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consultancy for financing the content industry

in partnership with

Study on the role of SMEs and European audiovisual works in the context of the fast changing and converging home entertainment sector (PayTV, Homevideo, Video on Demand, video games, internet, etc)

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Notice

This document is the final report of a study on the role of SMEs and European audiovisual works in the context of the fast changing and converging home entertainment sector. It contains the final results of the study.

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Content

Executive Summary

Introduction

The home entertainment sector is in the process of fundamentally reshaping itself. What used to be an a fairly stable industry in terms of the available technology and the business models employed is now becoming something far more chaotic where one person, through an innovative idea, can create ruptures in both consumer habits and along the entire value chain. Above and beyond our capacity to innovate, the ever increasing penetration of Internet broadband connections[1] in most European households and the convergence of equipment due to IP technologies[2], are the pillars of an increasingly globalised world.

Traditional integrated players such as media conglomerates, and public communication groups, are undergoing structural changes in order to adapt themselves. However, newcomers such as telecommunication companies, Internet Service Providers, "Internet pure players", and even hardware manufacturers, are also marking their ground. Within this clash of the titans, will there be some space left for SMEs? If so, at which level of the value chain? And how will they add value? These questions are cutial as in Europe, even more than in the United States, the businesses which make up the audiovisual sector tend to be small to medium-sized, operating for the most part mostly on their domestic market.

Innovation is the crux of the matter for the development of SMEs involved in distributing and creating new audiovisual platforms and hardware, but what about the actual content which reaches consumers via these channels? Is European talent sufficiently represented in what is offered to consumers via the different channels of distribution? Are the two sectors working hand in hand to ensure that the national cultural heritage and creation of audiovisual content is reaching its audience? The European Commission has been busy formulating and implementing new measures which aim to facilitate the legal framework surrounding the smooth circulation of works within Europe, as well as working toward homogenising the technological standards existent within the member states whose disparity can hamper circulation. Such is the case with measures surrounding the digital rollout in Europe, or the efforts to support the development of broadband in each European country. Most notably, this has been at the heart of the restructuring of the MEDIA Programme, which has been extended until 2013.

In order to allocate the available funds to best effect, it has become vital to analyse the shifts that are being incurred in the old paradigms of the audiovisual sector, and fully understand the impact that digitisation is making in the way media is produced, channelled, and consumed. By doing this, the European Commission can hope to meet the following challenges which will determine the vitality and innovativeness of its SMEs:

- Ensuring that European audiovisual works are well-represented within consumers' homes;
- Supporting the growth and creative potential of SMEs and thus creating a vibrant cross-European network of businesses involved in both the creation and distribution of audiovisual works;
- Creating the conditions for a harmonious development of audiovisual SMEs which will enable all European member states to take part in the economic and cultural benefits of this very important sector.

[1] The number of broadband subscribers in the OECD rose to 235m by December 2007, an increase of almost 20% from a year earlier – Source: The Economist Intelligence Unit.

[2] A study by Bain & Co suggests that by 2012, more than 80% of Western European Households and 30% in Eastern Europe, will have access to some form of digital television.

Objective and structure of the study

The aim of this study is to identify the challenges and opportunities facing the European home entertainment sector as a whole and to make recommendations on how the MEDIA Programme can help European SMEs and audiovisual works make the most of current changes. The first part of this report provides an overview about current home entertainment practices and market trends in Europe on the one hand, and about the role of European audiovisual SMEs active in this sector and of European audiovisual works on the other hand. This analysis is necessary in order to draw a clear picture (both in terms of breadth – various countries and segments - as of depth – practices, industry, market and legal base) of the European home entertainment sector.
Building on this analysis, the report then focuses on challenges and opportunities brought about by new distribution platforms for European audiovisual works and for the European SMEs of the home entertainment sector. It formulates a series of recommendation on how the European Commission should take these into account in the context of its policies and actions in favour of the audiovisual industries and its SMEs.

Scope of the study

The scope of this study includes all 31 countries member of the MEDIA Programme (all 27 EU member states plus Iceland, Norway, Switzerland and Liechtenstein). It focuses on home entertainment ie on any type of consumption of audiovisual works outside of dedicated places such as a cinemas. The analysis is based on a segmentation of the home entertainment market according to the following five content platforms:

- TV (linear TV platforms)
  - Terrestrial TV (analog and digital)
  - Cable TV
  - Satellite TV
  - IPTV (only linear)
  - Pay TV (only linear)
- Home Video (VHS/DVD)
  - Retail
  - Rental
- VOD (non linear video and TV platforms)
  - VOD services over IP, terrestrial, cable and satellite (including catch-up TV)
  - Video sharing websites
- Games
  - Physical sales (CD-ROM, Consoles, Handhelds)
  - Digital sales (digital sales over web or consoles)
  - Revenues of games communities
- Mobile content
  - Video/TV
  - Gaming

Legal aspects of the European home entertainment sector

This section aims at providing a general overview of the regulation in the European home entertainment sector as well as the current legal practices. It also looks into the new trends in terms of legal practices as well as of market practices linked to legal aspects of the home entertainment sector. It finally mentions a number of major legal challenges and opportunities to be addressed by the home entertainment industry and regulators.

The new era in the home entertainment sector, revolutionised by the increasing digitalisation of audiovisual works, the digital distribution of computer- and videogames (being multimedia works par excellence), IPTV and mobile TV and the emergence of user generated content (MySpace, YouTube etc.), basically grants consumers the possibility of accessing digital content no matter where and when, eventually leading to a fundamental change in the home entertainment market.

While some of the traditional business models will face extinction or at least become marginalised, others will flourish. Newer business models like streaming and video-on-demand (which is likely to eventually replace the retail of physical DVDs), subscription services, download to own (e.g. "buy and burn" or non-transferable), legal peer-to-peer, mobile services, DRM-enabled services, IPTV (through internet or closed-wall), online game services as well as free of charge video on demand ("free on demand"), whether advertising driven or shared, require a legal framework that is specifically customised for the legal challenges of content distribution through digital platforms. But as business models and technologies in the digital era rapidly change (the rate of technical innovation has been doubling every decade), lawmakers face the problem of the vertiginous pace of technical developments, of frequently varying consumer trends and of a young industry, that constantly conquers "terra incognita" in the world of digital business opportunities. It is virtually impossible to foresee the changes, which the current developments in the home entertainment sector will bring about. But it is absolutely certain that any regulatory framework must be open to such changes.

For some of the players of the home entertainment sector, like rights holders, content aggregators and platform operators, digital distribution of audiovisual or multimedia works is currently the most promising business model. Distribution over IP-based channels has evolved since the late 1990s and has enabled content providers to distribute their content online to be downloaded or streamed by end-users, bypassing costly physical distribution networks. In the digital world, providers of content are not limited by physical shelf space, as server, bandwidth and other storage and distribution costs are rapidly declining. But as copying of digital works is very easy and widespread, replacing retail on physical storage media increases the danger of copyright piracy – hence the protection of rights becomes paramount. Therefore rights holders want to control the usage of their content, sometimes colliding with consumer's rights and interests.

The existing EU legal framework regulating the digital distribution of content is made of a great variety of regulations which focus on such different areas as copyright issues and enforcement of intellectual property, consumer protection, personal data protection and privacy and electronic communication, protection of minors and human dignity advertising as well as on the technical aspects of telecommunication networks.

The regulatory framework of the Member States regarding IPTV and mobile TV has to be considered as a legal patchwork, which leaves providers of these services with uncertainty regarding the legal obligations they have to fulfil. It has also been feared that over-regulation of the young industry of IPTV and mobile TV could stall its economic development and turn into a competitive advantage for operators, which perform their services from outside the EU. The current regulatory framework which governs the telecoms sector of the EU was agreed in 2002 and seems to be outdated. As content distribution through broadband lines and voice–over-ip has already become an everyday phenomenon, the EU reacted to the developments and is currently revising the provisions.

The steady growing market for games requires a stable legal framework. As of today, the underlying software of a computer game is protected but not the game's concept, its layouts, methods and game engine. Many Member States try to close the legal gap by granting dual protection for computer games, since games as multimedia works are considered to be „cinematographic works", „works comparable to cinematographic works" or „audiovisual works" as well as software. The dual concept however, could possibly lead to a number of legal uncertainties, depending on the respective national law of the Member State.

The potential of the internal market for the home entertainment sector is not only hampered by different national tastes and language barriers, but in the case of EU-wide

digital distribution above all because of the fragmentation of copyrights of audiovisual and multimedia works. As long as rights are exclusively granted in different territories and as long as territorial rights are a fundamental cornerstone of the financing structure for audiovisual works and computer and videogames, the digital common market will remain wishful thinking. Nevertheless territorialisation is still the only way to determine the price of audiovisual works according to national specificities in terms of living standard, infrastructure, level of equipment, etc. The future legal framework to support trans-border digital distribution of movies and videogames should not impede the financing structures of the respective industries. The success of this transition of both the market and the industry will depend on how and how fast content aggregators, VoD or game-on-demand operators will become part of financing structures, where they grant minimum guarantees to film producers or game developers against digital rights for certain territories – sometimes replacing traditional players of the industry. Time will tell if multi-territory licensing can be an economic and legal answer to the fragmentation of copyrights.

European home entertainment market

This section is an attempt to qualify and to quantify the various segments of the home entertainment market (linear TV, home video, VOD, mobile content and games) across the 31 countries member of the MEDIA Programme (27 EU member States plus Iceland, Norway, Switzerland and Liechtenstein). It provides a picture of the size of the respective segments in each country and details both the types of services and contents offered for each segment. This overview is useful to understand the following section which analyses the industry providing these services and the business models it uses.

Media convergence readiness in Europe

The countries part of the MEDIA Programme are very heterogeneous in terms of their level of media convergence readiness. Four groups of countries can be identified:

- Countries with a high level of media convergence readiness (high broadband penetration, high 2.5/3G penetration, etc.): all five Nordic countries (Denmark, Finland, Iceland, Norway and Sweden), Switzerland, Malta, the Netherlands and the UK.
- Countries with an average level of media convergence readiness: Austria, Belgium, Germany, Spain, France, Greece, Ireland, Italy and Portugal
- Countries with a low level of media convergence readiness: Bulgaria, the Czech Republic, Hungary, Latvia, Poland and Slovakia.
- Countries with too little data available: Cyprus, Estonia, Latvia, Liechtenstein, Luxemburg, Romania and Slovenia

The total home entertainment market of the countries member of the MEDIA Programme can be estimated at about €100b.

The size of the industry is comparable to the publishing industry (books, newspapers, magazines). The market can be divided in three main groups of countries according to their market's size:

- **The "Big 5"** leading markets with the UK leading the league (€21,6b), followed by Germany (€17,9b), France (€13,8b), Italy (€10,1b) and Spain (€7,6b).
- **The second league with home entertainment revenues between €1b and €4b** is made up of all other Western European markets except Iceland. Poland is the only market within the new EU member States with a market above €1b.
- **The rest of Europe** includes Iceland, Liechtenstein and all new EU member States except Poland. However, it has to be noted that these countries' home entertainment markets are undervalued due to the lack of data available apart for linear TV.

Comparision of the 5 home entertainment market segments at European level

- **Linear TV represents 70 to 90% of the market in most countries**
  In all countries where data is available for the five audiovisual platforms, it appears

clearly that linear television is still the undisputed leader of the home entertainment market amounting roughly to 80% of the revenues in most countries. Therefore, the overall ranking of the various home entertainment markets is practically the same as it is when considering solely the linear television platform (terrestrial, cable, satellite and IP linear TV).

- **Home video is the second most significant segment of home entertainment revenues after linear TV**
  Its average market share amounts to 11,8% in EU15 but this segment does not present a homogeneous picture in Europe. Indeed, in North European countries, home video represents about 15% of the home entertainment market (Denmark, Norway, UK), whereas in other countries (mainly Eastern and South European) it remains significantly below a 10% market share (Greece, Latvia, Poland, Hungary, Czech Republic, Hungary, Italy, Austria, Portugal, Finland, Spain and Germany).
- **VoD is still a very marginal segment of the market**
  Its average market share does not reach 1% but it is emerging in some countries. It exceeds 1% of market revenues only in Portugal and probably Romania. Nevertheless, it starts to generate revenues in a number of counties such as Ireland (0,9% of the home entertainment market), Finland (0,7%), UK, France, Spain, Denmark and Norway (0,6%).
- **Mobile content appears to be a more significant market segment with an EU15[3] average of about 2%.**
  Nordic countries are the leading markets with mobile content reaching 9% of home entertainment revenues in Norway, 6,8% in Sweden, 5,5% in Denmark and 5,4% in Finland (no data available for Iceland).
- **Games represents the third segment of the home entertainment market in countries where data available**
  Not much data is available for the games sector. For the countries in which data is available, it appears to represent between 5 and 8% of the market except for a couple of countries with a market share over 10%: Ireland (14,7%), Switzerland (13,3%), UK (10,2%) and the Netherlands (9,5%).

The European home entertainment industry

The European home entertainment industry is much contrasted. 20 out of the 50 biggest audiovisual companies worldwide are European. They include production, distribution, broadcasting as well as cable companies. Next to these global enterprises that provide content and services across Europe, there are numerous national small and medium-sized companies as well as larger ones in each level of the audiovisual content value chain, which compose the industry of home entertainment in Europe. However, the audiovisual sector tends to be dominated by significantly large operators, such as TV operators, telecom operators and local distributors, which invest heavily in audiovisual production or distribution and shape the business models.

Thanks to digital technologies enabling convergence between Internet, television and telecommunications, the traditional value chain of the audiovisual industry has opened. Each operator now needs to collaborate more extensively with the players from other segments in the value chain through deals and partnerships. A fundamental shift in the audiovisual European industry is taking place and new business models will emerge in the next few years. Given this context of technological innovations and of consumer's behaviour (r)evolutions, the future of the home entertainment industry is unclear and the balance of power within the industry could experience a profound redefinition.

[3] Unfortunately, no information on mobile content is available for the new EU member countries.

Key findings on media usage of home entertainment in Europe

Access to media: increasing penetration rates for all media

- Almost all European households have a television, of which an overwhelming majority still have a standard television (92%) while only 1 of 5 have a wide screen
- Terrestrial television remains the main means of transmission (47%), 35% of EU27 households use cable television networks and 21% receive satellite TV. Digital terrestrial television is used by 7% of EU27 households (2006).
- In 2007, 54% of European households (EU 27) were equipped with Internet access and 1 of 2 Europeans regularly uses the Internet (once a week)
- 8 of 10 Europeans have a mobile phone, the penetration rate of mobile telephony seems to be directly proportional to the households and the city size and prepaid cards is the most frequent agreement

TV, DVD, VoD and video community networks: new forms of video consumption

- In 2006, television is still the central place for home entertainment consumption. People spend between two and three times longer watching TV than they spend on the Internet. Today, 95% of video content viewing in Europe is traditional "linear" television. However, this is set to change, as more and more non-linear options are becoming available.
- After TV, watching movies is the second most popular activity (cinemas, DVD, pay-per-view services).
- Over the last 4 years, the European DVD market has strongly declined as consuming video content online quickly becomes a mainstream activity, and more homes gain broadband access and larger bandwidth.
- Free access to audiovisual content is also one of the most attractive features of video social networks and explains the success of catch-up TV.
- Multi-platform distribution and the emerging concept of the "digital home", built around the demand for content portability and interconnecting devices, are also changing video usage.

