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VUB Lecture Series, 27 February 2008 — 1

A changing Media & Communications environment

Re-thinking European Media and Communications Policy
IES Lecture Series
Presentation VUB, Brussels, 27/02/2008

EPIS: Perspectives on the Creative content industries

Ioannis Maghiros
Fabienne Abadie
Corina Pascu
IPTS

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Summary

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- Content Industries = Traditional European, great diversity of activities
- Convergence ICT and Media (implications for growth and jobs)
- The Media Transformation: Examples (creation, distribution, consumption)
- Online Content markets in Europe are fragmented
- A number of issues require urgent attention:
  - •Technological Issues
  - •Regulatory Issues
  - •Market Issues
- Conclusions

Need to identify practical current and future challenges

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Prospective Technological Studies

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JRC IPTS

IPTS: Part of DG JRC of the EC:
7 Research Institutes across Europe

Mission: "to provide customer-driven support to the EU policy-making process by researching science-based responses to policy challenges that have both a socio-economic as well as a scientific/technological dimension"

Modus operandi: desk research, expert groups, modelling, centres of expertise

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Perspectives in the IS – EPIS

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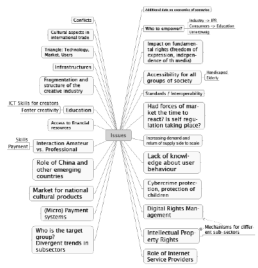
The Future of the Creative Content Industries

Rationale
- **ICTs - key driver for supply & demand of creative content industry**
- **Importance of the creative content industries for Europe**
- **Supporting EU "i2010" initiatives**
  Need for foresight-based intelligence, with pan-European dimension, in order to deploy appropriate EU policies

Main objectives
- **Forward looking study of the creative content sector**
- **Explore specific implications for R&D policy in ICT**



Extract from issues identified during research

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The Creative Content Industries

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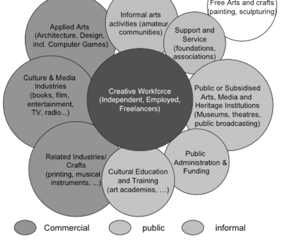
Graphical Definition



Heavily industrialised services
- broadcasting,
- film industries,
- Internet and mobile content industry,
- music industries,
- video & computer games,
- advertising & marketing,
- electronic publishing and print

Less industrialised activities
- museums and library services,
- visual arts (painting & sculpture),
- performing arts

Other creative activities (crafts, fashion, design industry).

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Generic Trends and Drivers

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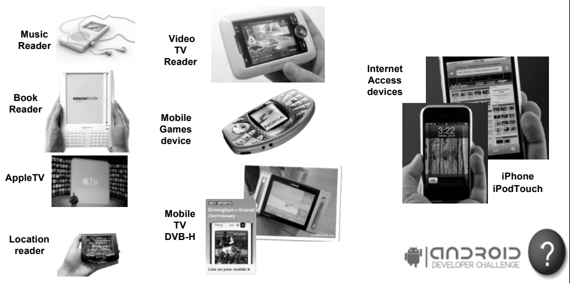
Convergence in the Content Industries

- Hardware, bandwidth, miniaturisation
- Demographics & the young generations
- Creation fostered by cheaper tools enabling reconfiguration and experimentation
- Space agnostic nature of communications networks open new audiences and niche markets
- Democratisation of the spotlight (long-tail effects)
- Social participation in creative activities (Web 2.0)

Very complex situation; many stakeholders

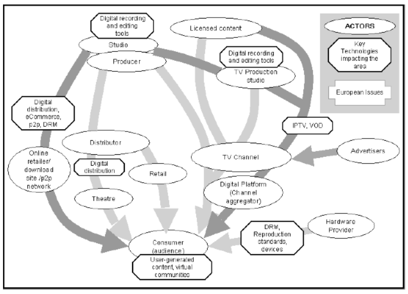
Examples Enabling Devices



Advances in Distribution influence creation positively
Still content is limited by the access device

AudioVisual Value chain

Example of changes in the video/film value chain



Examples of developments 1/3

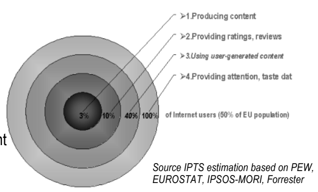
Content Creation / Production

The growing availability of tools lower barriers to entry for smaller players
- Apple's GarageBand (music)
- Adobe's Acrobat writer – blogging (publishing)
- Podcasting tools, digital cameras for movie creation (Audio-visual)
- Machinima model for animated movies (shooting film in real-time 3D env.)

