



# Convergence of Media and Telecom

*NEM & the Integration of Broadband and Multimedia*

◀ **BROADEN YOUR LIFE** ▶

Michiel Pelt  
Alcatel Research &  
Innovation  
NEM Workshop  
3 December 2004

# Introduction

- > **Media–Telecom convergence** is a multi-faceted movement
  - **Service and network convergence**: a wide range of applications over a single network
  - **Device convergence**: PC's, STB's, mobile phones support communication and media consumption
  - **Industry convergence**: hitherto unrelated industry players enter a new arena of competition
  
- > **User-Centric View**
  - Observing the emerging examples of, and the opportunities for **richer user experiences of networked electronic media**
  - Convergence phenomena reflect societal shifts
    - The **empowered user** seeks control, self-realisation and participation

# Media and Telecom Convergence

- > Internet (technology) initiated the convergence movement
  - Various application data transported over a single network technology
  - Consumable on a multi-purpose device, initially the PC
- > Broadband, supporting Big Media Objects, drives convergence
  - **Triple Play**: voice (telecom) + data + video (media)



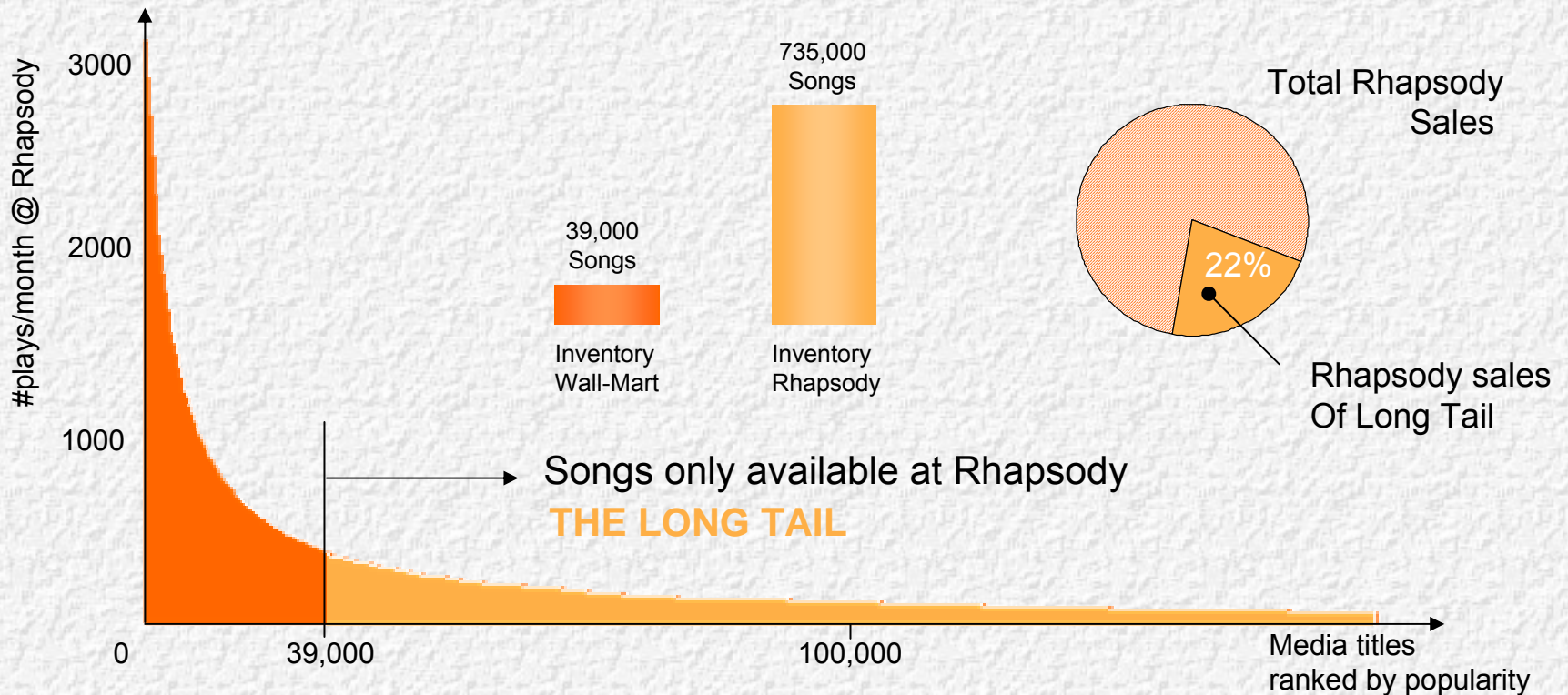
# The Triple Play Laboratory

- > The **Triple Play laboratory** is ready
  - Equipment, broadband infrastructure and multimedia devices are in place
  - Components are available: voice, data, video
- > **User-Centric Experimentation**
  - Don't make the alchemist's mistake of looking for the essence: the killer application
  - Create and discover **new user experiences** that combine the basic components in innovative ways
- > The first intriguing phenomena in the converged world can now be observed