Internet usage: specific usage profiles among younger generations

- 15 to 34-year-olds mostly use media for entertainment, whereas those over 35 use media above all for information.
- The use of pay-per-view or paying VOD services to access media content online is still marginal in Europe.
- Internet is used as a communication tool.
- Web 2.0 offers a new set of software tools for using the Web, and is particularly appreciated by young people as a free product which makes sharing information possible.

Social networks

- Web-based social networks are not related to any "community ideal"; rather, they exploit the strengths of weak cooperation. People discover cooperative opportunities only by making public their individual production.
- The expression of the self becomes a way of forging relations and making public one's relationships via a blog, a characteristic feature of many social networks.
- The rise of user-created content (UCC), or user-generated content (UGC) is one of the main features of the "participative web".
- One of the main features of online gaming is social interaction (group interaction, chatting, role playing).

Games: one of Europeans' favourite hobbies

- The majority of European gamers buy between 1 and 6 games per year.
- While video game demos and music downloads are largely sourced from official websites, complete video games and full-length movies are much more likely to come from unofficial sources.

- Different consumption trends coexist in the games sector with nomadism, casual gaming and online gaming being the dominant ones.
- The success of casual games can be ascribed to the development of broadband access (primarily over DSL), to the spread of laptops and to the infatuation for mobile phones that encourage the development of new usages.

Mobile

- Mobile phones give access TV, video and gaming content.
- Accessing the Internet via mobile is increasing.
- Video content for mobile devices is a fast growing segment.

Challenges and opportunities of new distribution platforms

The games sector represents a very dynamic market with clear business models

- Companies in this market experience high growth rates, many of them aiming to distribute (and sometimes also develop/produce) their products globally
- A great asset of the games sector is the existence of European distribution licensing which enables significant economies of scale on marketing.
- Two simultaneous processes are at work in the sector:
- Vertical integration: Publishers tend to distribute and develop their games by way of internal or external expension.
- Co-operation between companies: Other companies tend to organise themselves within more or less loose cooperation relationships in order to increase their industrial output and/or their access to market.
- Online distribution is gradually changing the value chain with publishers increasingly distributing their products directly online thus short cutting national/local distributors.
- No clear market failure can be seen in the games sector: the main challenge for European SMEs is to achieve critical mass to be able to control their distribution

The European home entertainment sector is in a transition phase, mainly driven by

- **Media convergence:** The digitalisation of content distribution makes content available on a multitude of distribution platforms and makes the combination of various types of content possible;
- **Interaction**: The digitalisation of content gives the viewer/user the possibility of interacting with the content, of sending feedback in real time though the distribution network and of creating original content which can in turn be made accessible for other users/viewers;
- **Commoditisation/Diversification**: The digitalisation of content changes the patterns for its availability and its consumption; the explosion of the number of delivery channels makes most content become more of a commodity with a strong pressure on prices while, at the same time, the possibility to reach niche audiences is increasing.

These changes bring about important impacts on the home entertainment sector:

- **Increasing importance of video content on the Internet**, although users/viewers tend to favour content accessible for free, leaving little room for other business models than ad-funded entertainment.
- **Dominance of "walled garden" solutions for IPTV** offered by the major telecom, satellite and cable operators.
- **Changes in the audiovisual value chain**, either due to the merging of roles which used to be distinct or due to the disappearing of some roles. For instance, in the VoD sector, many new players are entering the value chain as "platform editors" (media companies, telecommunication companies, independents and also online retailers) while the importance of the role of "aggregators" is constantly increasing. In the

games sector, besides the continuous process of integration around games publishers, a number of partnerships between stakeholders are emerging, especially between publishers and aggregators, amongst developers and, of course, between publishers and developers.

- **Increasing importance of games** as an industry as well as a form of cultural expression. In the EU15 countries, 23.5% of all households own a game console; hence, considering that most European gamers actually play on their PC (72% according to the most recent Nielsen Interactive Entertainment study), games can arguably be considered as a mainstream segment of the home entertainment sector. Moreover, one major impact of the continuous technological progress of games development combined with the phenomenon of media convergence is that games are increasingly influencing other types of media (especially film and animation) and vice versa.
- **Slow development of mobile entertainment**. The development of TV, video, games and interactive entertainment services distributed over mobile networks is slow. The lack of an attractive pricing for mobile data transfer is seen as the main reason for this.
- **Persistence of territorialisation** for the exploitation of digital rights of audiovisual works. Unlike the game industry that can leverage on multi-territorial licenses are common, the full benefits of digital distribution of video content are still hampered by the territorialisation of licenses. This is mainly due to the heterogeneity of European markets with different consumption, different regulations and the domination by local players.
- **New distribution platforms represent an opportunity for European SMEs** to reach their audience and to understand it better by means of interaction. Furthermore, as business models are still in the process of being defined, they represent a real chance for production companies to improve their position in the sharing of the copyright than on the traditional platforms (TV, cinema and video/DVD).

Challenges to the development of new platforms in Europe

Users' interest for audiovisual content available for free on the new platforms does not need to be further demonstrated. The question is rather about how to finance this content which, so far, too few users seem to be willing to pay for. Except for premium content on certain Internet platforms, the only economically viable model so far seems to be ad-financed content such as branded entertainment, brand integration or web ads on the page displaying the content. For the time being, rules for advertising in audiovisual works being stricter in Europe than in the rest of the world, the development of the new platforms on Europe is even more of a challenge.
Access to finance for SMEs is a major issue for the development of the European entertainment industry.

Recommendations for additions to current Media support schemes

- **Training:**
  - Interactive storytelling, multiplatform storytelling: Classic film or TV scriptwriters do not know how to write non-linear stories which leave room for interactivity.
  - Technical games engineers: The European industry lacks skilled human resources in this area especially for people trained at programming console games.
- **New Technologies:**
  - Pilot projects: Support for "360° production strategy".
    "360° production strategy" refers to the idea of developing a piece of content over all existing media platforms (cinema, TV, Internet, mobile, print, games…), usually with originally developed content for each specific media platform. This support could be targeted directly at TV production companies or broadcasters as well as to film production and distribution companies.
  - Creation of a special scheme to support media clusters
    Support the setup of clusters which bring together companies having technological know-how to produce and distribute digital content and companies having creative

know-how to produce original content which could be developed for various media platforms. This could boost the creativity and the ability of SMEs to provide the right services and programmes for a changing market.

- **Producer's Support: Development of interactive works:**
  The support for the development of interactive works should be increased as the funds currently available are not in relation with the variety, the economical size as well as the economical and cultural potential of the types of media addressed in this scheme.
- **Distribution:**
  Although interactive works are for the time being not included in the scope of the MEDIA Programme for distribution, the Commission could take into consideration emulating what it has been able to do with its Producers' Support and including Interactive works in the scope of the Distribution scheme of the MEDIA Programme. Such an addition could aim at supporting for the international distribution of games released by independent games publishers and supporting independent content aggregators which are active internationally.

Recommendations for a new support instrument focussing on the access to finance of European audiovisual SMEs

The key issue which will determine the consumption of European audiovisual works at home will be the gateway enabling the access, the research and the delivery of the content, should it be set top boxes, mobile content platforms or video sharing platforms. Therefore the MEDIA Programme and the European Commission should encourage a variety of stakeholders to be active at this critical point of the value chain in order to guarantee the access of European consumers and users to European audiovisual content. Furthermore, such support could help some young innovative SMEs to eventually develop as major European corporations.

For the time being, the strong stakeholders of the industry (i.e. TV networks such as BSkyB, telecom operators such as Deutsche Telekom as well as search engines such as Google/Youtube or VOD platforms such as iTunes) start to position themselves as gatekeepers of the access to home viewers/users. Most of them are favouring walled-garden solutions meaning that only the content which they have licensed is accessible. Thanks to their economical weight and to the fact that, for some of them, the bulk of their revenues does not come from audiovisual content distribution, they can easily determine the terms of trade, especially in the face of independent content owners.

In order to guarantee a diversified offer of audiovisual works to the European households, the European Commission should aim at facilitating the emergence of alternative stakeholders in this field. As a matter of fact, most of these alternative stakeholders are SMEs at a relative early stage of development such as Holland's United Content Distributors. As we know, European innovative SMEs face a great challenge in bridging the gap between the seed and start-up capital phase where they are usually able to find business angel and bank investment locally and the expansion phase where venture capital investment is necessary.

The Commission has already a wide range of supports available for European SMEs available either directly from DG Enterprise, DG Regio or DG INFSO or through programmes managed at national or regional level, such as the European Union's Structural Funds. SMEs can also benefit from a series of non-financial assistance measures in the form of programmes and business support services. Nevertheless, there is no specific instrument for financing the SMEs of the home entertainment sector and it appears that SMEs from the audiovisual sector are very much underrepresented in the companies benefiting from these supports. A detailed analysis of this situation and of its origins was not in the scope of this study. Nevertheless, considering the economical and cultural importance of home entertainment, a financial instrument more focussed at the audiovisual/home entertainment sectors appears to be needed.

One option for the European Commission could be to set up a public fund to bridge the equity gap for innovative European audiovisual SMEs. Investments at this critical phase of the development of such companies would aim at helping them expanding internationally. The European Commission would aim at exiting such an investment

within a period of 5 to 10 years by means of a management buy-out, trade sale or public sale. Furthermore, the EC could choose not to aim primarily at making a major profit with such investments but rather examine the possibilities of binding the support with some European criteria within these companies, sustainable after its exiting of the investment. Such soft criteria could include ways to guarantee the access of European audiovisual works to the home or to guarantee the European ownership of the company for a significant period of time. Indeed, as we know, the challenges which European companies face in finding start-up and growth finance appear at the end of the scale as well when the company is seeking funds to finance its global expansion. At this very stage, most European SMEs often have to go the US to find such funds since large scale venture investment is scarce in Europe.

Such public funds have already been set up at regional or national levels in some members States, most of them focussing on the "creative industries" and including both national/regional funds and European funds such as NESTA (UK) or the VC Fonds Kreativwirtschaft (DE).

Introduction

One of the biggest challenges facing the European Union is creating the best possible conditions to nurture economic growth and cultural promotion and, in doing so, contribute at the same time to the homogenisation of the level of development of all member states. In what is essentially a very fragmented market, which directives should be created in order to establish Europe's economic weight as a whole? How can audiovisual works from the various member states be well represented on the content market and be competitive with the well-established market position of both national and US audiovisual works?

These questions arise at a time when the audiovisual sector faces a number of changes in what had been a fairly stable industry in terms of the available technology and the business models employed. In Europe, as opposed to the United States, the businesses which make up this sector tend to be small to medium-sized, operating for the most part locally (nationally). These SMEs represent the key to Europe's role in the race to innovation and market share within the framework of the new digital age. However, as recent examples have shown, most of these companies struggle to find sufficient financing within Europe in order to take off and develop to their full potential (examples of this include Skype). And yet, innovation is crucial in this area, as Europe is already feeling the pressure to counter the economic clout of the United States. Targeting the sectors most likely to lead the way in the audiovisual sector and facilitating their access to financing is the next step towards ensuring that European SMEs remain competitive.

Innovation is the crux of the matter for the development of SMEs involved in distributing and creating new audiovisual platforms and hardware, but what of the actual content which reaches consumers via these channels? Is European talent sufficiently represented in what is offered to consumers via the different channels of distribution? Are the two sectors working hand in hand to ensure that the national cultural heritage and creation of audiovisual content is reaching its audience? The European Commission has been busy formulating and implementing new measures which aim to facilitate the legal framework surrounding the smooth circulation of works within Europe, as well as working toward homogenising the technological standards existent within the member states whose disparity can hamper circulation. Such is the case with measures surrounding the digital rollout in Europe, or the efforts to support the development of broadband in each European country.

Most notably, this has been at the heart of the restructuring of the MEDIA Programme, which has been extended until 2013. In order to allocate the available funds to best effect, it has become vital to analyse the shifts that are being incurred in the old paradigms of the audiovisual sector, and fully understand the impact that digitisation is making in the way media is produced, channelled, and consumed. By doing this, the European Commission can hope to meet the following challenges which will determine the vitality and innovativeness of its SMEs:

- Ensuring that European audiovisual works are well-represented within consumers' homes;
- Supporting the growth and creative potential of SMEs and thus creating a vibrant cross-European network of businesses involved in both the creation and distribution of audiovisual works;
- Creating the conditions for a harmonious development of audiovisual SMEs which will enable all European member states to take part in the economic and cultural benefits of this very important sector.

Context of the study

The home entertainment sector is in the process of fundamentally reshaping itself. Increasing global research and development is partly responsible for the changes taking place; what was a controlled, understandable and fairly readable market is now becoming something far more chaotic where one person, through an innovative idea, can create ruptures in both consumer habits and along the entire value chain.

Above and beyond our capacity to innovate, the current fast-paced mutations of the sector can also be explained by the equipment adopted by our fellow citizens. An ever increasing penetration of Internet broadband connections[4] in most European households and the convergence of equipment due to IP technologies[5], are the pillars of a not so distant world of being always connected.

Even though it is believed that the events unfolding are due to fundamental shifts from the supply side, we can also note that they reflect demands from increasingly demanding consumers. Indeed, a generation of firm believers in the "you can't always get what you want", is slowly but surely moving out as a new generation of "I know what I want, and I want it now" is taking over. This is not new. It has been the same story over and over for the past hundred years; but this time, most analysts agree[6], is different, at least for the entertainment sector.

Let us briefly go back to the reasons why the current situation calls for changes and why the Internet, and more generally speaking, IP technologies, could provide satisfactory solutions to the current shortcoming of the industry.

Let us look at feature film distribution in Europe…

Distributing films outside of their national territory
Even though France is the second exporter of feature films in the world, only a limited amount of the 200 films produced each year are distributed abroad in numerous territories[7]. This situation also applies to European countries producing fewer feature films per year.

High promotion and advertisement costs as well as limited distribution outlets in traditional distribution networks, prevents the totality of films produced from being distributed outside of their national markets. As a result, many films remain unknown in many territories.

Distributing foreign films in a domestic market
Inversely, of the totality of films produced in the world, only a small fraction is sold, distributed and visible in a national territory. Indeed, acquisition costs and release fees are often too important versus the expected commercial gains. Moreover, they often face difficulties to access the traditional distribution networks[8]. This is happening while,

[4] The number of broadband subscribers in the OECD rose to 235m by December 2007, an increase of almost 20% from a year earlier – Source: The Economist Intelligence Unit.
[5] A study by Bain & Co suggests that by 2012, more than 80% of Western European Households and 30% in Eastern Europe, will have access to some form of digital television.
[6] In the same study, Bain & Co promotes the idea that an "evolving" (slow transition towards new habits) scenario for the industry will slowly but surely lead the way for a "next-generation" (radical changes in consumer habits) scenario.
[7] e.g. According to the CNC, Germany and Italy normally buy 50 to 60 French films per year.
[8] The market share of European films outside of their respective domestic markets is mostly less than 10% in the European Union.

simultaneously, the production of films in the European Union has a tendency to increase while the space in traditional distribution channels remains stable[9].

IP technologies as a solution

As IP-based distribution has an initial per unit publishing cost that is limited in comparison to theatrical and DVD releases, this solution could achieve 100% availability in Europe. Furthermore, it allows for contextual marketing, offering the possibility to address niche markets that are limited, but reactive to targeted film offers, which could ensure that each and every film has more chances of being exploited to its full potential.

This solution should also greatly benefit content producers as, even though gross margins for editors are less in VoD vs DVD and theatrical, the profit sharing in favour of the rights holder is three times more important[10].

Actors of changing times

This obviously means inherent threats to the actual players of the industry all across the value chain, from authors to retailers and exhibitors. However, one must also keep in mind that the end of something is also a new beginning, and that many actors are seeing the new paradigms as opportunities rather than a threat.