On Pro-sumers

Producer/consumer contribution to content generation

Four types of web 2.0 usage, with different degree of users' involvement



Source IPTS estimation based on PEW, EUROSTAT, IPSOS-MORI, Forrester

Examples of developments 2/3

Delivery/ Distribution/ Access

Emergence of downloading services (advertising or subscription -based)
- iPod/iTunes platform
- Google Books – the "books iTunes", online aggregation of Bookstores (ABE, CA)
- Digital downloading of audiovisual content – YouTube (including films)

Content-on-demand for audience building and diversity of content
- Social radio – Last.fm
- VOD, TIVO, Channel on demand e.g. Joost,

Convergence for seamless user experience
- *MS Xbox Live, Sony PS, Nintendo Wii – gateways for accessing games & other content (e.g. TV)*
- *IPTV, Wifi enabled TV, Apple TV integrated with iTunes*

Examples of developments 3/3

User interaction

Adoption of innovative viral and community-led strategies for promotion
- *MySpace enables musicians/bands to sell their DRM-free tracks directly from their pages*

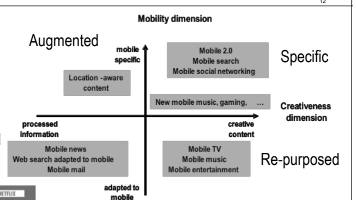
Social interaction as part of digital content consumption experiences

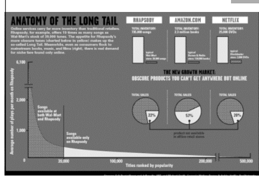
SecondLife success is almost directly related to the increasingly social nature of the activity

Communities of users become important actors, especially in a networked context
- *Virtual communities of fans e.g. The Blair Witch Project*
- *Virtual economies e.g.*
  - *Habbo Hotel (75m avatars / 29 countries): 90% of $60m annual revenue is virtual goods;*
  - *Gaia Online (50,000 person to person auctions and 1 million message board posts a day): the 3rd largest auction site and the 2nd largest message board on the Internet.*
  - *Amazon explores new techs for integrating in-world searching with real world purchases ('Life2Life' combines search in Second Life with Amazon's Remote Shopping Cart system).*

Demand for content

Demand for NEW content
Mobile content projection

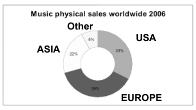




New demand for existing content
The Long-tail effect

European Music market evolution

Sales of music online grow, but sales in general fall



Source: EPIS - based on PWC 2007-2011 Media Outlook -

European Film market evolution

(sales in billion USD)

(sales in million USD)

Source: EPIS - based on PWC 2007-2011 Media Outlook -

High definition Video and emergence of digital streaming services will turn around the home video physical sell through market

European Games market evolution

Source: EPIS - based on PWC 2007-2011 Media Outlook -

Gaming even on mobile is big business

Online content markets: EU summary

- Opportunities for smaller players to reach large audiences by-passing large publishers and potential to enhance diversity (– a lot in EU)
- User-created content growth expected (distributed creation possible)
- Content is more important to consumers than the technologies to access it
- Viral and Community-led strategies may be used for promotion
- Developments are highly fragmented
  - Online music revenues: UK (103m€), DE (53m€), IT (35m€)
  - Video-on-demand user growth in Nordic countries + FR + DE (limited yet)
  - IPTV: FR (5m subscribers of the 7.3 estimated in all EU)
  - Online gaming rapid growth, 3m users and 300m€ in revenues (DE, FR) and 3 of 15 largest publishers in EU (Ubisoft, Eidos, Atari/Infogrames)