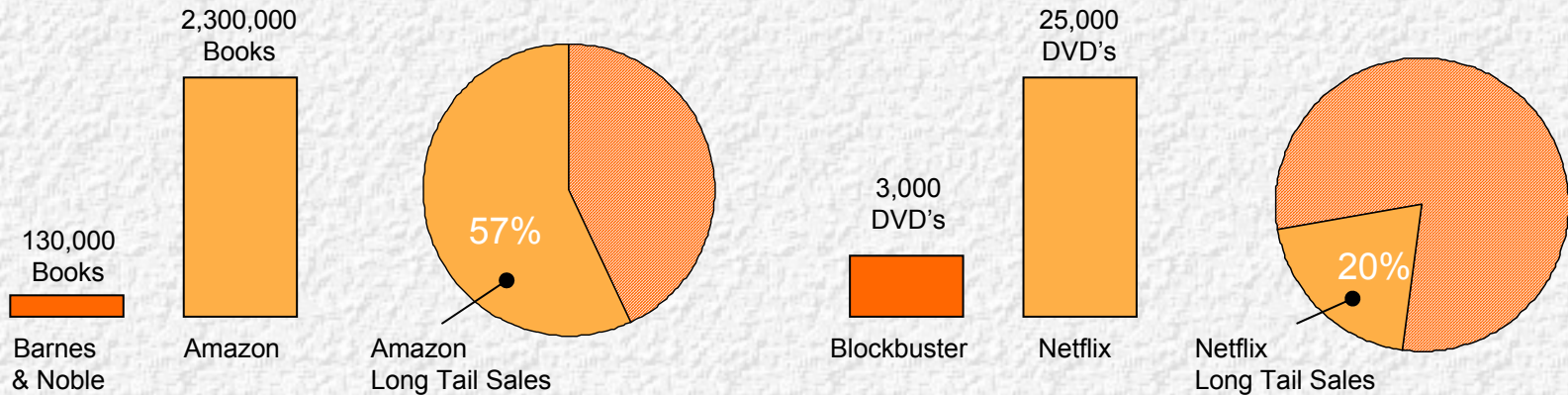
# Convergence Phenomenon #1: The Long Tail

- > On-line Services modify the consumption behaviour
  - Media content not profitable in physical stores, constitutes a healthy market in an on-line environment
  - Example: Rhapsody on-line music store



Source: **WIRED** MAGAZINE

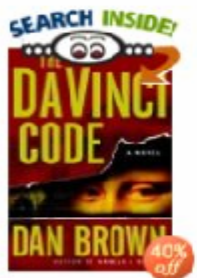
# Long Tail Catalyser



## Mainstream hits serve as entry point

Recommendations guide users' exploration of the long tail

**The Da Vinci Code**  
by [Dan Brown](#) (Author)



[Search inside this book](#)

**List Price:** \$24.95  
**Price:** **\$14.97** & Eligible for **Prime** orders over \$25  
**You Save:** **\$9.98 (40%)**  
**Availability:** Usually ships within 1-2 business days