Traditional integrated players such as media conglomerates, and public communication groups, are currently undergoing some structural changes in order to adapt themselves. However, newcomers such as telecommunication companies, Internet Service Providers, Internet Pure Players, and even hardware manufacturers, are also marking their ground. Within this clash of the titans, will there be some space left for SMEs? If so, at which level of the value chain? And how will they add value?…

The only certainty for the time being is that the first beneficiary of this fundamental shift will be the consumer, who will soon be able to escape from scheduled programming and to watch what he wants, when he wants, how he wants and using the device he wants.

[9] In France, European films represent less than 18% of the total theatrical releases (100 films out of 589 in 2005). Which means that only 13% of European films (789 in 2006) are distributed in France.

[10] Source: Etude sur L'Economie de la VoD en France published by Media Consulting Group

Objectives of the study

The title of this study is "Study on the role of SMEs and European audiovisual works in the context of the fast changing and converging home entertainment sector (Pay TV, home video, video on demand, video games, Internet, etc.)".

This study is commissioned in the context of the adoption of MEDIA 2007, the next generation of the E.U. funding programme aimed at supporting the audiovisual industry in Europe, now taking into account the changes brought about by the digital revolution. In particular, the European Commission wishes to set up measures based on expert recommendations which will enable it to stimulate the growth of small and medium-sized businesses and support its Video on Demand scheme.

The Consultant's understanding of the aim of this study is to give a clear view and understanding of the two following aspects:

- European audiovisual usage in the home and forseeable trends, especially with regard to the development of the use of new digital platforms,
- the market positioning of, on the one hand, audiovisual SMEs, and on the other, of European audiovisual works, and how to help improve their competitiveness; especially on the new digital platforms.

With the appearance of new formats and means of delivering content to users, come new types of content. New forms of audiovisual usage include terms like "interactivity" or "user-generated content" (UGC), as opposed to the more traditional forms of media usage, in which the relationship between producer and user only worked in one direction.

The multiplicity of usage includes linear forms of receiving content (such as traditional television programming), on-demand services (of which Video on Demand is only one aspect), interactive solutions (via not only Internet, but also television), and increasingly, producing one's own content and sharing it with other users. The multiplicity of platforms which carry these forms of usage range from television sets to computers to handheld devices.

In this study, we examine how the multiplicity of usage and platforms interact with each other to create new solutions in accessing, interacting with and producing content. We also try to provide an accurate picture of the current market position of European audiovisual SMEs and works in the context of traditional, new, and emerging audiovisual usage in the home.

In order to do this, we examine how the traditional business categories of the audiovisual sector – i.e. distribution, production, providers, territories, etc. – tend to blur in an age where the digital format encourages convergence between previously distinct types of content and channels for delivering them. The current business models are also undergoing deep changes, especially with advertising, subscription, and paid downloads becoming one of the main sources of revenue for many content producers and distributors, rather than selling physical media such as DVDs.

The Consultant's understanding of his mission is that the result of this study should give some keys as to how the MEDIA Programme could help support the capacity of European audiovisual SMEs and audiovisual works to compete with large European and non-European media and telecommunication companies which are the main gatekeepers of the new digital platforms.

Scope of the study

The study covers all member states of the MEDIA Programme:
- 27 members of the European Union
- Norway, Switzerland, Iceland and Liechtenstein.

The study addresses the issue of the role of SMEs and European audiovisual works in the changing home entertainment (HE) sector following three topics (see Table 1):

1. Description of **current home entertainment practices** in the countries covered by the study, including a short market assessment for the **future**.

This topic can be divided into three subtopics:

   a. Description of what **forms of media usage** exist in European households and what weight these forms have in the countries covered;

   b. Analysis of **current and future trends** of the home entertainment market in Europe;

   c. Assessment of the **market share of European audiovisual works** in the home entertainment sector by country.

2. **Role of European audiovisual SMEs** in the European home entertainment sector.

This topic can be divided into two subtopics:

   a. Description of **European audiovisual SME involvement** in the sector, by type of media and by country;

   b. Identification of the **potential growth opportunities** for these SMEs.

Table 1: Topics to be addressed in the study

Topic 1	**Current home entertainment practices and market trends**
Subtopic 1.1	Forms of media usage in European households
Subtopic 1.2	Current and future trends of the European HE market
Subtopic 1.3	Market share of European audiovisual works in HE
Topic 2	**Role of European audiovisual SMEs in the home entertainment sector**
Subtopic 2.1	European AV SMEs' involvement in the HE sector
Subtopic 2.2	Potential growth opportunities for European AV SMEs

Definition of the terms of the study

The following definitions of the terms of the objectives of the study were used to define the scope of the study.

Home entertainment

Home entertainment is traditionally the content consumed or used at home. Nevertheless, we can today consider that a definition of home entertainment should include any type of consumption of audiovisual works except if it is done in a place dedicated to the consumption of audiovisual works (such as a cinema). This study therefore includes mobile entertainment.

European audiovisual works

Audiovisual works are works which consist of a series of fixed related images, with or without accompanying sound, susceptible of being made visible and, where accompanied by sound, susceptible of being made audible.[11] A "work", in this respect, can be defined as something produced by the exercise of creative talent or expenditure of creative effort.[12]

In this study, the Consultant considered as "audiovisual work" any audiovisual content which has at its core the uniqueness conferred by the creative work of one or a number of individuals. This includes:

1. Produced works of fiction, documentaries and animation
2. Games: both video games and online games.
3. User-generated content (UGC): both free or paid content

Note: Music, music videos and adult entertainment as well as all types of flow programmes like news, sports, entertainment, home shopping or gambling are not included in the scope of this study.

European households

The concept of household is a unit of measure widely used for statistical reports. This unit of measure was used to define general data such as the level of equipment in the different countries; but to apprehend media usage in a fast changing and converging home entertainment sector, segmentation by sex and age was also used. Indeed, in Europe, home entertainment is no more consumed exclusively through the single household television device. A significant number of European households possess more than one TV device and an important amount of home entertainment is being consumed or used today using other devices like computers or mobile phones.

SMEs of the home entertainment sector

The Consultant followed the official definition of SMEs provided by the European Union:

Companies classified as small and medium-sized enterprises (SMEs) are officially defined by the EU as having fewer than 250 employees. In addition, they can have an annual turnover of up to 50 million euros, or a balance sheet total of no more than 43 million euros. […] In reality, 99% of businesses in the European Union are small and medium-sized enterprises.[13]

[11] World Intellectual Property Organisation: http://www.wipo.int/treaties/en/ip/frt/trtdocs_wo004.html

[12] Merriam-Webster dictionary: http://www.m-w.com/dictionary/work

[13] European Commission: http://ec.europa.eu/enterprise/smes/facts_figures_en.htm

Methodology

Definition of the various home entertainment platforms

There are many ways to apprehend and categorize the home entertainment sector. In order to apprehend more easily this complex industry, the Consultant developed the following typologies (see Table 2):

- Transmission mode: Through which "network" is the content being delivered to the end user?
  - Physical distribution (network of retail or rental outlets, online shops or rental services)
  - Terrestrial, cable and satellite transmission ("traditional" TV transmission)
  - IP transmission (over the internet)
  - Mobile transmission (over mobile networks)
- Type of content: What type of content is being delivered?
  - Audiovisual works (fiction/non-fiction/documentary, short and longform)
  - Games
- Distribution platform: Which platform is being used to deliver archive, display and deliver the content?
- Transaction (business model): Which type of transaction or business model is being used by content providers for their offering?
  - Free
  - Subscription-based
  - Transaction based
- Usage: Which type of usage of the content is being made by the end user?
  - Passive (on schedule)
  - Active (on demand)
  - Interactive (the user has an impact on content)

Table 2: Overview of the home entertainment sector

Transmission mode	Type of content	Distribution platform	Transaction (business model)	Usage
Physical distribution	AV works	Video (DVD & VHS)	Subscription-based or transaction-based	Passive
	Games	CD-ROMs Consoles Handhelds	Mainly transaction-based	Interactive
Terrestrial, cable and satellite transmission	AV works	Terrestrial TV, cable and satellite TV, Pay-TV, Catch-up TV	Free, subscription-based or transaction-based	Passive Active (only for Catch-up TV)
IP transmission	AV works	VOD platforms (Internet, consoles, further devices, software)	Subscription-based or transaction-based	Active
		Webcasters (IPTV, Web TV, Catch-up TV)	Free or subscription-based (transaction based)	Active
		Video communities	Mostly free	Active (streaming) Interactive (upload)

	Games	Games communities and digital sales over websites or consoles	Free, subscription-based or transaction-based	Interactive
Mobile transmission	AV works (video and TV)	Mobile platforms	Free, subscription-based or transaction-based	Active (streaming/ download) Interactive (upload)
	Games		Free, subscription-based or transaction-based	Interactive

Based on this typology of the home entertainment sector, the Consultant chose to use the platform segmentation for his analysis. We defined 5 main home entertainment platforms.

TV (linear TV platforms)
- Terrestrial TV (analog and digital)
- Cable TV
- Satellite TV
- IPTV (only linear)
- Pay TV (only linear)

Home Video (VHS/DVD)
- Retail
- Rental

VOD (non linear video and TV platforms)
- VOD services over IP, terrestrial, cable and satellite (including catch-up TV)
- Video sharing websites

Games
- Physical sales (CD-ROM, Consoles, Handhelds)
- Digital sales (digital sales over web or consoles)
- Revenues of games communities

Mobile content
- Video/TV
- Gaming

The choice of segmentation according to these five platforms was made with the idea of prioritising the usage of the media over its distribution. Indeed, we see interaction as the major change in the consumption of home entertainment brought about by the convergence of media rather than the change of transmission channel: Watching a scheduled film on terrestrial TV or on IPTV comes down to more or less the same experience, as opposed to buying or renting a film on a VoD portal to watch it at a later point in the day.

Research

Overview

The Consultant used primary and secondary research for his analysis of the various topics of the study (see Table 3).

Table 3: Methodology used for the research

Data collection	Methodology	Sources
TOP1 Current HE practices and market trends		
TOP1.1 Forms of media usage in European households	2ary research (1ary research)	various
TOP1.2 Current and future trends of the European HE market	1ary research 2ary research	various
1.2.1 TV Broadcasters	2ary research	OBS/A1 Unit
1.2.2 Webcasters	2ary research	OBS/A1 Unit
1.2.3.1 VOD online services	2ary research	OBS/A1 Unit
1.2.3.2 Games online services	1ary research	Questionnaire
1.2.4 Social online networks	1ary research	Questionnaire
1.2.5.1 Mobile VOD/TV	2ary research	OBS/A1 Unit
1.2.5.2 Mobile games	1ary research	Questionnaire
1.2.6 Physical Medium (sales/retal, online/offline)	1ary research	Questionnaire
TOP1.3 Market share of European audiovisual works in HE	2ary research (1ary research)	various
TOP2 Role of European AV SMEs in the HE sector		
TOP2.1 European AV SMEs involvement in the HE sector	2ary research	various
TOP2.2 Potential growth opportunities for European AV SMEs	2ary research	various
TOP3 Legal environment of home entertainment and current trends		
TOP3.1 General legal environment in Europe	2ary research (1ary research)	various
TOP3.2 Current and future market pactices and legal trends	2ary research (1ary research)	various
Special Focusses		
Focus 1: VoD	2ary research	various
Focus 2: Broadcast/ Webcast	2ary research	various
Focus 3: Communities	1ary research	SL + HABBO

Primary research

The primary research focussed at generating overviews for the two main topics of the research (see Table 3): TOP1 Current HE practices and market trends and TOP2 Role of European AV SMEs in the HE sector. It consisted in a quantitative survey through questionnaire sent to companies in all 31 countries covered by the study. The data collected was that for the year 2006.

The following eight types of players were identified in the 31 countries and a specific questionnaire was developed for each of them:

- Game CE Manufacturers
- Games Distributors
- Games Distributors Association
- Games Social Networks
- Mobile Operators
- Video Association

- Video Publishers
- Video Social Networks

463 companies (or national entities of international companies) were identified. Unfortunately, the response to this survey was very low (see Table 4). Possible explanations are that industry players are very reluctant to provide information on their audience/ customers/ users and on their income structure (mainly needed to approach subtopic 1.1 and 1.2). This is due on the one hand to the fact that this information goes to the core of their activity in an industry which is characterised by fierce competition and evolving business models; on the other hand, some companies might not have very detailed information on their users.
Hence, the data collected on these issues over the primary research could only be used as a complementary source for the secondary research.

Table 4: Results of the primary research

All 31 countries	Contacted entities/ companies	Question-naires filled	Success rate	Failure rate
CE Manufacturers	48	0	0,0%	100,0%
Games distributors	127	5	3,9%	96,1%
Games social networks	68	1	1,5%	98,5%
Video online networks	54	2	3,7%	96,3%
Video associations	19	17	89,5%	10,5%
Video publishers	47	3	6,4%	93,6%
Mobile networks	100	2	2,0%	98,0%
Total/Average	**463**	**30**	**15,3%**	**84,7%**

Secondary research

Apart from the above mentioned primary research, the Consultant based his approach of the reality of media usage of home entertainment in Europe solely on secondary research.
Indeed, a relevant primary research on this aspect of the study would have meant to set up a consumer market study in which a representative sample of the population of each country covered by the study would have been interviewed about his home entertainment practice. This would have surpassed the capacities of this research project by far.

Hence, the work of the Consultant was to produce a compilation of available information. The research focusses on six topics (see Table 3, page 25):
- Subtopic 1.1: Forms of media usage in European households
- Subtopic 1.2: Current and future trends of the European HE market
- Subtopic 2.2: Potential growth opportunities for European AV SMEs
- Legal environment of home entertainment and current trends
- VoD
- Broadcast/Webcast

This research included a range of difference sources which can be found in the bibliography and sources section at the end of this report.

For each of these topics, the Consultant endeavored to produce as many and as comprehensive overviews as possible. For example, *Volume 1 of the Yearbook* of the European Audiovisual Observatory provided all necessary general economical and market data on all countries covered by the study except for Liechtenstein (number of inhabitants, of households, of broadband connections, of installed 3G telephones, etc.).
The Consultant aimed at including as many countries as possible covered by the study for each aspect of the secondary research. Nevertheless, relevant information was often only

available for a limited number of countries covered by the study. Especially available data on Eastern European countries is extremely scarce.

Regarding legal aspects of home entertainment, the Consultant focussed his secondary research on the new distribution platforms (VOD/games services, webcasters, Mobile TV, video and games, social online networks). These summaries included:

- General legal environment in Europe
- Current and future legal trends
- Current and future market pactices
- Main legal challenges and opportunities

Phase 2

The presentation of the Interim Report in Brussels on July 3rd, 2008 was followed by a discussion between the participants aimed at narrowing the scope of phase 2 and at defining clearly the expectations of the Commission regarding the output of the final report. As a result of this discussion, the scope of Phase 2 was defined as follows.

General aim of the European Commission

Have a better understanding of which revenue streams are likely to develop in the future for European audiovisual SMEs in order to make up for the slow progression/ stagnation/ decline of their traditional revenue streams which are cinema, home video and linear television.

Focus of Phase 2

According to this general aim, Phase 2 focussed on providing a clear understanding of the trends in the two fairly new branches of development of the European audiovisual industry which are:

- Games
- Distribution of professionally produced video content over new digital platforms

Phase 2 concentrated solely on European audiovisual works distributed through ways which mainly foresee a fair retribution of the rights' holders, thus excluding:

- User-generated content (UGC)
- Video sharing

Finally, Phase 2 did not aim at including all 31 countries included in the scope of the study.

