  - ▶ 10.7 million PS3 consoles in use in the USA, 11.7m in Europe.
- New consoles will have upgraded firmware for Blu-ray and 3D gaming.
- Sony planning 3D gaming titles for PS3 in 2010.
  - ▶ X-Box, Wii likely to follow to remain competitive.
- Large 3D TV population needed to stimulate widespread game development.



# Summary

- The ingredients for a Home 3D market are falling into place.
  - ▶ 3D Digital Cinema expansion.....
  - ▶ ....means more 3D live action movie production.
  - ▶ 3D-Ready TVs and Blu-ray will seed the consumer market.
  - ▶ Pay-TV networks ready to deliver movies and non-theatrical 3D content, especially sports, music.
- Free-to-air 3D broadcasting generally 3yrs+.
- No-glasses auto-stereoscopic screens longer term (5yrs+).
- Substantial revenue opportunities for all industry segments.
- 3D expected to provide major boost to the Blu-ray business

# BD Continues To Go From Strength To Strength In Europe\*



\* Data relates to top 16 European markets.

# The Futuresource Entertainment Summit

## 10<sup>th</sup>/11<sup>th</sup> June 2010

- Visit the event website at [www.fes2010.com](http://www.fes2010.com)

The screenshot shows the website for the Futuresource Entertainment Summit. The header includes the event title and dates (10-11 June 2010, London UK). A navigation menu contains links for Home, Agenda, Attendees, Register, Sponsor, Contact Us, The Venue, and About Futuresource. The main content area is divided into several sections:

- Welcome to FES2010:** A message from Jim Bottoms, Director of Futuresource, welcoming attendees and highlighting the conference's focus on entertainment technologies and business issues.
- Latest News:** A news item announcing Feargal Sharkey as a key speaker, detailing his background as a former Undertones lead singer and CEO of British Music Rights.
- Sign up NOW!** and **Add date to diary:** Promotional buttons for registration.
- Sponsorship Opportunities:** A section for potential sponsors.
- Who's Attending?:** A section for attendees.
- Conference Partners:** A list of partner logos including Broadband TV News, CDSR, DIG, era, videomarkt, MESA, and one to one.

The footer contains contact information for Futuresource Consulting Ltd, including the address (200-204 High Street South, Donutale, Bedfordshire), phone number (+44 201182 100 100), email (info@futuresource-hq.com), and website (www.futuresource-consulting.com).



# Your questions answered

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