**Want it delivered Monday?** Get it by Tuesday, 32 hours and 40 minutes before checkout. [See Details.](#)

**261 used & new** from **\$7.97**

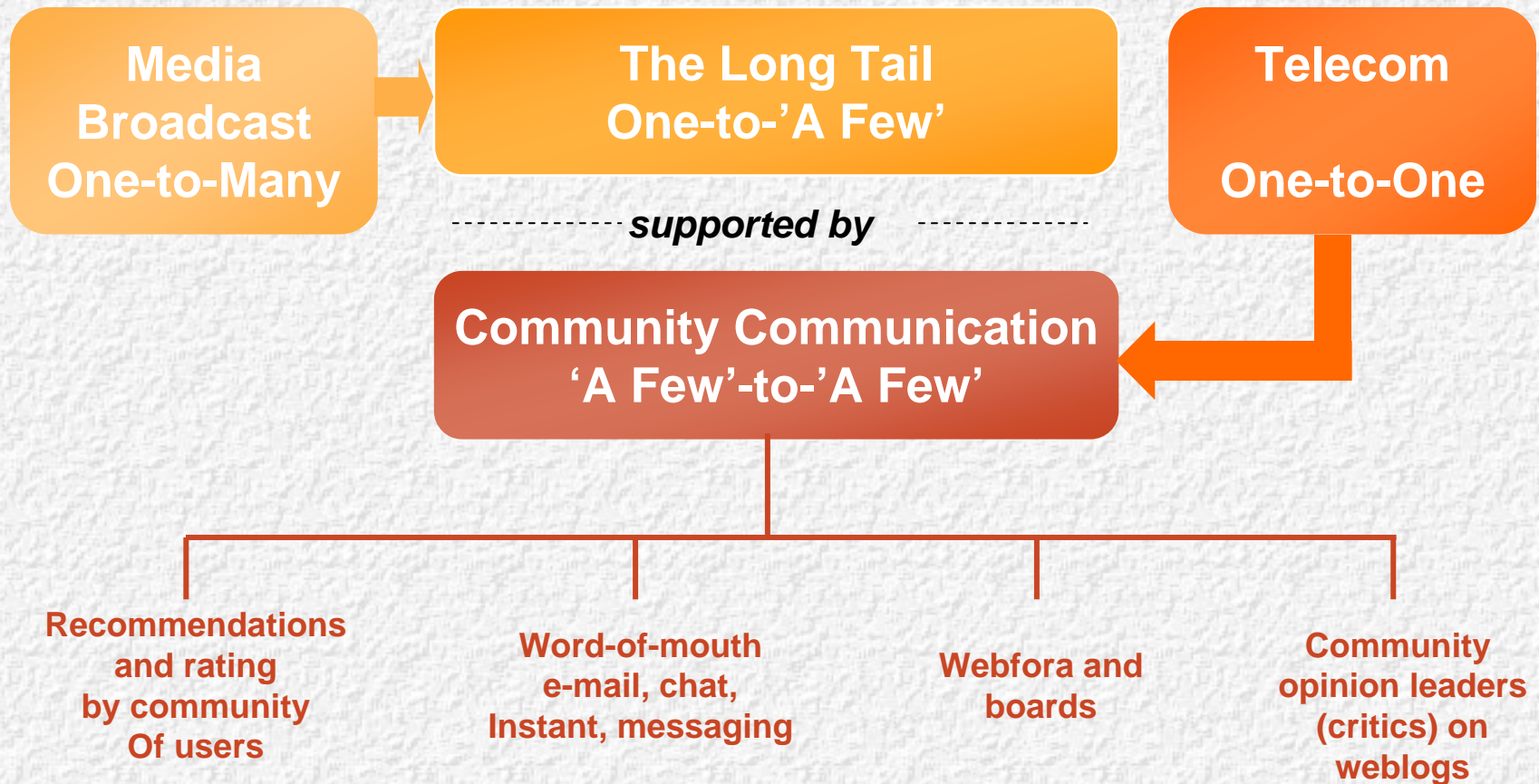
### Customers who bought this item also bought these items:

- [Angels & Demons](#) by [Dan Brown](#)
- [The Five People You Meet in Heaven](#) by [Mitch Albom](#)
- [Deception Point](#) by [Dan Brown](#)
- [Life of Pi](#) by [Yann Martel](#)
- [The Secret Life of Bees](#) by [Sue Monk Kidd](#)
- [Digital Fortress : A Thriller](#) by [Dan Brown](#)

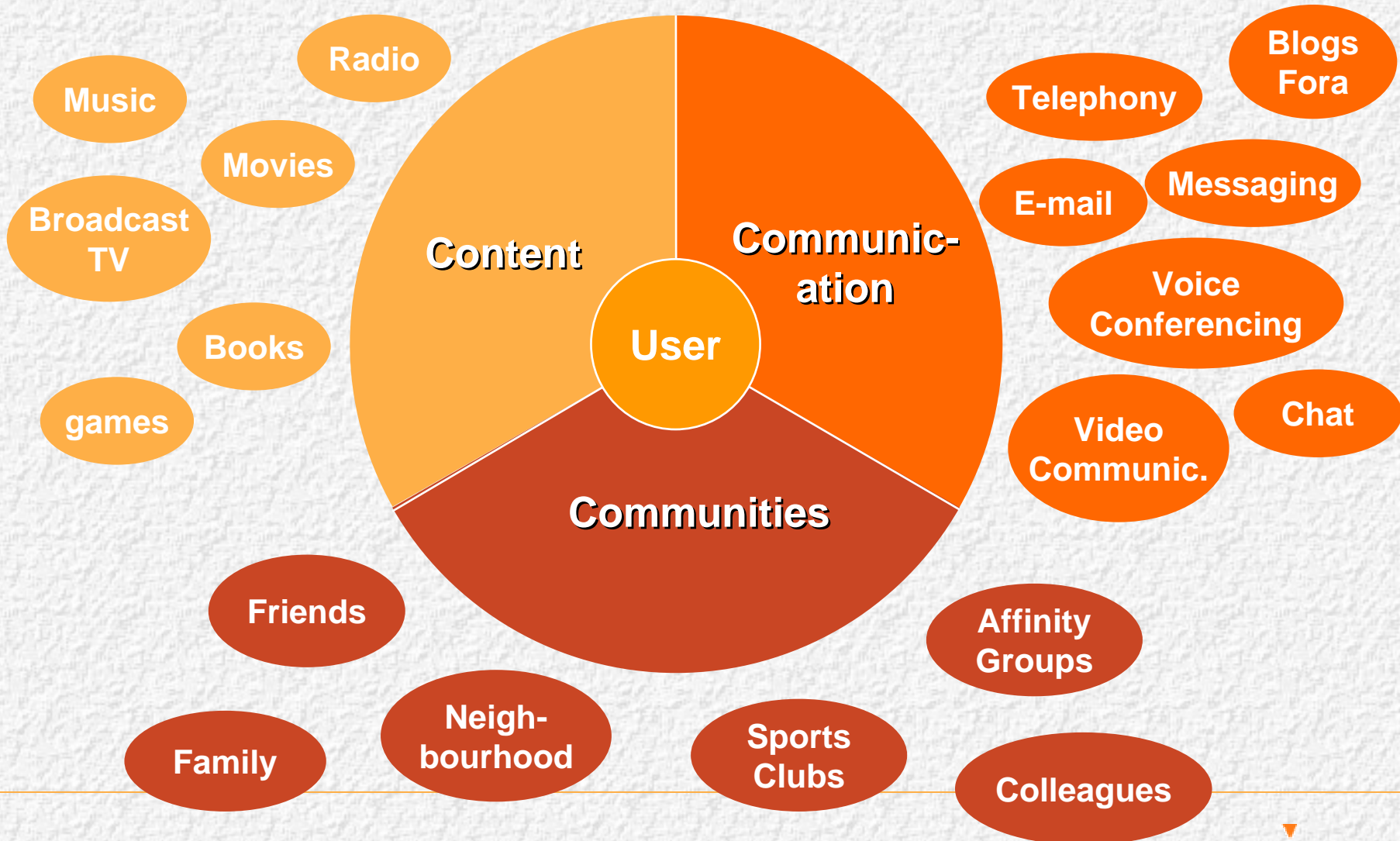
▶ **Explore Similar Items:** in [Books](#), in [Music](#), and in [DVD](#)