Methodology of Phase 2

The methodology used for Phase 2 was based mainly on qualitative interviews with industry insiders. These interviews were supplemented by secondary research.

Participation in industry events

Throughout the study, the Consultant took part in several industry events which helped us directly contact the people involved in the home entertainment industry and to gather information to be used for our secondary and primary research. The consultant took part in the following events:

- 2008 Mobile World Congress – Barcelona, 11-14 February, 2008
- MipTV – The world's audiovisual and digital content market – Cannes, 30 March-3 April, 2008
- Screen Conference: Maximising Digital Rights Values – London, 18 March, 2008
- Medienwoche@IFA – Berlin, 1-3 September, 2008

PART I: CURRENT PRACTICES AND TRENDS IN THE HOME ENTERTAINMENT SECTOR IN EUROPE

As mentioned earlier (see Table 1 page **Fehler! Textmarke nicht definiert.**), the aim of this study is to provide clarity about current home entertainment practices and market trends in Europe on the one hand, and about the role of European audiovisual SMEs active in this sector and of European audiovisual works on the other hand, so as to identify clearly the challenges and opportunities facing the European home entertainment sector as a whole and to make recommendations on how the MEDIA Programme can support European SMEs and audiovisual works make the most of current changes.

This first part of the report focuses on current practices and trends. This analysis is necessary in order to draw a clear picture (both in terms of breadth – various countries and segments - as of depth – practices, industry, market and legal base) of the European home entertainment sector. It describes the sector following four sections:

A. Legal aspects of the European home entertainment sector
B. European home entertainment market
C. European home entertainment industry
D. Forms of media usage of home entertainment in Europe

Building on this analysis, Part II focuses on challenges and opportunities of new distribution platforms for European audiovisual works and for the European SMEs of the home entertainment sector.

A. Legal aspects of the European home entertainment sector

This section aims at providing a general overview of the regulation in the European home entertainment sector as well as the current legal practices. It also looks into the new trends in terms of legal practices as well as of market practices linked to legal aspects of the home entertainment sector. It finally mentions a number of major legal challenges and opportunities to be addressed by the home entertainment industry and regulators.

Overview of regulation and legal practices in the European home entertainment sector

The new era in the home entertainment sector, revolutionised by the increasing digitalisation of audiovisual works, the digital distribution of computer- and videogames (being multimedia works par excellence), IPTV and mobile TV and the emergence of user generated content (MySpace, YouTube etc.), basically grants consumers the possibility of accessing digital content no matter where and when, eventually leading to a fundamental change in the home entertainment market.

While some of the traditional business models will face extinction or at least become marginalised, others will flourish. Newer business models like streaming and video-on-demand (which is likely to eventually replace the retail of physical DVDs), subscription services, download to own (e.g. "buy and burn" or non-transferable), legal peer-to-peer, mobile services, DRM-enabled services, IPTV (through internet or closed-wall), online game services as well as free of charge video on demand ("free on demand"), whether advertising driven or shared, require a legal framework that is specifically customised for

the legal challenges of content distribution through digital platforms. But as business models and technologies in the digital era rapidly change (the rate of technical innovation has been doubling every decade), lawmakers face the problem of the vertiginous pace of technical developments, of frequently varying consumer trends and of a young industry, that constantly conquers "terra incognita" in the world of digital business opportunities. It is virtually impossible to foresee the changes, which the current developments in the home entertainment sector will bring about. But it is absolutely certain that any regulatory framework must be open to such changes.

For some of the players of the home entertainment sector, like rights holders, content aggregators and platform operators, digital distribution of audiovisual or multimedia works is currently the most promising business model. Distribution over IP-based channels has evolved since the late 1990s and has enabled content providers to distribute their content online to be downloaded or streamed by end-users, bypassing costly physical distribution networks. In the digital world, providers of content are not limited by physical shelf space, as server, bandwidth and other storage and distribution costs are rapidly declining. But as copying of digital works is very easy and widespread, replacing retail on physical storage media increases the danger of copyright piracy – hence the protection of rights becomes paramount. Therefore rights holders want to control the usage of their content, sometimes colliding with consumer's rights and interests.

The following legal analysis will focus on business models for the home entertainment sector, which are based on digital distribution. In this context, digital distribution shall be understood as content sent through different digital networks for the use in the many different types of devices for different consumer groups.

General Legal Environment in Europe

The existing EU legal framework regulating the digital distribution of content is made of a great variety of regulations which focus on such different areas as copyright issues (the Copyright Directive[14], the "Conditional Access" Directive[15]) and enforcement of intellectual property (Enforcement Directive[16]), consumer protection (eCommerce Directive[17], the Unfair Commercial Practices Directive[18], Unfair Terms in Consumer Contracts Directive[19] and Distance Contracts Directive[20]), personal data protection and privacy and electronic communication[21], protection of minors and human dignity as well as advertising (e.g. Audiovisual Media Services Directive[22]).

The main European set of rules for the technical aspects of telecommunication networks as the basis of IPTV and other online services are set out in the Directive on a Common

[14] Directive 2001/29/EC, OJ L 167, 22.6.2001, p. 10.
[15] Directive 98/84/EC, OJ L 320, 28.11.1998, p. 54.
[16] Directive 2004/48/EC, OJ L 157, 30.4.2004 – OJ L 195, 2.6.2004, p. 16
[17] Directive 2001/31/EC, OJ L 178, 17.7.2000, p. 1.
[18] Directive 2005/29/EC, OJ L 149, 11.5.2005, p.22 amending Council Directive 84/450/EEC, Directives 97/7/EC, 98/27/EC and 2002/65/EC of the European Parliament and of the Council and Regulation (EC) No 2006/2004 of the European Parliament and o the Council ('Unfair Commercial Practices Directive')
[19] Directive 93/13/EEC, OJ L 95, 21.4.1993, p. 29
[20] Directive 97/7/EC, OJ L 144, 4.6.1997, p. 19.
[21] Directive 95/46/EC, OJ L 281, 23.11.1995, p. 31 and Directive 2002/58/EC, OJ L 201, 31.7.2002, p. 37.
[22] Directive 89/552/EEC („Television without frontiers directive"), OJ L 298, 17.10.1989, p. 23 as amended by Directive 97/36/EC, OJ L 202, 30.7.1997, p. 40 and Directive 2007/65/EC, 18.12.2007, OJ L 332, p. 27.

Regulatory Framework[23], Directive on Access and Interconnection[24], the Directive on the authorization of electronic communications networks and services ("Authorization Directive")[25] and the Directive on universal service and user's rights relating to electronic communications networks and services ("Universal Services Directive")[26].

Copyrights

The EU Copyright Directive (EUCD), which implemented the WIPO Copyright Treaty on a European level, defines the regime for physical but also digital works – the latter requiring specific protection, as digital technology allows audiovisual works, videogames and other digital content to be copied endless times without any loss of quality. As these copies can be spread through the internet over networks to an uncountable number of consumers, copyright holders seek to control distribution of their protected works through digital rights management systems (DRM). The Directive supports the use of these systems by allowing technical measures that prevent or restrict acts not authorized by the rights holders of any copyright or rights related to copyright. The Directive obligates Member States to provide adequate legal protection against the circumvention of any effective technological measures and against the provision of devices and products or services to this effect. On the other hand, DRM is seen as a threat to the survival of the doctrine of "fair use", as users might not be able to enjoy the freedom that copyright law traditionally provided: As users and copyright holders should jointly "promote the progress of Science and Arts", there are fears that the extensive use of DRM systems could lead to a bare commercialization of creative works and could eventually affect the creative potential of European companies.

Antipiracy measures and enforcement

The Conditional Access Directive aims to harmonize the regulations against piracy in the EU Member States and protects commercial services like pay TV, video-on-demand, music-on-demand, electronic publishing and similar online services. The directive requires Member States to prohibit all commercial activities related to unauthorized access to protected services, such as the sale of piracy decoders, smart cards or software, and to provide appropriate sanctions. Furthermore, the directive prohibits the Member States from invoking „anti piracy" grounds to restrict the free movement of legitimate services and conditional access devices originating in another Member State.

The Enforcement Directive harmonizes the enforcement of intellectual property rights as provided by Community law and / or by the national law of the Member State concerned. The Directive concerns trademarks, designs or patents, but also copyrights. It requires all Member States to apply effective, dissuasive and proportionate remedies and penalties against those engaged in counterfeiting and piracy. The directive aims to create a level playing field for rights holders in the EU. Eventually, all Member States will have a similar set of measures, procedures and remedies available for rights holders to defend their intellectual property rights, if they are infringed by others.

[23] Directive 2002/21/EC, OJ L 108, 24.04.2002, p. 33.
[24] Directive 2002/19/EC, OJ L 109, 24.04.2002, p. 7.
[25] Directive 2002/20/EC, OJ L 108, 24.04.2002, p. 21.
[26] Directive 2002/22/EC, OJ L 108, 24.02.2002, p. 51.

Consumer's rights

In respect to B2C businesses through internet websites, interactive television or via mobile networks, the eCommerce Directive paved the way for an internal market framework for electronic commerce. The directive seeks to foster greater use of e-commerce by removing barriers across Europe and to enhance consumer confidence by providing legal certainty and by clarifying the rights and obligations of both businesses and consumers. The provisions set up minimum standards for information requirements, electronic contracts and liability limitations of intermediary service providers, where they act as mere conduits, caches or hosts of information. Non compliance leads to legal consequences. According to the directive, there is also no general obligation for providers to monitor illegal content or illegal activities when providing their services. If a hosting provider becomes aware of content that infringes copyrights or any other rights (e.g. personality rights), it must remove the infringing content immediately. Although some aspects of the directive are still being debated and currently remain unsolved, the liability regime created more legal certainty for new business models and services, particularly for user generated content platforms. Recent legal cases in Europe have shown though, that the boundaries between hosting providers and editors or publishers are blurred, especially since the underlying business model for many of these is usually driven by advertising revenues. As a consequence, a hosting provider that at the same time is considered a publisher can be held liable for copyright infringements on its site. Some national courts have also judged that hosting providers can be held liable for copyright infringements, if they have been aware that infringing activities happen on a regular basis. There have been demands lately to extend the general protection of ISPs of the directive to providers of search engines and directories, providers of keyword advertising services and content aggregators, as some Member States have embedded such protection into their national law, while others haven't. At present, some legal questions arise with respect to copyright infringement, as search engines link to the protected material and possibly abet others to infringe copyrights or might even infringe themselves through thumbnails, etc.

The eCommerce Directive also answers the question of whose law will apply on cross-border trade, no matter if the relevant content is dispatched on physical storage media or non-physical by online means. According to the "country of origin principle" the company based in a certain member state has to comply with the regulations of that member state. The regulations also prevent any member state from restricting the provision of information society service from another member state of the EU.

The eCommerce Directive however does not deal with the aspect of jurisdiction, that is, which court will hear the dispute of a consumer based in another EU state than the company, which distributes its content online. This question is dealt with by the Brussels Regulation on Jurisdiction and Enforcement of Judgment in Civil and Commercial Matters[27], which generally stipulates, that EU-based consumers can either sue in the member state the consumer resides in or in the courts of the member state in which the company is based in. EU-based consumers can only be sued in a court of the member state in which the consumer is domiciled. Although the legal provisions seem to be quite clear, Art. 15 of the Brussels Regulations additionally requires a "consumer contract". The provision stipulates that the company's activity is directed at the Member State of the consumer's domicile, leading to a possible scope of interpretation, whether the services of the respective website are or are not directed at the Member State the consumer resides in. Certain aspects that have to be considered to answer this question are for example the type of product offered, the language of the website or explicit exclusion of transborder posting and shipping.

[27] Brussels Regulation on Jurisdiction and the Enforcement on Judgments in Civil and Commercial Matters, 16.01.2001, OJ L012

The Unfair Commercial Practices Directive aims to protect not only consumers but also competitors and the interest of the public in general against misleading advertising and its unfair consequences. The directive prohibits methods of advertising, that, either in their wording or presentation, deceive or are likely to deceive the persons to whom they are addressed or whom they reach, by reason of their deceptive nature, are likely to affect consumers economic behavior or for those reasons, are likely to injure a competitor.

The Distance Selling Directive aims at ensuring that consumers who buy goods or services via distance selling means, such as digital distribution platforms, are in no worse a position than consumers that have face-to-face contact. The directive sets up regulations like the obligatory information the consumer has to be provided with (like the main characteristics of the goods or services, the prices including taxes, an address to which the consumer can complain), the time and the manner in which this information is imparted to the consumer. Additionally, the provisions contain a right of withdrawal of at least seven working days. Due to their nature, certain goods and services are exempted from this right though. This applies for example to services being consumed within the withdrawal period.

Audiovisual Media Services

The Audiovisual Media Services Directive recently amended the "Television without frontiers" Directive and widened its scope to all audiovisual media services, such as on-demand services (being non-linear in contrast to linear television services). Although most of the rather detailed provisions regarding quality rules for advertising and promotion of production of European works apply to traditional television services, whatever their mode of delivery may be, some of the general terms, specifically the ones regulating the internal market, such as the country of origin principle, apply to linear as well as non-linear services.

There have been strong reservations about the practical effects of the directive, as content regulated in Europe has no impact on competing content providers, who operate from outside the EU and whose services can be accessed in Europe. Furthermore, it has been feared that regulation of internet broadcast in Europe leads to commercial and legal disadvantages of European content providers to providers based elsewhere in the world.

Cultural aspects

Finally, all EU secondary law has to conform to the obligations of Art. 151 (4) of the treaty, which requires the Community to take cultural aspects into account in all its actions. As in the area of home entertainment many goods or services provided have a cultural impact or can be considered as cultural goods, EU legislators, while ensuring that competition in the internal market is not distorted, have to make sure that the scope of discretion the EU Member States have implementing secondary law relates to cultural aspects.

National Implementation

Most of the above mentioned directives have been adopted by the Member States into national law, although a few are still pending. As for the nature of a directive granting each Member State a more or less wide discretion of how the provisions have to be transformed into national law, the level of harmonization between the Member States differs significantly. Especially the implementation of the "Television Without Frontiers" Directive, the EU Copyright Directive and the Enforcement Directive, which at the time of

writing has not been implemented by all Member States, varies considerably between the different Member States.

Current and future legal practices

Applicable law

The digital distribution of audiovisual or multimedia works raises a number of questions. Indeed, the converged usage of online services through telecommunication or television breaks up the traditional boundaries between telecommunication law, media and broadcasting law, and cyber law.

Although the subsumption of mobile TV or IPTV into national copyright law of the Member States has proved rather unproblematic (although some questions still remain), the role of IPTV operators in the legal framework of the broadcasting and telecommunication law of many Member States remains unsolved. IPTV comprehends linear and on-demand services and blurs the sharp distinction between individual and mass communication, which traditionally serves as connecting factor for the concept of "broadcasting". If IPTV operators were considered to be "veritable" broadcasters, they might be obliged to follow certain regulations of broadcasting law (e.g. advertising rules) and / or be obliged to follow certain regulations of telecommunication law. IPTV platforms as "broadcasting networks" have to follow other regulations (e.g. "Must Carry"). IPTV operators as broadcasters might, then again, be entitled to receive a share of the payouts of broadcasters' collection societies. The Audiovisual Media Services Directive only distinguishes between linear (push content) or non linear services (pull content), the latter being on-demand services. The directive contains a graduated regulation from linear services to non linear services, with less strict provisions for non-linear services. However, many national particularities remain. For instance, German State Media Authorities chose not to have solely the distinction between linear and non-linear services but also to introduce specific rules for IPTV operators based on the argumentation that they have an impact on the shaping of public opinion: The more influence a service has, the stricter the provisions should be. Therefore, German authorities introduced an additional criterion stating that IPTV operators should be obliged to obtain a broadcasting license if they allow more than 500 users collateral access to their content.