Positive implications but also challenges ahead

Technology Issues

Usability issues (content selection, access, configuration, payment systems…)
Further research into key technologies needed:
- Intelligent technologies (e.g. intelligent content)
- Interface technologies (e.g. human computer interfaces, multimodal interfaces…)
- Display technologies (e.g. ultra thin OLEDs, flexible/transparent displays)
- Multi-language access (e.g. finding data in different languages)

Technologies not adequate to answer user demand for access anywhere, anytime
Further research areas include:
- New conceptual models for accessing content (e.g. books)
- Networking (e.g. increased broadband access)
- Interoperability & overcoming fragmentation (e.g. standards, DRM, payment systems)

Multi-channel production (research in overcoming platform & devices fragmentation)

Improved Infrastructure capacity
- A high-def YouTube (currently at 600 PB/year) could require 12 HB/year (x10^{18})

Regulatory Issues

Innovation enhancing environment
- Investments (e.g. infrastructure) precondition for innovation
- Innovation more likely to emerge in diversified environment
- Foster social media innovation

Standards
- Worldwide coordination of standards and legal rules needed
- Specific standards for content creation, distribution and management would help markets develop

Risk capital and funding
- Access to more risk friendly capital markets would help the sector
- Access to funding in early stage of development (especially for SMEs)
- Public R&D funding not geared towards the CC sector

Digital Rights and IPR
- Loosening IPR would boost the industry, allowing SMEs/micro entreprises to fully exploit their creativity
- New IPR systems would also enable new business models
- Creative content free of DRM in the future very likely; however in the near term need to promote:
  (a) Interoperability; (b) Transparency (labelling); (c) Right to copy

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Market Issues

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Stimulating start-ups
- Creative content sector dynamics driven by creation & growth of new players
- Provision of infrastructure & equipment to subsidise start ups (mixed results so far)
- Reconciling tax practices
- Facilitating mobility of workers (e.g. pension issues, learn from S/T ERA)
- Repositories of open source tools (raise awareness as to the existence of)

New business models
- Business models are key to success in changing CC context
- Public private partnerships
- Better understanding of underlying factors for success

Quality of content
- Improved understanding of user behaviour and new consumption patterns (ethnographic studies)
- Monetisation of users attention central to business models
- Risk for content authenticity and trustworthiness; may ultimately erode confidence in digital media
- Likely emergence of code of conducts, quality labels; community based or voluntary schemes
- Public procurement
- Professionalisation of user communities could help define good practice

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Conclusions

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- The Creative Content sector is under transformation;
  we witness an evolution rather than revolution (many small disruptions)
- Many hurdles on the way to a stable creative content sector reaping the benefits offered by digitisation, new technologies and applications
- Role of users should be factored in better (e.g. in business models, policy, legal framework + expected social benefits)
- Further research & initiatives in cross cutting areas will help unleash the potential of the sector (e.g. infrastructure, business models, education, over-the-horizon R&D …)
- EU needs to establish an environment conducive to innovation in order to compete with other regions in the creative content sector ("tell a good story")

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CONTACT DETAILS

Ioannis.Maghiros@ec.europa.eu

Fabienne.Abadie@ec.europa.eu

Corina.Pascu@ec.europa.eu

EPIS Website: http://epis.jrc.es

IPTS Website: http://ipts.jrc.ec.europa.eu

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What, if anything can we DO?

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Fostering ICT and creative skills
- Promoting ICT skills through education (hybrid curriculae technical/business/creativity)
- Teaching the teachers
- Encouraging women to engage in creative content activities
- Raising awareness of the value of creativity
- Mediating between skills and demand for skills

Fostering innovation
- Supporting R&D for infrastructure
- Facilitating mobile content development
- Accelerating broadband penetration
- Developing mechanisms to monitor trends and measure impacts of creative content activities
- Promoting innovation-oriented public procurement
- Adopting measure to encourage new entrants (Fncl / Mngt support, remove cross-border barriers…)

Artificial General Intelligence (most promising developments in 20-30 years)
- Research into human-sense and brain interface
- Exploring AGI and human augmentation
- AGI impact on content creation