# Two Good Friends

## The Long Tail and Community Communication



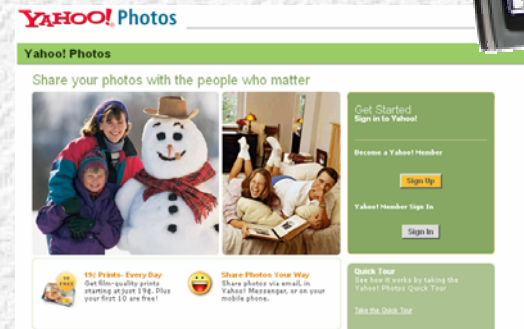
# The Basic Component Families Revisited



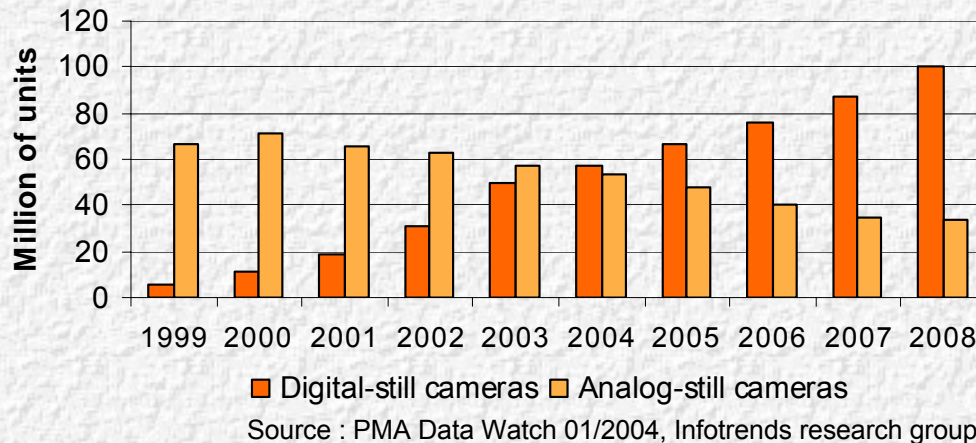


# Convergence Phenomenon #2: Personal Content

- > 45% of American broadband users used the PC to **send digital pictures**
  - Downloading pictures is the only on-line activity that skews toward female consumers  
(Source: Yankee Group 042004, Consumer Entertainment)
- > Every day 12,000 **weblogs** are created  
(Source: Technorati, 10/2004)