A quite unclear legal situation of IPTV remains with regards to some copyright-related aspects within the international treaties such as the Revised Berne Convention, the International Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organizations (Rome Convention), the Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS) as well as the WIPO Broadcasting Treaty draft of 1996. IPTV does not fall under any of these provisions.

The regulatory framework of the Member States regarding IPTV and mobile TV has to be considered as a legal patchwork, which leaves providers of these services with uncertainty regarding the legal obligations they have to fulfil. It has also been feared that over-regulation of the young industry of IPTV and mobile TV could stall its economic development and turn into a competitive advantage for operators, which perform their services from outside the EU. The current regulatory framework which governs the telecoms sector of the EU was agreed in 2002 and seems to be outdated. As content distribution through broadband lines and voice–over-ip has already become an everyday phenomenon, the EU reacted to the developments and is currently revising the provisions.

Place shifting

Some fear that it is the impending "convergence" of modes of communication and delivering all kinds of copyrighted works in media heretofore unknown that will spur a

new generation of licensing wars. The current enemy of the "old" players such as broadcasters might be the Slingbox, a CE device that connects a TV source to an existing internet connection and can control a digital video recorder, a cable or satellite set top box through remote access. The Slingbox and similar devices allow users to access recorded or live content in any place where they have broadband internet access or access through mobile networks (referred to as "place shift"). A consumer could, for example, watch his favourite TV show parallel to its airing on France2 simultaneously on his laptop, using the broadband connection of his hotel room in Fiji.

Place shifting is problematic to many copyright holders, because it sidesteps proximity control, which restricts distribution of content to specific regions and times. As geographic limits are traditionally considered as being essential for lucrative distribution deals of audiovisual content and are standard contractual stipulations, a device that ignores any territorial restrictions of copyrights is without any doubt a threat for those players in the home entertainment market that acquire and exploit exclusive territorial rights. In the new digital environment of which the entertainment sector has become an active part, it will become more and more difficult to restrict the distribution of content to certain territories. In this context, new technical gadgets like the Slingbox have the potential to overthrow traditional distribution models. They are certainly a legal challenge for future contract drafting in the entertainment sector.

Ownership and exploitation of digital rights

From a film producer's perspective, digital distribution of audiovisual works generally opens a chance for additional revenues and has the potential to raise awareness for movies, documentaries or shows in other countries, where they were not released. Video-on-demand providers, content aggregators and film producers wishing to exploit their libraries of rights have to know which set of rights needs to be transferred, who is currently holding these rights and if there are any restrictions on the exploitation of the respective rights. Depending on the financing constellation of a film production, the producer might have transferred all rights in the underlying contracts to a distributor or a broadcaster might hold some or all rights himself or might have transferred the exploitation rights to his movie for a certain time and a certain territory. In practice, a territorial fragmentation of exploitation rights is common. If producers hold new media rights, they try to transfer them to third parties for certain territories only on a non exclusive basis.

The struggle for digital rights between the producers and broadcasters and the respective financial participation of the parties involved has led to "Terms of trade" agreements in some Member States (e.g. the "New Media Rights Framework" between British independent producer association PACT and the BBC), while in other Member States the economically powerful broadcasters, above all the commercial broadcasters, usually buy out producers of all new media rights.

Media windows

Another limiting factor for a potential transfrontier distribution of audiovisual works are the media windows that have been enshrined into law in most of the Member States. Media windows commonly describe contractual or legal provisions that stipulate that a certain time must elapse between different types of exploitation of an audiovisual work (e.g. theatrical release, DVD, pay TV, free TV, etc.). The compliance with these windows or "holdbacks" is a requirement for many film funding regulations, as non compliance could lead to significant consequences for film producers or distributors, such as to repay loans or subsidies before maturity. Holdback periods start to run from the first (theatrical or other) release of a film and as films are not released simultaneously in all Member

States, different holdback periods apply for different Member States. As the film funding laws of the Member States are only applicable within their national borders, transfrontier distribution of audiovisual works could possibly disturb the media windows of other Member States and lead to an unintended infringement of film funding regulations.

Rights clearing

For film producers or distributors wanting to exploit their rights through VoD, a term that has to be specifically defined in the underlying contracts, it is often of great difficulty to manage the clearing of music rights, as in some Member States collective societies hold specific rights for specific exploitations, authors hold other rights and music publishers again others – all of them are needed for an exploitation of the respective film through VoD. There have been demands for a "one stop shop" principle for rights administered by collecting societies. This could be made possible by setting contracts reciprocities or through one single European collecting society which would make it possible to grant licenses for the entire world for offline and online services.

DRM

DRM, one of the key elements in securing rights holders in digital distribution, is still a controversial tool as such systems have the potential to affect competition for better or worse and to infringe on consumers' rights. Indeed, the implementation of DRM systems has consequences within traditional markets as well in the creation of new markets. From a competition law perspective, great concerns arise as DRM can possibly be used to enable market foreclosure, especially if the implementation protects hardware and software platforms and regulates interoperability between complementary goods. DRM systems which protect hardware and software technology platforms have been accused of strengthening or even creating market barriers and distorting competition in secondary markets, rather than safeguarding rights holders and enabling content distribution. Some Member States like France have reacted and adopted legal measures to ensure mandatory DRM interoperability. In its "Communication on Creative Content [28]", the Commission suggests better interoperability between DRM systems in order to improve the level of competition and to encourage consumer acceptance. It also mentions the need to set a framework for transparent, consumer-oriented and interoperable DRM systems. DRM systems are tools to enable IP exercises but have the unwelcome side-effect of morphing into means other than IPRs, leading to fragmentation of traditional markets or the establishment of new markets. iTunes and his brother iPod are one good example.

Legal aspects of VoD

VoD rights can be transferred among players with specific license schemes. Such licenses can be categorized in the following main types.

Mandate license

Exclusive VoD rights on a specific territory allowing the mandate's owner to sublicense the film to VoD platforms on an exclusive or non-exclusive basis. A mandate license may be transferred among players on an exclusivity basis. Examples of Mandate owners are producers, distributors, aggregators, brokers, VoD operators. Co-exclusivity of mandates

[28] Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee for the Regions on Creative Content Online in the Single Market, COM (2007) 836 final, SEC (2007) 1710.

can also exist, in which case the perimeter of the Mandate owners must be clearly defined in the contract.
The Mandate is a legal prerequisite that was tailor-made for right-holders, aggregators and distributors of content.

Exploitation license

Exclusive: exclusive VoD rights allowing the exploitation licence's owner to directly distribute the film on a VoD platform but not to sublicense the film to other VoD platform.
Non exclusive: non-exclusive VoD right allowing the exploitation licence's owner to directly distribute the film on a VoD platform. As per the exclusive exploitation license the license owner has no right to sublicense the film to other VoD platform.
The Exploitation licenses are legal prerequisite that were tailor-made for Platform editors and distributors of VoD services.
Any VoD operator may cumulate mandate license and exploitation license for the same content (on an exclusive or non exclusive basis). Any mandate owner may cumulate mandate licenses for one or more territories.

Different legal provisions for games

The steady growing market for games requires a stable legal framework. As of today, the underlying software of a computer game is protected by Directive 91/250/EEC („Software Directive")[29], but not the game's concept, its layouts, methods and game engine – unless one extends the scope of the Directive by the backdoor through, for example, the German concept of the „Gewebeformel" („fabric formula"), that grants copyright protection to the program structure.
Many Member States try to close the legal gap by granting dual protection for computer games, since games as multimedia works are considered to be „cinematographic works", „works comparable to cinematographic works" or „audiovisual works" as well as software. The dual concept however, could possibly lead to a number of legal uncertainties, depending on the respective national law of the Member State. Developers might have to distinguish between authorship of the computer programme and the audiovisual parts of the game, as different legal provisions apply. While employed authors automatically transfer all the necessary rights in the software programme by the concept of „cessio legis", employed authors and / or (art) directors of the audiovisual parts would have to transfer rights explicitly to the developer. The German law stipulates, for example, that any doubts about the scope of a license would by the concept of the „Zweckübertragungstheorie" be interpreted to the licensee's disadvantage, as the transferred license would only comprise its narrowest possible meaning. Games developers, that want to exploit their latest video game by granting merchandising licenses or screen adaptation rights, could possibly face difficulties to provide a respective chain of title.

Digital distribution of games

As gaming and its licensed content will increasingly be distributed in converging media in the upcoming years, another legal challenge will be whether video or computer game publishers own or have licensed all rights necessary to distribute a game in a new medium or device. Depending on the respective national law, future use clauses in license agreements might or might not be held invalid, illegal or unenforceable.

In-game advertising

Another, yet unregulated, area is the heavily discussed „in-game advertising", where advertisements are embedded statically or dynamically into the virtual world of a game. Through dynamic advertising the current advertising efforts in the virtual world can be

[29] Directive 91/250/EEC, OJ L 22, 14.5.1991, p. 42.

matched with the advertising campaign in the real world. The advantage of „in-game advertising" is seen in the direct approach to a consumption-oriented and financially potent target group. It is commonly accepted that users tend to value advertisements in games as enrichment of authenticity. The interweaving of advertisements and economically neutral contents is problematic though, as it could possibly inconvenience or deceive users. Although the Audiovisual Media Services Directive is (by prevailing opinion) not applicable for computer and video games, the EU Member States could generally widen their scope to games. This could lead to certain stipulations game developers would have to follow, as to inform the user about upcoming advertisements and the restriction to advertise certain products (alcohol, cigarettes etc.), if the users are minors – which they quite often are.

Current and future market practices

Consumer's perspective

From a consumer's perspective, it should be possible to access any audiovisual or multimedia work through digital platforms anywhere in the world. One major consequence of the growing convergence and possibilities for consumers to interact with service providers, is that the consumer plays an increasingly active part in the home entertainment sector: rather than to consume "ready-made" content at a given time, consumers will individually choose content, time and consumption method. The consumer will also choose his consumption device: a set-top box connected to a television set, a console, a PC, a laptop, mobile phone, mp3 player, handheld system or any device which will be developed in the future. The market of home entertainment has begun to respond to the increasing demands of the more active user and has developed more interactive models for the digital distribution of content, most notably, of audiovisual works. As of this, the focus of the legislator will have to shift towards the individual relationship between consumer and content provider.

The main unique selling proposition of distribution of audiovisual works or video and computer games through digital platforms is that it allows for a huge variety of content to be made accessible. The "Long Tail Theory" exposed by Chris Anderson, journalist of Wired magazine, is linked to the fact that internet and digital distribution eliminate the constraints of shelf space, which allows online services to carry unlimited inventory, leading to theoretically infinite consumer choice and an optimal matching of supply and demand. As consumers move to the "tail" of the demand curve, they create niche markets, on the far side from the traditional "head" of the demand curve, that is driven by "hits" (such as Hollywood blockbusters or groundbreaking video games). It is expected that although the overall entertainment demand will increase, the "hits" will become less big while the consumer's demand shifts disproportionably to the tail.

In an ideal digital world, an Italian cinephile should be able to download and watch via digital-based distribution that one Danish movie, that unfortunately was never released in his country, Czech automobile lovers enjoy that one British motoring magazine streamed through by IPTV, any gamer in Europe download and play that Scandinavian innovative adventure game which set new standards in graphics and animation. However, at present this ideal distribution remains a consumer's wish, as digital distribution of audiovisual and multimedia works regularly stops on national borders.

Similarities and differences between film / TV and games practices

In the audiovisual industry, the financing of a film is often achieved through minimum guarantees by distributors – leading to a fragmentation of distribution and other rights by different territories or languages. Broadcasters that commission and finance a film production entirely, tend to have all rights assigned to them in order to exploit the production through digital distribution. But as TV productions are rarely sold to other countries, broadcasters tend to distribute them nationally or archive their films, rather than to distribute them trans-border to other member states. Status quo is that VoD operators often have to obtain the rights to make their films available for each member state separately. The costs incurred by the clearing of all rights to audiovisual works often prevent their exploitation outside national markets.

The video game industry practices are generally similar to the practices of the film industry: Game developers can be considered as the film producers of the game industry, game publishers and distributors are comparable to film distributors. Not surprisingly, the game and the movie industry have found common grounds, as both parts share the profits from turning movies into successful games and turning games into successful movies. The powerful Hollywood studios have started to turn their attention to the games sector. Some have already vertically integrated game developers and publishers, in order to exploit and market their blockbusters. But a new era might just have dawned: The criminal action game "Grand Theft Auto 4" scored over $500 million in global receipts during its first week in release, selling over 6 million units to become one of the most lucrative entertainment launches in history and topping Hollywood´s biggest blockbuster film debut, "Pirates of the Caribbean: At World's End," which had its maximum turnover with $406 million globally in its first six days.

Game distributors and publishers usually play the most important role in the financing of the development of a video game. In order to finance the development process, developers try to sell upfront different license territories for a video or computer game to publishers or distributors against a flat fee, advances against royalties or for a pure royalty share, as opposed to film producers, who tend to finance their projects through a variety of sources, sometimes called patchwork financing, like national or international co productions, television presales or co productions, minimum guarantees from film distributors and, most importantly for European film producers, through public support (loans, grants or indirectly through tax schemes). Furthermore, the interactive entertainment sector differs from traditional movies and television in that the technology plays as much of a role as the content. The gaming industry depends on new technologies to deliver its content, because gaming does not generate ancillary products of revenue like movies which generate their revenues through royalties from theatrical, pay-per-view, cable, DVD or television sales. The revenues of the game industry are generated through new and updated technologies. This is why in the game industry, contracts between developers and publishers, if the respective game is not entirely financed through the publisher, usually do not limit the publishing license to certain territories, but tend to agree on short terms (usually between 24 and 36 months) with a possible "sell–off" period of six months. This contract practice reflects the shorter exploitation cycle of video games compared to audiovisual works, which usually runs for many years.

There is, however, another fundamental difference between the games and the movie industry: As game consoles have defended their superior position on the market of videogames in recent years, the three console manufacturers of the 7th generation (Nintendo, Sony and Microsoft) are the market gatekeepers with which game developers and publishers have to deal. Developers generally have to apply for a license to develop games for a console, have to provide the manufacturer with a track record of developed games and have to buy development kits from the respective console manufacturer, whereas distributors must acquire a general license to publish games for the console (for a specific territory) as well as for the respective game. Developers additionally have to obtain an approval for the game concept and the master version of the game (the "gold master"), as console manufacturers demand a certain quality standard. Because the console manufacturers also develop games themselves, the approval process also serves as protection of in-house developments. Publishers again, after having acquired a game license, have to place the production order for the respective title at a set price with the manufacturer of the respective game console company and pay a license per unit of the respective console version.

The highly concentrated market for console games and the above mentioned preconditions for developers and publishers, potentially serve as an entry barrier for small or medium enterprises of the European gaming industry.

Legal challenges and opportunities

Multi-territory licensing

The potential of the internal market for the home entertainment sector is not only hampered by different national tastes and language barriers, but in the case of EU-wide digital distribution above all because of the fragmentation of copyrights of audiovisual and multimedia works. As long as rights are exclusively granted in different territories and as long as territorial rights are a fundamental cornerstone of the financing structure for audiovisual works and computer and videogames, the digital common market will remain wishful thinking.

