



THOMSON
images & beyond

Beyond images ...

THOMSON's strategy for the Future Internet

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A new era for communication

- **New usages drive new applications and services**
 - Legacy applications are evolving
 - Dad's TV is dead
 - Search the internet is the default answer to everything
 - More interactivity, friendliness, emotion
 - Service personalization (health, tourism, TV, shopping, etc.)
 - Security
 - Ease of commercial transactions
 - Social networks
- **New business models**
 - User Generated Services, not only content !!!!

Thomson's vision

- **The Future Internet is the Internet of content and emotions**
 - Most content is low quality, and does not carry emotion
 - Customers want content everywhere and anytime, on all terminals
 - Technology must be transparent
- **Convergence is happening at the service level**
 - Mostly around three devices: the cell phone, the PC and the gateway

Beyond image

- “High Definition” -> better, sharper (and heavier)
 - S-HD
 - 4K, 8K
 - HDR, ECG
 - 3D
- Games
- Virtual worlds
- Content virtualization
 - Emotion
 - Perception

How to get there

- **Network technology is there already**
 - Throw bandwidth at it! (this is what most Internet gurus would tell you :-)
- **Content and services will power the Future Internet**
- **The challenge is in the control of the content**
 - Production
 - Management
 - Sharing
- **Increase European self-confidence**

What we learned from the past

- Legacy internet leaders are technology companies (Cisco, Microsoft, etc.).
- New leaders are content companies (Google, Yahoo, YouTube)
- The Internet lives on a different time scale
 - VC mindset
 - Lifetime of an idea is short
 - Need high reactivity: idea must be converted quickly
- Important to drive innovation, not follow!
- Talents are KEY!

European leadership

- **Not all content comes from Hollywood!**
 - e.g. news (BBC, other major broadcasters), major cultural heritage and diversity, festivals, regional and community TVs, sports, etc.
- **Boost the European competitiveness and confidence**
 - Long term research in industry
 - Develop the entrepreneurial culture
 - Facilitate emergence of strong academic research groups and SMEs issued from academia
 - Cross fertilization with large industrial and service-based groups
- **Cooperative programs needs to be thought in that sense**
 - Tighter coupling between academia, large groups and SMEs

BACK-UP

Service convergence

- **Evolution of the internet**

- Deliver content (not only video :-) safely and with high quality on the Internet
- Prevent dissemination of illegal content
- P2P based services (gaming, communities, etc.)

- **Beyond the Internet -- Vision**

- New services?
- How will technology enable these new services?

Research challenges

- Internet of objects
- Virtual content, emotion
- User Generated Services
- Security, privacy
- Content compression techniques
- Social networking, interaction
- nPlay & fix/mobile convergence
- Personalization
- High Quality content delivery