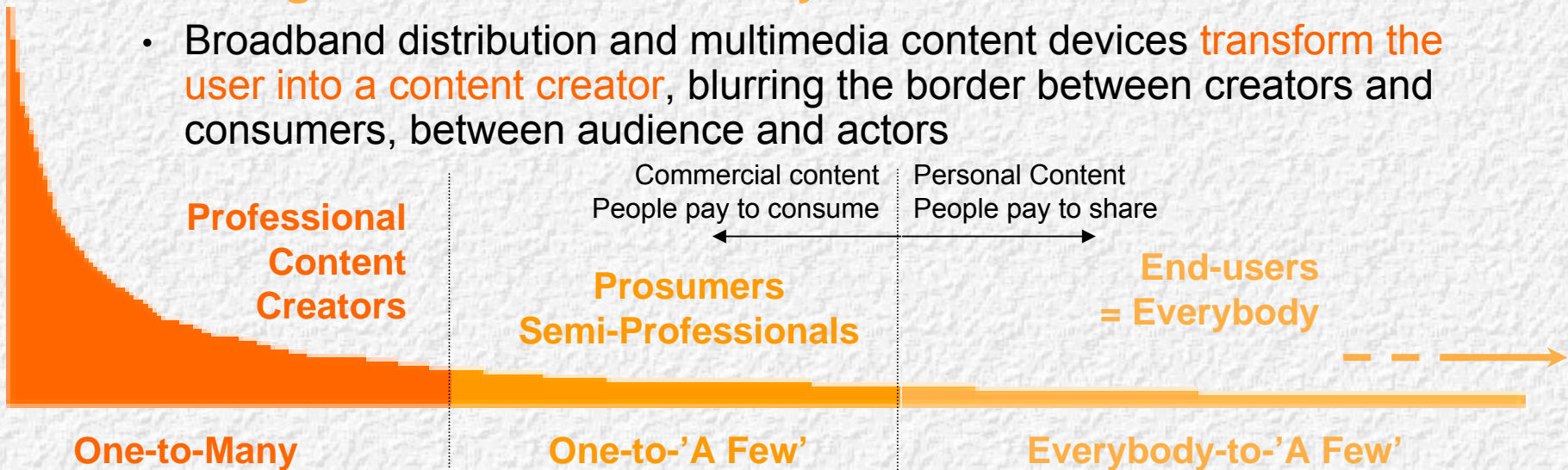
### Worldwide still camera sales



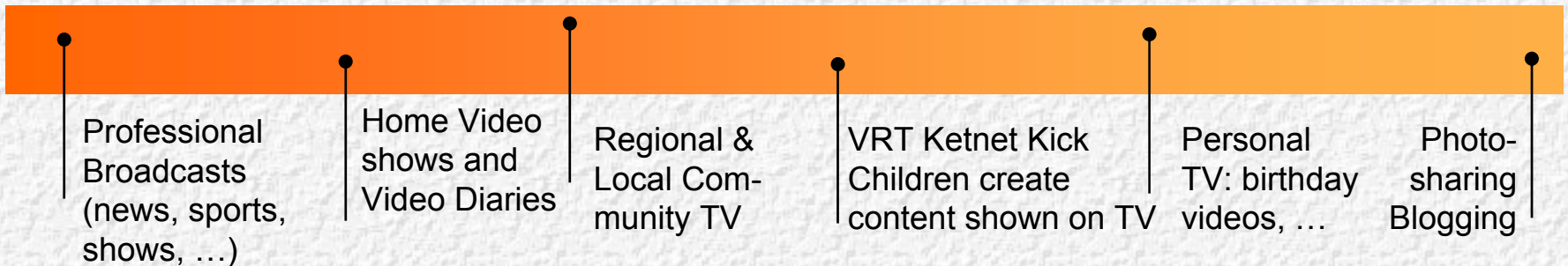
# Another Perspective at the Looooong Tail

## > The long tail continues infinitely

- Broadband distribution and multimedia content devices **transform the user into a content creator**, blurring the border between creators and consumers, between audience and actors

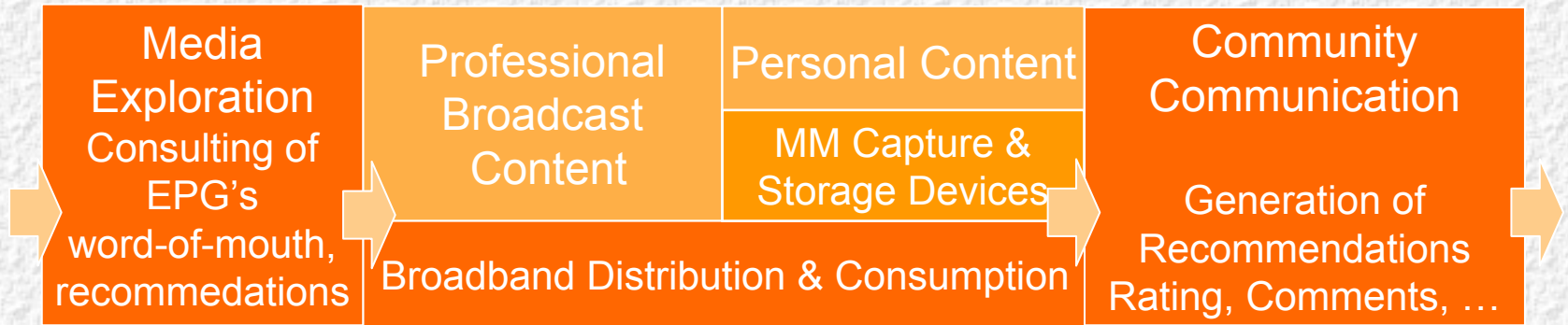


## > A wide spectrum of content emerges



# Structure of the Observed Phenomena

- > The new media consumption/creation user experience is a **concatenation** and superposition of telecom and media components