Nevertheless this is not necessarily bad news for the European home entertainment industry. Indeed, territorialisation is still the only way to determine the price of audiovisual works according to national specificities in terms of living standard, infrastructure, level of equipment, etc. As the concept of digital distribution is price-driven, the industry fears that if there are different prices for the same film or game to download and burn, it is very likely that the consumer will pick the cheapest offer. In the digital world, there are no down-market products and there is no distinction in quality: A film is exactly the same, no matter if you download it from a VoD operator in the UK, in Latvia or in Taiwan.

Hence, the future legal framework to support trans-border digital distribution of movies and videogames should not impede the financing structures of the respective industries. The success of this transition of both the market and the industry will depend on how and how fast content aggregators, VoD or game-on-demand operators will become part of financing structures, where they grant minimum guarantees to film producers or game developers against digital rights for certain territories – sometimes replacing traditional players of the industry.

The Commission has suggested the set up of multi-territory license mechanisms by promoting fair competition on the market for rights management. With respect to audiovisual works, the Commission proposes a system where rights holders would be encouraged to grant, next to the main license, a second multi-territory license[30]. The strong opposition from film industry bodies seems to be showing its first effects though, as the Commission's standpoint has recently softened. Time will tell if multi-territory licensing can be an economic and legal answer to the fragmentation of copyrights.

Competition

It is a fact that the profit-driven production of Hollywood films with million dollar budgets has dwarfed the mainly culture-driven European film industry and led to a dominance of US films in European cinemas. This will not change with VoD as users will keep watching films which were tailored to their taste and viewing patterns. One has to understand that the internal market for European audiovisual works will only work if there is sufficient demand for such works. European audiovisual works will most likely be the "long tail" of digital distribution, consisting of niche films for special audiences. Nevertheless, European film production companies with their portfolio of arthouse films will most likely hardly profit from those niches - their financial profits will be absolutely marginal. The

[30] Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on Creative Content Online in the Single Market, COM (2007) 836 final, SEC (2007) 1710.

winners of digital distribution are more likely to be the content aggregators and platform operators; the losers being, once again, the production companies.

This can be easily transferred to the game industry, where mostly small and medium-sized development studios of video and computer games are competing with million dollar budgets for new game developments and networks of studios from Asia to America and Europe. Nevertheless, unlike the European film industry which relies strongly on public support justified by the cultural character of its activity, the games industry has developed to date without major public subsidisation. Nevertheless, should video and computer games be considered as being cultural works, as they are in some member states, developers of such games would then have access to public funding based on the criteria set out by the EU legislators. The forming of game development studio networks could as well be encouraged, financially and practically.

The digital distribution of audiovisual or multimedia works will certainly stimulate the circulation of European content within the common market. It is uncertain though, if it will lead to a European upswing of small and medium-sized companies in the home entertainment sector – especially if they are at the beginning of the exploitation cycle, like film production companies or development studios. The fragmentation of copyrights is probably the highest barrier for European works to be distributed online in all member states. Media windows and different languages additionally hamper the online distribution of audiovisual works. A legal framework could facilitate digital distribution, e.g. by connecting public funding with the condition of a reversion of digital distribution rights to a production company after a reasonable time period. The market practices have shown that the value of most audiovisual works declines rapidly after their initial release. Once a movie has been aired through free TV, there is no reason why a film should not be distributed online in all member states. Such exploitation might not generate significant revenues for some sectors of the media industry but it would surely foster the diversity of European films available online, and support cultural diversity within the EU.

Eventually, a legal framework for digital distribution can only partially encourage the user's demand for European audiovisual works. In this sense, it would probably not be the miracle remedy to overcome the structural difficulties that the European film industry has been facing over the last decades.

B. European home entertainment market

This section is an attempt to qualify and to quantify the various segments of the home entertainment market (linear TV, home video, VOD, mobile content and games) across the 31 countries member of the MEDIA Programme (27 EU member States plus Iceland, Norway, Switzerland and Liechtenstein). It provides a picture of the size of the respective segments in each country and details both the types of services and contents offered for each segment. This overview is useful to understand the following section which analyses the industry providing these services and the business models it uses.

Preliminary note

The main challenge of the Consultants' research (both primary and secondary) was to be able to apprehend a sector which is not considered as such by most analysts and professionals. Indeed, the concept of an "audiovisual home entertainment sector" is not a common one. One rather encounters concepts such as the entertainment and media sector, defined by PricewaterhouseCoopers as including the following segments:

- Filmed entertainment
- TV networks: Broadcast and cable
- TV distribution
- Recorded music
- Radio and out-of-home advertising
- Internet advertising and access spending
- Video games
- Business information
- Magazine publishing
- Newspaper publishing
- Book publishing
- Theme parks and amusement parks
- Casino and other regulated gaming
- Sports

Such a typology includes many segments which are not included in the scope of this study (such as recorded music or radio) and excludes others which are included in our typology such as mobile content.

Furthermore, the geographical area covered by the study (all 27 EU members, plus Iceland, Norway, Switzerland and Liechtenstein) is not commonly used either. For instance, the International Video Federation includes Russia in its European figures.

The focus on audiovisual "works" is also a very culture-oriented way of looking at content and does not fit very well to the new digital platforms which (for better or for worse) scarcely discriminate between a sequence of a feature film, a black humour 30-second animation and a real-life scene filmed with a mobile phone. When asked about what type of "audiovisual works" are displayed on their portals, mobile content managers and video sharing website publishers often ask you to repeat your question because they do not categorise the content they offer that way.

Finally, content for new home entertainment platforms as well as games often falls under a very different regulation than traditional television or movie content, and the platforms which distribute them as well. Hence, the monitoring of the "origin" of audiovisual works is something which is not widely in use on video sharing or mobile content platforms – if it is, it's usually by the content provider/owner rather than distributor/network. Moreover, games are often being developed in a number of different countries, thus

sometimes making the definition of the country of origin of their conception a quite arduous task, - especially if content is distributed to multiple platforms (significant issues in delivering content to multi-platforms: technical, copyright, regulatory, market-oriented. Generally speaking, one of the biggest problems is that there are very few metrics in mobile. It's a very immature industry.

Nevertheless, the Consultant fully understands the validity of these categories for traditional audiovisual content and for the European legislator, and sees the ambition of analysing games and user generated content using the concept of "audiovisual work" as a challenging but quite necessary task.

The year 2006 was taken as year of reference for the market data collection. This was a necessity considering that many companies in the sector do not publish their financial statements before the third quarter of the following year. Considering the newest content platforms, namely, IPTV, VoD, video sharing and mobile content, were only emerging in 2006 and experienced a significant progression in 2007, the displayed figures might not provide a very up-to-date picture of the market situation[31].

European home entertainment market across Europe in 2006

As mentioned previously, the home entertainment market as defined in this study includes the following five content platforms:

TV (linear TV platforms)

- Terrestrial TV (analog and digital)
- Cable TV
- Satellite TV
- IPTV (only linear)
- Pay TV (only linear)

Home Video (VHS/DVD)

- Retail
- Rental

VOD (non linear video and TV platforms)

- VOD services over IP, terrestrial, cable and satellite (including catch-up TV)
- Video sharing websites

Games

- Physical sales (CD-ROM, Consoles, Handhelds)
- Digital sales (digital sales over web or consoles)
- Revenues of games communities

Mobile content

- Video/TV
- Gaming

[31] In the case of mobile TV, it can be said that this platform is emerging at this very moment.

Media convergence readiness in Europe

The first approach to understand the differences between the various European markets is to analyse the level of equipment of households as well as the level of development of the infrastructure necessary for the transmission of audiovisual content. Indeed these are the determinant factors enabling the development of new entertainment platforms.

Table 5 (see page 47) gives an overview of the level of media convergence readiness in the 31 countries covered by the study. The criteria included are the following.

- Population and households[32]: Important factors for the development of the national home entertainment sector (the bigger the population, the bigger the market for local players to develop).

- Percentage of households with DVD player[33]: The level of equipment of households is key for the home video segment.
  Note: DVD Video player/recorders do not include games consoles or PCs with a DVD player. Therefore, the penetration rate of DVD player can be considered as significantly higher.

- Percentage of households with broadband connection[34]: Considerable amounts of data need to be transferred in order to download or stream audiovisual content. Therefore, the level of broadband penetration is a precondition for the development of digital home entertainment (IPTV, VoD, online games).
  Note: The Consultant considered that this criteria is more significant than the level of PC penetration per households. Indeed, one needs a PC to own a broadband connection and to be able to access audiovisual online services.

- Percentage of households with IPTV subscription[35]: Provides information on the level of development of this emerging market.
  Note: The access of TV/video content over the internet using a PC, a console or a WiFi-capable mobile device is more widespread than with walled-gardened offers based on a subscription model.

- Percentage of households with a console[36]: Next to the PC, consoles are the devices used to play digital games. The level of penetration of console games is a good indicator of the level of popularity of gaming in a country.

- Percentage of population with at least one mobile line[37]: Indicates the proportion of the population which has at least one mobile phone subscription.

- Percentage of 2.5/3G lines among all mobile lines[38]: As a broadband connection is a prerequisite to access audiovisual content online, 2.5/3G technology provides high-speed data transmission and supports multimedia applications such as full-motion video, video-conferencing and internet access, alongside conventional voice services.

- Percentage of mobile users with mobile TV subscription[39]: Shows which countries can be counted as early adopters of mobile TV, a service which is fairly new.
  Note: The access of TV/video content over the internet using a PC, a console or a WiFi-capable mobile device is more widespread than with walled-gardened offers based on a subscription model.

[32] Source: Mainly *Yearbook 2007*, European Audiovisual Observatory (OBS), Strasbourg, 2007
[33] Source: *Yearbook 2007*, European Audiovisual Observatory (OBS), Strasbourg, 2007
[34] Source: *Yearbook 2007*, European Audiovisual Observatory (OBS), Strasbourg, 2007
[35] Source: Mobile Entertainment Forum (MEF), London, 2008
[36] Source: Eurostat, Brussels, 2008
[37] Source: Mobile Entertainment Forum (MEF), London, 2008
[38] Source: Mobile Entertainment Forum (MEF), London, 2008
[39] Source: Mobile Entertainment Forum (MEF), London, 2008

Key findings

The countries part of the MEDIA Programme are very heterogeneous in terms of their level of media convergence readiness. Four groups of countries can be identified:

- Countries with a high level of media convergence readiness (high broadband penetration, high 2.5/3G penetration, etc.): all five Nordic countries (Denmark, Finland, Iceland, Norway and Sweden), Switzerland, Malta, the Netherlands and the UK.

- Countries with an average level of media convergence readiness: Austria, Belgium, Germany, Spain, France, Greece, Ireland, Italy and Portugal

- Countries with a low level of media convergence readiness: Bulgaria, the Czech Republic, Hungary, Latvia, Poland and Slovakia.

- Countries with too little data available: Cyprus, Estonia, Latvia, Liechtenstein, Luxemburg, Romania and Slovenia

Table 5: Overview of media convergence readiness in Europe in 2006

YEAR 2006	Population (in thousands)	Households (in thousands)	Percentage of households with DVD player	Percent. of households with broadband connection	Percentage of households with IPTV subscription	Percentage of households with a console	Percentage of population with at least one mobile line	Percentage of 2.5/3G lines among all mobile lines	Percentage of mobile users with mobile TV subscription
AT	8.207	3.431	58,3%	36,4%	0,1%	18,0%	83,7%	77,4%	0,1%
BE	10.511	4.477	60,3%	43,4%	3,1%	15,0%	76,5%	77,0%	*na*
BG	7.761	2.691	*na*	5,0%	0,0%	2,0%	*na*	*na*	*na*
CH	7.509	3.271	73,4%	52,8%	0,3%	*na*	76,9%	74,4%	0,6%
CY	766	250	*na*	19,9%	*na*	24,0%	*na*	*na*	*na*
CZ	10.320	4.013	29,9%	10,0%	0,4%	2,0%	*na*	*na*	*na*
DE	82.315	39.234	70,3%	29,8%	0,3%	16,0%	78,2%	74,8%	0,1%
DK	5.428	2.504	79,9%	56,7%	0,8%	26,0%	79,2%	79,7%	0,1%
EE	1.342	515	*na*	32,0%	0,0%	4,0%	*na*	*na*	*na*
ES	44.475	15.380	67,6%	33,7%	3,3%	*na*	74,1%	75,0%	0,2%
FI	5.277	2.400	41,7%	50,7%	0,2%	26,0%	79,3%	76,1%	0,1%
FR	63.195	27.357	64,3%	39,9%	4,8%	*na*	66,9%	73,6%	1,3%
GR	11.125	3.675	40,8%	20,7%	0,0%	13,0%	78,1%	69,8%	*na*
HU	10.087	3.817	41,9%	11,0%	0,0%	7,0%	*na*	*na*	*na*
IE	4.240	1.440	62,5%	26,5%	0,0%	33,0%	77,9%	80,7%	0,3%
IS	307	118	84,7%	74,6%	0,0%	38,0%	*na*	*na*	*na*
IT	58.752	23.907	73,6%	28,2%	1,2%	19,0%	79,0%	77,7%	1,4%
LI	35	13	*na*	*na*	*na*	*na*	*na*	*na*	*na*
LT	3.385	1.192	*na*	9,0%	0,8%	3,0%	*na*	*na*	*na*
LU	476	185	*na*	29,2%	0,0%	36,0%	*na*	*na*	*na*
LV	2.282	831	*na*	13,0%	10,5%	3,0%	*na*	*na*	*na*
MT	393	124	*na*	79,8%	0,0%	27,0%	*na*	*na*	*na*
NL	16.334	7.200	79,2%	85,5%	1,8%	25,0%	79,9%	76,4%	*na*
NO	4.681	2.037	83,5%	50,0%	3,7%	29,0%	78,6%	77,1%	0,1%
PL	38.157	12.700	26,0%	6,9%	*na*	6,0%	*na*	*na*	*na*
PT	10.599	3.785	63,4%	32,0%	*na*	18,0%	75,2%	73,7%	0,0%
RO	21.565	7.698	*na*	28,6%	0,0%	2,0%	*na*	*na*	*na*
SE	9.133	4.441	67,6%	48,4%	2,1%	24,0%	82,0%	78,6%	0,1%
SI	2.016	750	*na*	44,0%	*na*	7,0%	*na*	*na*	*na*
SK	5.394	1.952	*na*	6,8%	0,0%	8,0%	*na*	*na*	*na*
UK	60.587	26.342	76,7%	44,3%	0,2%	36,0%	84,1%	77,2%	0,9%
Total/ Average	**506.654**	**207.730**	**62,3%**	**35,0%**	**1,3%**	**17,3%**	**78,1%**	**76,2%**	**0,4%**
EU15	**390.654**	**165.758**	**64,7%**	**40,4%**	**1,3%**	**23,5%**	**78,2%**	**76,3%**	**0,4%**
EU27	**494.122**	**202.291**	***na***	**31,3%**	**1,3%**	**15,7%**	***na***	***na***	***na***

Source: peacefulfish/MCG based on information mainly from OBS, Eurostat and MEF

MEDIA and EU15 averages

Table 6 is an excerpt of

Table 5 and provides averages for the various indicators defined for MEDIA countries as well as for EU15[40] and EU27[41] countries.