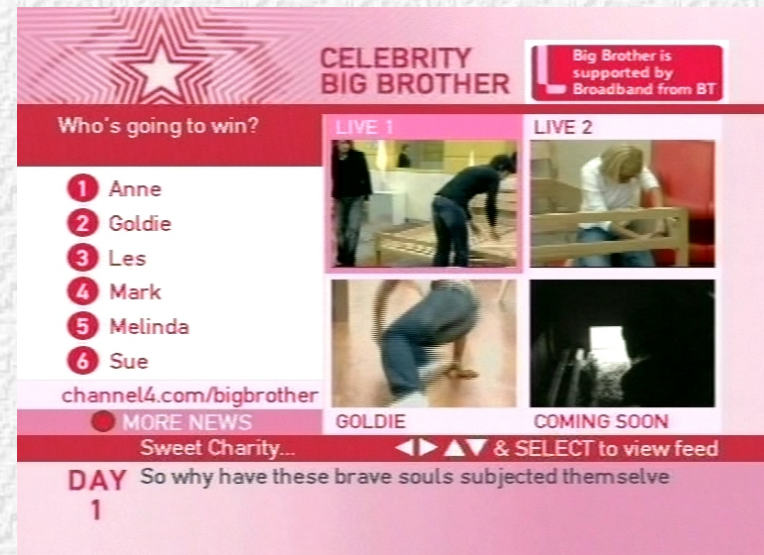
- > Equal attention to all phases of the end-to-end user experience is necessary for a satisfying and appealing experience
  - ➔ Turn electronic program guides into community portals
- > **The really exciting prospect is the actual fusion of media and telecom components into a new user experience**

# Convergence Phenomenon #3: The Real Fusion

- > Early examples of integrated telecom+media experiences



On-line gaming with voice chat



Interactive TV with voting

- > **Communication becomes an integral part of the experience of networked electronic media**

# The AmigoTV Experience: Watching Television Together

Community Television, the next step for Interactive TV  
= Communication between TV viewers



## > Find your friends on TV

- Use 'Channel presence' to find out what they are watching

## > Talk with your friends

- Comment on the TV program

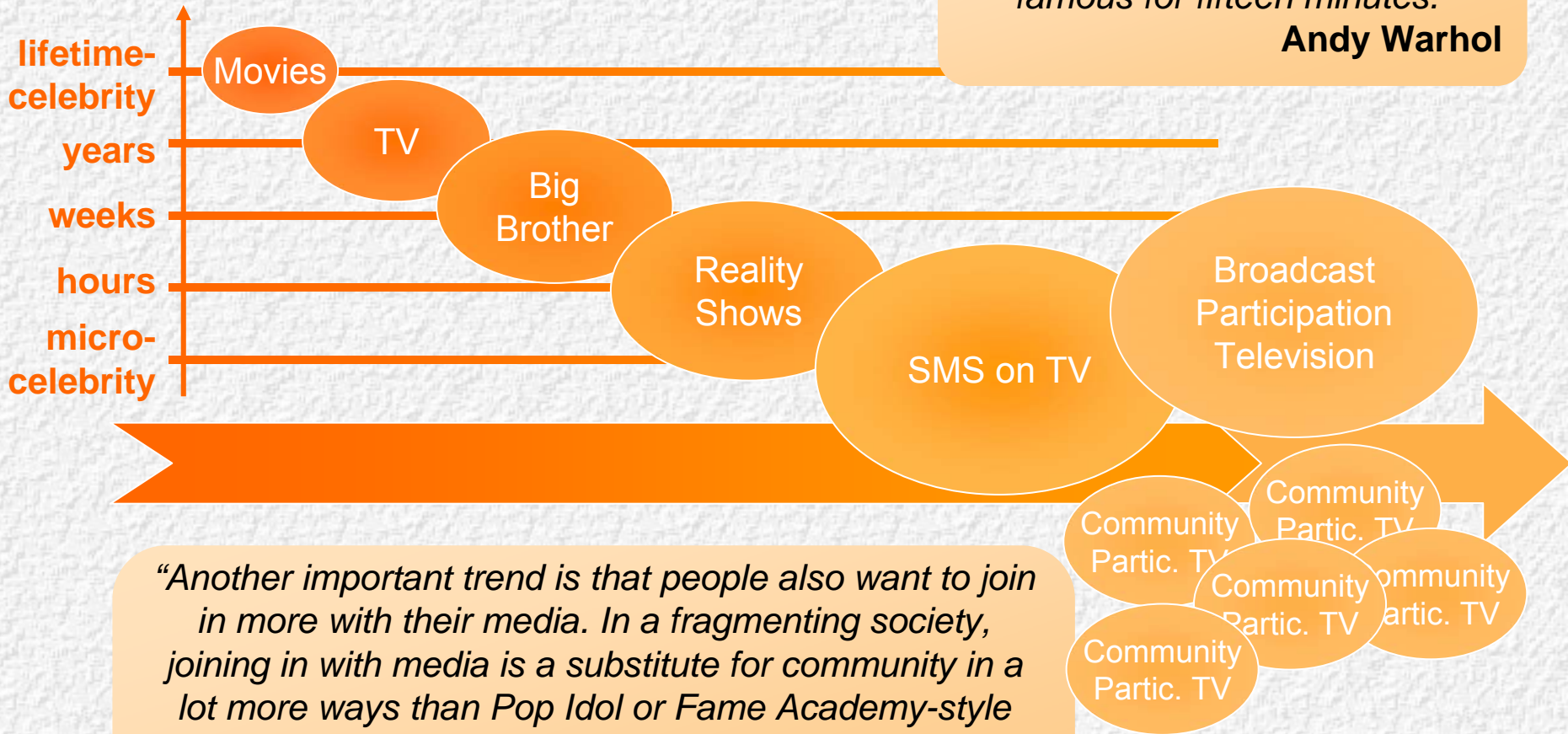
## > Share your emotions

- Change the expression of your avatar (\*)
- Send multimedia messages

(\*) Avatar = your graphical presence on TV

# Micro-Celebrity

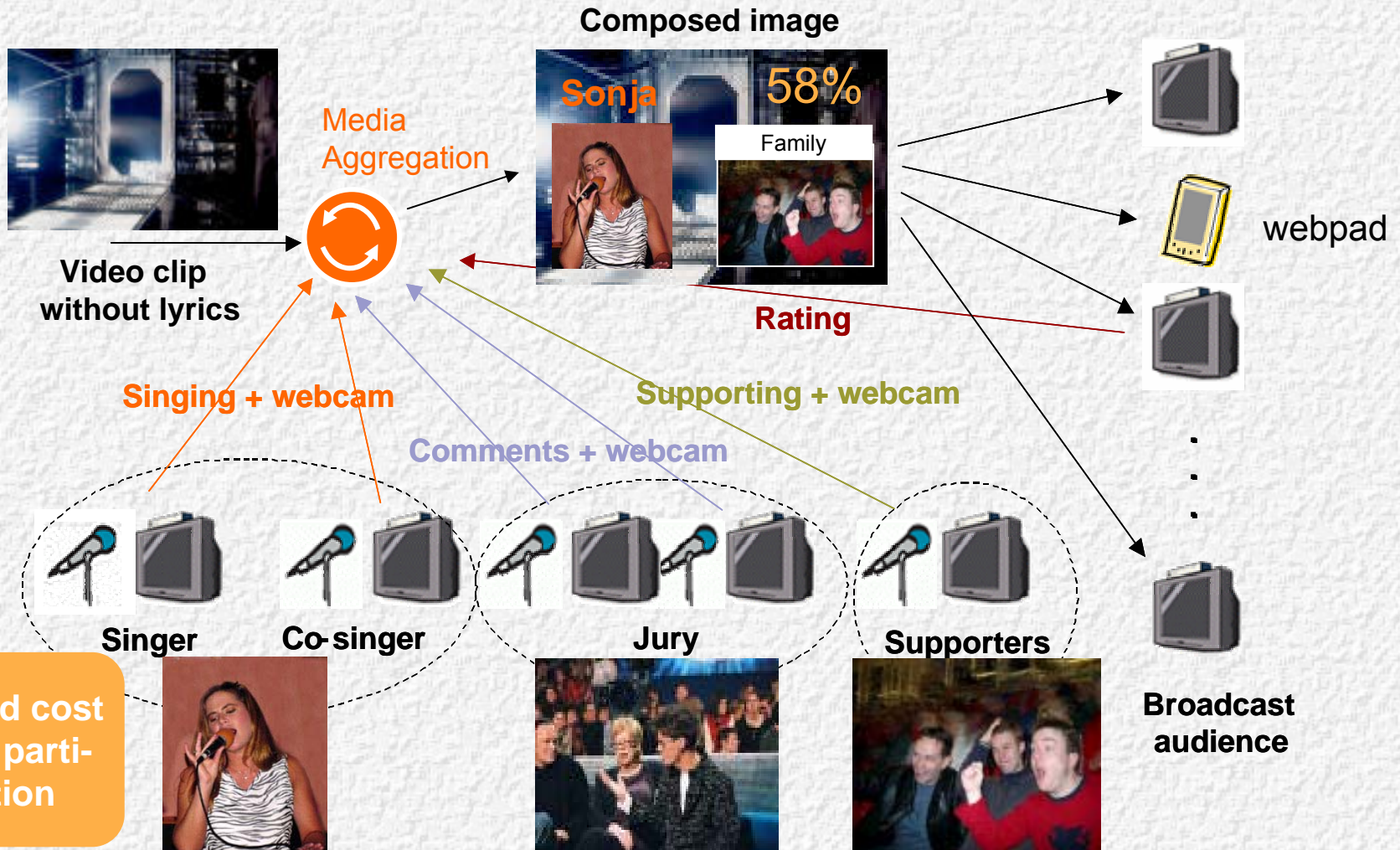
*"In the future, everybody will be famous for fifteen minutes."*  
**Andy Warhol**



*"Another important trend is that people also want to join in more with their media. In a fragmenting society, joining in with media is a substitute for community in a lot more ways than Pop Idol or Fame Academy-style voting."*