Table 6: MEDIA, EU15 and EU27 averages

YEAR 2006	Population (in thousand)	Households (in thousand)	Percentage of households with DVD player	Percent. of households with broadband connection	Percentage of households with IPTV subscription	Percentage of households with a console	Percentage of population with at least one mobile line	Percentage of 2.5/3G lines among all mobile lines	Percentage of mobile users with mobile TV subscription
MEDIA Total/ Average	506.654	207.730	62,3%	35,0%	1,3%	17,3%	78,1%	76,2%	0,4%
EU15	390.654	165.758	64,7%	40,4%	1,3%	23,5%	78,2%	76,3%	0,4%
EU27	494.122	202.291	*na*	31,3%	1,3%	15,7%	*na*	*na*	*na*

Source: peacefulfish/MCG based on information mainly from OBS, Eurostat and MEF

It should be noted that for some countries, especially new EU members States and Liechtenstein, the data available is extremely scarce, hence the average figure obtained for all 31 MEDIA countries[42] is almost similar to the EU15 average.

Consequently, for the following indicators, only the EU15 average can be considered as representative:
- Percentage of households with DVD player
- Percentage of population with at least one mobile line
- Percentage of 2.5/3G lines among all mobile lines
- Percentage of mobile users with mobile TV subscription

Except for the percentage of households with IPTV subscription which lies at 1.3% for all averages, significant differences (over 5 percent points) can be stated between EU15 averages (including most of Western Europe) and MEDIA averages for all indictors where data for EU27 countries is available. This indicates that, generally speaking, new EU member States still lag behind Western Europe in terms of infrastructure and household equipment necessary for the development of a dynamic home entertainment market.

For two criteria, namely percentage of population with at least one mobile line and percentage of 2.5/3G lines among all mobile lines all countries lie approximately at comparable levels. This is of course due to the fact that no figures are available for EU new member states. Nevertheless, it is interesting to notice that the percentage of mobile single users and the level of penetration of 2.5/3G technology in Western Europe is very similar in each country (respectively between 75 and 85% of the population and between 70 and 80% of mobile lines). One exception being the relatively low level of penetration of mobile phones in France with only 66,9% unique mobile users. Nevertheless, this does not seem to have a negative impact on the percentage of mobile TV subscriptions which is one of the highest in Europe (although still at the very low level of 1,3% of unique mobile users with a mobile TV subscription).

For the other criteria, this overview of the 31 MEDIA countries makes it clear that the level of media convergence readiness greatly differs from country to country. We can roughly identify four main groups of countries:

[40] EU15 includes AT, BE, DE, DK, ES, FI, FR, GR, IE, IT, LU, NL, PT, SE and UK.
[41] EU27 includes all EU15 countries plus BG, CY, CZ, EE, HU, LT, LV, MT, PL, RO, SI and SK.
[42] MEDIA countries includes all EU27 countries plus CH, IS, LI and NO.

- Countries with a high media convergence readiness
- Countries with a low media convergence readiness
- Countries with an average media convergence readiness
- Countries with inconsistent indicators or on which too little information is available

Countries with a high media convergence readiness

These are countries where equipment and infrastructure penetration rates are significantly above MEDIA and/or EU15 average in at least three categories. These countries are all five Nordic countries (Denmark, Finland, Iceland, Norway and Sweden), Switzerland, Malta, the Netherlands and the UK (see Table 7).

Table 7: Countries with a high media convergence readiness

YEAR 2006	Population (in thousand)	Households (in thousand)	Percentage of households with DVD player	Percent. of households with broadband connection	Percentage of households with IPTV subscription	Percentage of households with a console	Percentage of population with at least one mobile line	Percentage of 2.5/3G lines among all mobile lines	Percentage of mobile users with mobile TV subscription
CH	7.509	3.271	73,4%	52,8%	0,3%	*na*	76,9%	74,4%	0,6%
DK	5.428	2.504	79,9%	56,7%	0,8%	26,0%	79,2%	79,7%	0,1%
FI	5.277	2.400	41,7%	50,7%	0,2%	26,0%	79,3%	76,1%	0,1%
IS	307	118	84,7%	74,6%	0,0%	38,0%	*na*	*na*	*na*
MT	393	124	*na*	79,8%	0,0%	27,0%	*na*	*na*	*na*
NL	16.334	7.200	79,2%	85,5%	1,8%	25,0%	79,9%	76,4%	*na*
NO	4.681	2.037	83,5%	50,0%	3,7%	29,0%	78,6%	77,1%	0,1%
SE	9.133	4.441	67,6%	48,4%	2,1%	24,0%	82,0%	78,6%	0,1%
UK	60.587	26.342	76,7%	44,3%	0,2%	36,0%	84,1%	77,2%	0,9%
MEDIA	**506.654**	**207.730**	**62,3%**	**35,0%**	**1,3%**	**17,3%**	**78,1%**	**76,2%**	**0,4%**
EU15	**390.654**	**165.758**	**64,7%**	**40,4%**	**1,3%**	**23,5%**	**78,2%**	**76,3%**	**0,4%**
EU27	**494.122**	**202.291**	***na***	**31,3%**	**1,3%**	**15,7%**	***na***	***na***	***na***

Source: peacefulfish/MCG based on information mainly from OBS, Eurostat and MEF

All these countries are EU15 countries except for Norway, Iceland and Switzerland which are not part of the European Union and for Malta which adhered to the EU in 2004. We can therefore also take into account the EU15 average when analysing their criteria.

- Population and households: Except the UK, all these countries are among the smaller countries in Europe.
- Percentage of households with DVD player: Except for Sweden and Finland, all have a very high DVD player penetration rate. Finland's level is significantly lower than EU15 average.
- Percentage of households with broadband connection: All these countries have very high broadband penetration with the Netherlands in the first position in Europe with 85,5%.
- Percentage of households with IPTV subscription: Norway and Sweden have an IPTV penetration rate above MEDIA average (3,7% and 2,1& respectively). It is important to note that in 2006, IPTV was still at an emerging phase in most European countries.
- Percentage of households with a console: All countries have a consoles penetration rate higher than EU15 average (23,5%). Iceland is at the first position in Europe with 38,0% households equipped with a console.

- Percentage of population with at least one mobile line: All countries have a rate higher than EU15 average (78,2%), the UK being Europe's leader with 84,1% penetration rate.
- Percentage of 2.5/3G lines among all mobile lines: All countries have a rate higher than EU15 average (76,3%), Denmark being Europe's leader with 79,7% penetration rate of high-speed mobile technology.
- Percentage of mobile users with mobile TV subscription: These countries are at average (low) level or do not have any data on this criterion.

Countries with a low media convergence readiness

These are countries where equipment and infrastructure penetration rates are significantly below MEDIA average in at least three categories. These countries are Bulgaria, the Czech Republic, Hungary, Latvia, Poland and Slovakia (see Table 8).

Table 8: Countries with a low media convergence readiness

YEAR 2006	Population (in thousand)	Households (in thousand)	Percentage of households with DVD player	Percent. of households with broadband connection	Percentage of households with IPTV subscription	Percentage of households with a console	Percentage of population with at least one mobile line	Percentage of 2.5/3G lines among all mobile lines	Percentage of mobile users with mobile TV subscription
BG	7.761	2.691	*na*	5,0%	0,0%	2,0%	*na*	*na*	*na*
CZ	10.320	4.013	29,9%	10,0%	0,4%	2,0%	*na*	*na*	*na*
HU	10.087	3.817	41,9%	11,0%	0,0%	7,0%	*na*	*na*	*na*
LT	3.385	1.192	*na*	9,0%	0,8%	3,0%	*na*	*na*	*na*
PL	38.157	12.700	26,0%	6,9%	*na*	6,0%	*na*	*na*	*na*
SK	5.394	1.952	*na*	6,8%	0,0%	8,0%	*na*	*na*	*na*
MEDIA	**506.654**	**207.730**	**62,3%**	**35,0%**	**1,3%**	**17,3%**	**78,1%**	**76,2%**	**0,4%**
EU15	**390.654**	**165.758**	**64,7%**	**40,4%**	**1,3%**	**23,5%**	**78,2%**	**76,3%**	**0,4%**
EU27	**494.122**	**202.291**	***na***	**31,3%**	**1,3%**	**15,7%**	***na***	***na***	***na***

Source: peacefulfish/MCG based on information mainly from OBS, Eurostat and MEF

All these countries are Central and Eastern European countries, not part of the EU15.

- Population and households: Poland is among the most populated European countries, the Czech Republic, Hungary and Bulgaria are middle-sized European countries in terms of population, Latvia and Slovakia have fewer citizens.
- Percentage of households with DVD player: For countries where data is available, the level of DVD penetration is significantly lower than MEDIA average.
- Percentage of households with broadband connection: This is the most significant criteria determining the low level of media convergence readiness. Indeed all these countries have broadband penetration rates at least 25 percent points below MEDIA average.
- Percentage of households with IPTV subscription: Accordingly to the low broadband penetration, IPTV subscriptions are quite low.
- Percentage of households with a console: Accordingly to the low broadband penetration, console penetration is more than 10 percent points below MEDIA average.
- There is no information available on mobile services in these countries.

Countries with an average media convergence readiness

These are countries where equipment and infrastructure penetration rates are at MEDIA and/or EU15 average in most categories. These countries are Austria, Belgium, Germany, Spain, France, Greece, Ireland, Italy and Portugal (see Table 9).

Table 9: Countries with an average media convergence readiness

YEAR 2006	Population (in thousand)	Households (in thousand)	Percentage of households with DVD player	Percent. of households with broadband connection	Percentage of households with IPTV subscription	Percentage of households with a console	Percentage of population with at least one mobile line	Percentage of 2.5/3G lines among all mobile lines	Percentage of mobile users with mobile TV subscription
AT	8.207	3.431	58,3%	36,4%	0,1%	18,0%	83,7%	77,4%	0,1%
BE	10.511	4.477	60,3%	43,4%	3,1%	15,0%	76,5%	77,0%	*na*
DE	82.315	39.234	70,3%	29,8%	0,3%	16,0%	78,2%	74,8%	0,1%
ES	44.475	15.380	67,6%	33,7%	3,3%	*na*	74,1%	75,0%	0,2%
FR	63.195	27.357	64,3%	39,9%	4,8%	*na*	66,9%	73,6%	1,3%
GR	11.125	3.675	40,8%	20,7%	0,0%	13,0%	78,1%	69,8%	*na*
IE	4.240	1.440	62,5%	26,5%	0,0%	33,0%	77,9%	80,7%	0,3%
IT	58.752	23.907	73,6%	28,2%	1,2%	19,0%	79,0%	77,7%	1,4%
PT	10.599	3.785	63,4%	32,0%	*na*	18,0%	75,2%	73,7%	0,0%
MEDIA	**506.654**	**207.730**	**62,3%**	**35,0%**	**1,3%**	**17,3%**	**78,1%**	**76,2%**	**0,4%**
EU15	**390.654**	**165.758**	**64,7%**	**40,4%**	**1,3%**	**23,5%**	**78,2%**	**76,3%**	**0,4%**
EU27	**494.122**	**202.291**	***na***	**31,3%**	**1,3%**	**15,7%**	***na***	***na***	***na***

Source: peacefulfish/MCG based on information mainly from OBS, Eurostat and MEF

All these countries are EU15 countries. Therefore the EU15 average can also be used to analyse their indicators.

- Population and households: Germany, France, Italy and Spain are big European countries in terms of population. All other countries are middle-sized except for Ireland which can be counted to the rather smaller European countries.
- Percentage of households with DVD player: Most countries have DVD penetration rates about the EU15 average (64,7%) except for Greece which rates is significantly lower (over 20 percent points).
- Percentage of households with broadband connection: This group is not homogeneous in terms of broadband penetration with Austria, Germany, Greece, Ireland, Italy and Portugal having rates below EU15 average (40,4%) and Belgium and France close to EU15 average.
- Percentage of households with IPTV subscription: 3 countries have high IPTV subscription averages (Belgium 3,1%, Spain 3,3% and France 4,8% - second highest in Europe behind Latvia). In the other countries, the penetration rate of IPTV is insignificant.
- Percentage of households with a console: Ireland has a console penetration rate 10 percent points higher than the EU15 average, Italy, slightly higher than EU15 average. In the other countries consoles penetration rate lies over 5 percent points below EU15 average.
- Percentage of population with at least one mobile line: These countries have mobile penetration rates close to the EU15 average (78,2%) except for Greece where it lies more than 10 percent percent points lower (66,9%).
- Percentage of 2.5/3G lines among all mobile lines: These countries have 2.5/3G penetration rates close to the EU15 average (76,3%) except France where it lies more than 5 percent percent points lower (69,8%).

- Percentage of mobile users with mobile TV subscription: Except for Italy and France which have a relatively high penetration rate of mobile TV (1,4% and 1,3% respectively), all other countries are at average (low) level.

Countries with inconsistent indicators or on which too little data is available

These are countries where too little data is available on equipment and infrastructure penetration rates to classify them. These countries are Cyprus, Estonia, Latvia, Liechtenstein, Luxemburg, Romania and Slovenia. In the case of Latvia, this country has the highest rate of IPTV subscriptions per households in Europe (10,5%) although its broadband penetration rate lies at 13,0% of the households (see Table 10).

Table 10: Countries with inconsistent indicators or on which too little data is available

YEAR 2006	Population (in thousand)	Households (in thousand)	Percentage of households with DVD player	Percent. of households with broadband connection	Percentage of households with IPTV subscrip-tion	Percentage of households with a console	Percentage of population with at least one mobile line	Percentage of 2.5/3G lines among all mobile lines	Percentage of mobile users with mobile TV subscription
CY	766	250	*na*	19,9%	*na*	24,0%	*na*	*na*	*na*
EE	1.342	515	*na*	32,0%	0,0%	4,0%	*na*	*na*	*na*
LI	35	13	*na*	*na*	*na*	*na*	*na*	*na*	*na*
LU	476	185	*na*	29,2%	0,0%	36,0%	*na*	*na*	*na*
LV	2.282	831	*na*	13,0%	10,5%	3,0%	*na*	*na*	*na*
RO	21.565	7.698	*na*	28,6%	0,0%	2,0%	*na*	*na*	*na*
SI	2.016	750	*na*	44,0%	*na*	7,0%	*na*	*na*	*na*
MEDIA	**506.654**	**207.730**	**62,3%**	**35,0%**	**1,3%**	**17,3%**	**78,1%**	**76,2%**	**0,4%**
EU15	**390.654**	**165.758**	**64,7%**	**40,4%**	**1,3%**	**23,5%**	**78,2%**	**76,3%**	**0,4%**
EU27	**494.122**	**202.291**	***na***	**31,3%**	**1,3%**	**15,7%**	***na***	***na***	***na***

Source: peacefulfish/MCG based on information mainly from OBS, Eurostat and MEF

All these contries are new EU member States (non EU15). Except for Romania which is a middle-sized European country, all are among the smallest European countries. Estonia and Luxembourg have broadband penetration rates close to MEDIA average while Slovenia's lies almost 10 percent points above. All other countries have low broadband penetration rates.
These countries have consoles penetration rates among the lowest in Europe except for Cyprus (24% on EU15 average) and Luxembourg (36% over 10 percent points above EU15 average).

Overview of the home entertainment market in Europe

Preliminary remarks

Due to the lack of information available on many segments of the home entertainment market as defined in this study, the results displayed in Table 11 are difficult to analyse. First of all the distinction between linear and non-linear audiovisual programming which is made in this study is not always the one found in the literature and market data. Moreover, it is especially the importance of platforms more remote from the traditional "audiovisual works" approach which appear difficult to evaluate. For instance, the European console games market which is divided between only three players (namely Sony, Microsoft, Nintendo) is a market on which very little quantitative Europe-wide data is being published. In spite of very comprehensive research and of repeated contacts with executives from these three companies in the various European offices as well as in their European headquarters and EC contact offices, the Consultant did not succeed in receiving information broken down on a country by country basis and distinguishing software from hardware revenues, etc.