**Ashley Highfield,**  
Director, BBC New Media and Technology

# Participation Television: On-Line Idol 2006



# Conclusions

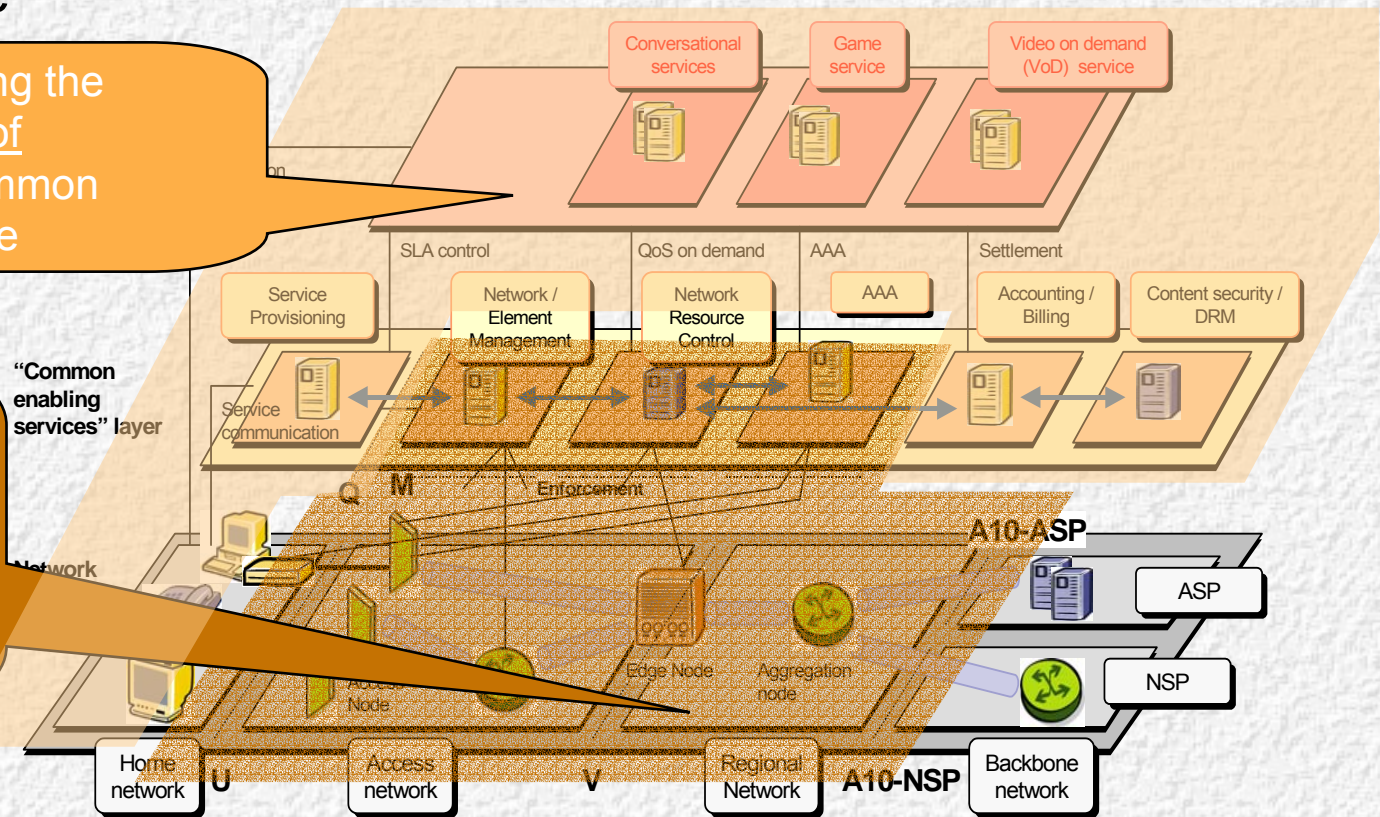
- > **Broadband Triple Play significantly modifies the user experience of networked electronic media**
  - empowering the user who seeks personal control of his media experience
  - drawing heavily on community communication
- > The emerging **real fusion of telecom and media services unleashes enormous creative energy** to stage new broadband user experiences
- > **Numerous challenges ahead**
  - Broadband infrastructures that support a new level of multimedia information transfer
  - Versatile and performant, yet simple-to-use multimedia devices
  - Repositioning of the industrial players in the value chain
  - Creative and innovative approach of the new opportunities, **always taking the user experience as the starting point**

# Already addressing the Challenges...

- > Within the MUSE and MediaNet EC FP6/IST projects, Alcatel and its partners have started to address the challenges of media+telecom convergence

**MediaNet =>** Enabling the delivery of a myriad of applications over common reference architecture

**MUSE =>** Providing secure connectivity of multiple services between terminals and multiple providers



...But much more needs to be done down the line!!!

- > The NEM initiative is a **key driver** for the convergence between media and telecoms
- > This is a unique opportunity to bring ALL the stakeholders together, share experiences and develop innovative user-centric solutions
- > This is a unique opportunity for the **European industry** to have a **strong lead** in an area which is **key to develop access to the European diverse cultural environment**
- > This is a unique opportunity for the **European citizens** to benefit from **technologies and services** that will have been directly **developed for them**—not for the benefit of others and then adapted to European needs

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