Key findings

The total home entertainment market of the countries member of the MEDIA Programme can be estimated at about €100b.

The size of the industry is comparable to the publishing industry (books, newspapers, magazines). The market can be divided in three main groups of countries according to their market's size:

- **The "Big 5"** leading markets with the UK leading the league (€21,6b), followed by Germany (€17,9b), France (€13,8b), Italy (€10,1b) and Spain (€7,6b).
- **The second league with home entertainment revenues between €1b and €4b** is made up of all other Western European markets except Iceland. Poland is the only market within the new EU member States with a market above €1b.
- **The rest of Europe** includes Iceland, Liechtenstein and all new EU member States except Poland. However, it has to be noted that these countries' home entertainment markets are undervalued due to the lack of data available apart for linear TV.

Comparision of the 5 home entertainment market segments at European level

- **Linear TV represents 70 to 90% of the market in most countries**
  In all countries where data is available for the five audiovisual platforms, it appears clearly that linear television is still the undisputed leader of the home entertainment market amounting roughly to 80% of the revenues in most countries. Therefore, the overall ranking of the various home entertainment markets is practically the same as it is when considering solely the linear television platform (terrestrial, cable, satellite and IP linear TV).
- **Home video is the second most significant segment of home entertainment revenues after linear TV**
  Its average market share amounts to 11,8% in EU15 but this segment does not present a homogeneous picture in Europe. Indeed, in North European countries, home video represents about 15% of the home entertainment market (Denmark, Norway, UK), whereas in other countries (mainly Eastern and South European) it remains significantly below a 10% market share (Greece, Latvia, Poland, Hungary, Czech Republic, Hungary, Italy, Austria, Portugal, Finland, Spain and Germany).
- **VoD is still a very marginal segment of the market**
  Its average market share does not reach 1% but it is emerging in some countries. It exceeds 1% of market revenues only in Portugal and probably Romania. Nevertheless, it starts to generate revenues in a number of counties such as Ireland

(0,9% of the home entertainment market), Finland (0,7%), UK, France, Spain, Denmark and Norway (0,6%).

- **Mobile content appears to be a more significant market segment with an EU15[43] average of about 2%.**
  Nordic countries are the leading markets with mobile content reaching 9% of home entertainment revenues in Norway, 6,8% in Sweden, 5,5% in Denmark and 5,4% in Finland (no data available for Iceland).
- **Games represents the third segment of the home entertainment market in countries where data available**
  Not much data is available for the games sector. For the countries in which data is available, it appears to represent between 5 and 8% of the market except for a couple of countries with a market share over 10%: Ireland (14,7%), Switzerland (13,3%), UK (10,2%) and the Netherlands (9,5%).

[43] Unfortunately, no information on mobile content is available for the new EU member countries.

Table 11: Overview of the home entertainment market in Europe in 2006 in €m

YEAR 2006 in €m	Home Entertain-ment	TV [44]	% of the HE sector	Home video [45]	% of the HE sector	VOD [46]	% of the HE sector	Games [47]	% of the HE sector	Mobile content [48]	% of the HE sector
AT	**1.607,7**	1.352,1	*84,1%*	106,8	*6,6%*	1,2	*0,1%*	112,6	*7,0%*	35,0	*2,2%*
BE	**2.780,1**	2.265,2	*81,5%*	316,2	*11,4%*	9,4	*0,3%*	154,3	*5,6%*	35,0	*1,3%*
BG	**311,3**	311,3	-	*na*	-	*na*	-	*na*	-	*na*	-
CH	**1.402,4**	994,8	*70,9%*	163,3	*11,6%*	*na*	-	187,0	*13,3%*	57,3	*4,1%*
CY	**92,9**	92,9	-	*na*	-	*na*	-	*na*	-	*na*	-
CZ	**744,2**	694,9	*93,4%*	48,0	*6,5%*	1,3	*0,2%*	*na*	-	*na*	-
DE	**17.925,8**	14.957,7	*83,4%*	1.591,3	*8,9%*	21,3	*0,1%*	1.126,0	*6,3%*	229,6	*1,3%*
DK	**1.971,5**	1.569,4	*79,6%*	281,0	*14,3%*	12,2	*0,6%*	*na*	-	108,9	*5,5%*
EE	**92,3**	92,3	-	*na*	-	*na*	-	*na*	-	*na*	-
ES	**7.585,3**	6.301,1	*83,1%*	651,8	*8,6%*	42,3	*0,6%*	459,9	*6,1%*	130,2	*1,7%*
FI	**1.153,7**	994,3	*86,2%*	88,7	*7,7%*	8,7	*0,7%*	*na*	-	62,1	*5,4%*
FR	**13.826,3**	10.578,7	*76,5%*	1.823,0	*13,2%*	86,6	*0,6%*	1.174,8	*8,5%*	163,2	*1,2%*
GR	**968,4**	920,0	*95,0%*	18,3	*1,9%*	1,8	*0,2%*	*na*	-	28,3	*2,9%*
HU	**536,9**	489,0	*91,1%*	46,9	*8,7%*	1,1	*0,2%*	*na*	-	*na*	-
IE	**1.461,4**	945,9	*64,7%*	259,1	*17,7%*	13,1	*0,9%*	215,2	*14,7%*	28,1	*1,9%*
IS	**68,8**	54,3	*79,0%*	14,5	*21,0%*	*na*	-	*na*	-	*na*	-
IT	**10.074,7**	8.438,1	*83,8%*	710,5	*7,1%*	29,0	*0,3%*	600,2	*6,0%*	296,9	*2,9%*
LI	**0,0**	*na*	-	*na*	-	*na*	-	*na*	-	*na*	-
LT	**92,4**	92,4	-	*na*	-	*na*	-	*na*	-	*na*	-
LU	**48,0**	48,0	-	*na*	-	*na*	-	*na*	-	*na*	-
LV	**58,0**	57,4	*99,0%*	0,6	*1,0%*	*na*	-	*na*	-	*na*	-
MT	**26,9**	26,9	-	*na*	-	*na*	-	*na*	-	*na*	-
NL	**3.826,1**	2.929,7	*76,6%*	475,8	*12,4%*	14,8	*0,4%*	364,2	*9,5%*	41,6	*1,1%*
NO	**2.422,0**	1.709,7	*70,6%*	366,6	*15,1%*	14,4	*0,6%*	114,0	*4,7%*	217,4	*9,0%*
PL	**2.693,7**	2.627,1	*97,5%*	61,0	*2,3%*	5,6	*0,2%*	*na*	-	*na*	-
PT	**1.560,5**	1.403,0	*89,9%*	106,2	*6,8%*	25,3	*1,6%*	*na*	-	26,1	*1,7%*
RO	**689,6**	674,8	*97,9%*	*na*	-	14,8	*2,1%*	*na*	-	*na*	-
SE	**2.757,6**	2.172,8	*78,8%*	388,2	*14,1%*	9,0	*0,3%*	*na*	-	187,7	*6,8%*
SI	**222,5**	222,5	-	*na*	-	*na*	-	*na*	-	*na*	-
SK	**233,5**	233,5	-	*na*	-	*na*	-	*na*	-	*na*	-
UK	**21.561,9**	15.375,7	*71,3%*	3.653,5	*16,9%*	135,7	*0,6%*	2.199,8	*10,2%*	197,1	*0,9%*
MEDIA Total/ Aver-age	**98.796,4**	**78.625,3**	***79,6%***	**11.171,3**	***11,3%***	**447,3**	***0,5%***	**6.708,0**	***6,8%***	**1.844,5**	***1,9%***
EU15	**89.109,0**	**70.251,6**	***78,8%***	**10.470,4**	***11,8%***	**410,2**	***0,5%***	**6.407,0**	***7,2%***	**1.569,8**	***1,8%***
EU27	**94.903,2**	**75.866,5**	**-**	***na***	**-**	***na***	**-**	***na***	**-**	***na***	**-**

Source: peacefulfish/MCG based on information from O&O, OBS, IVF, PwC and MEF

[44] Source: Oliver & Ohlbaum Associates (2008) based on a compilation of the following sources: company, regulator and broker reports, European Audiovisual Observatory Yearbook 2007, TV sports markets 2006/2008, TVI Yearbook 2008 (and tv international newsletters), Zenith Optimedia (advertising data for individual states), PWC Global Media Outlook: 2007-2011, SNL Kagan portal, Screen Digest, press reports and interviews.
[45] Source: Mainly *Global Entertainment and Media Outlook: 2007-2011*, Wilkofsky Gruen Associates, PricewaterhouseCoopers (PwC), New York, 2007 and *European Video Yearbook 2007*, International Video Federation (IVF), Brussels
[46] Source: Oliver & Ohlbaum Associates (2008) (ibid)
[47] Source: Mainly *Global Entertainment and Media Outlook: 2007-2011*, Wilkofsky Gruen Associates, PricewaterhouseCoopers (PwC), New York, 2007 and national sources
[48] Source: Mobile Entertainment Forum, London, 2008

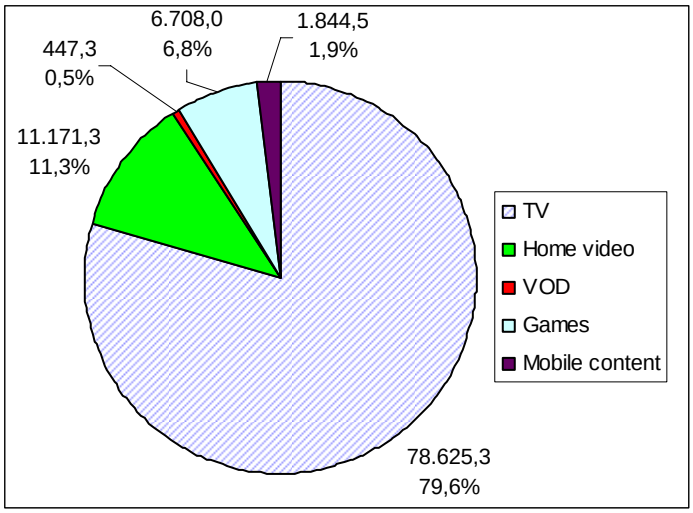


Chart 1: Home entertainment market in Europe in 2006 in €m

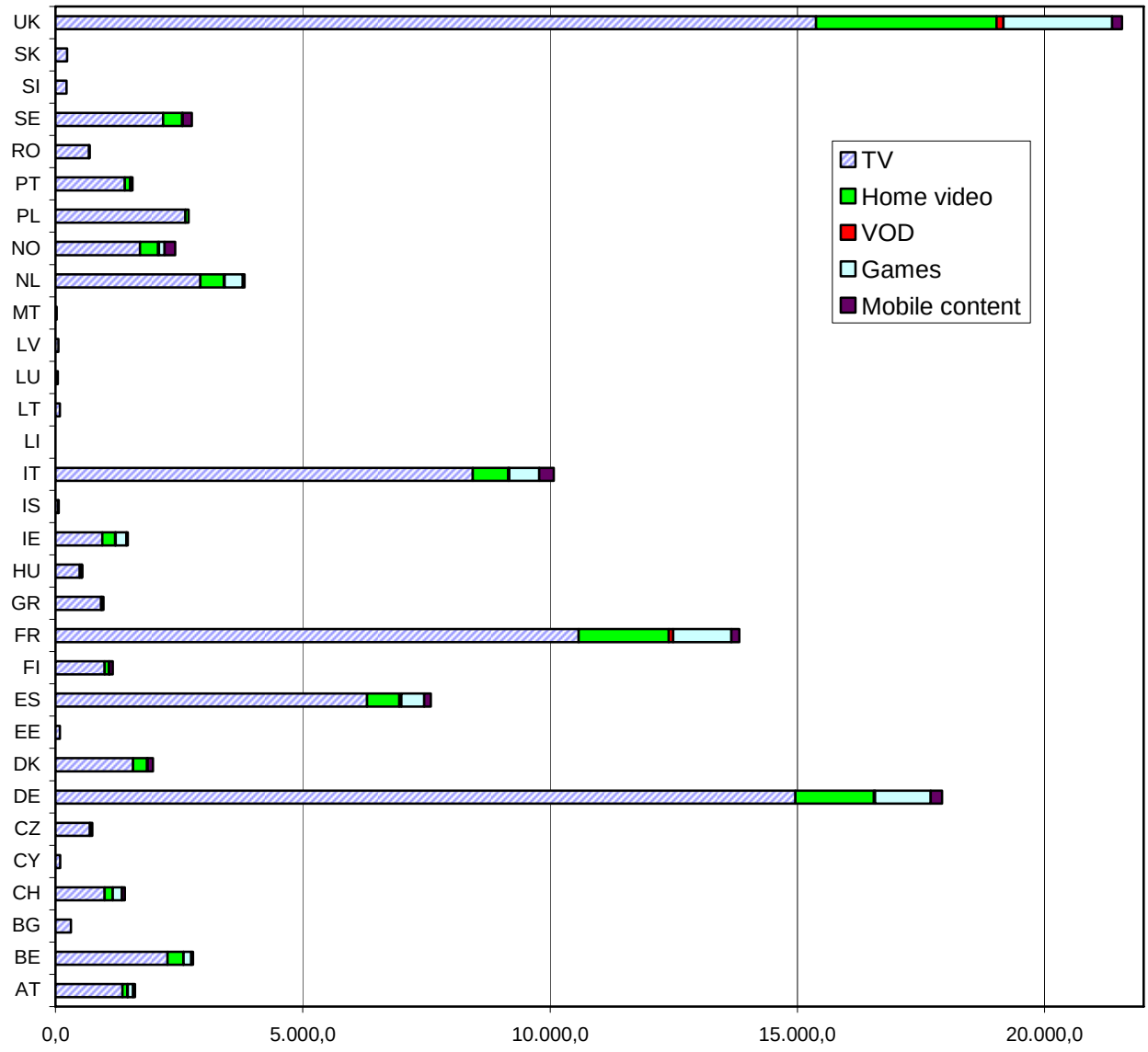


Chart 2: European home entertainment market country by country in 2006 in €m

Size of the home entertainment market

The "Big 5"

The "Big 5" European countries are the leading markets, with the UK leading the league (€21,6b), followed by Germany (€17,9b), France (€13,8b), Italy (€10,1b) and Spain (€7,6b) (see Table 12).

Table 12: The Big 5

YEAR 2006	Home Entertain-ment	TV	% of HE sector	Home video	% of HE sector	VOD	% of HE sector	Games	% of HE sector	Mobile content	% of HE sector
UK	**21.561,9**	15.375,7	*71,3%*	3.653,5	*16,9%*	135,7	*0,6%*	2.199,8	*10,2%*	197,1	*0,9%*
DE	**17.925,8**	14.957,7	*83,4%*	1.591,3	*8,9%*	21,3	*0,1%*	1.126,0	*6,3%*	229,6	*1,3%*
FR	**13.826,3**	10.578,7	*76,5%*	1.823,0	*13,2%*	86,6	*0,6%*	1.174,8	*8,5%*	163,2	*1,2%*
IT	**10.074,7**	8.438,1	*83,8%*	710,5	*7,1%*	29,0	*0,3%*	600,2	*6,0%*	296,9	*2,9%*
ES	**7.585,3**	6.301,1	*83,1%*	651,8	*8,6%*	42,3	*0,6%*	459,9	*6,1%*	130,2	*1,7%*

Source: peacefulfish/MCG based on information from Oliver & Ohlbaum, OBS, IVF, PwC and MEF

Second league

The second league with home entertainment revenues between €1b and €4b is made up of all other Western European markets except Iceland. Poland is the only market within the new EU member states which has a home entertainment market above €1b (Table 13).

Table 13: Second league

YEAR 2006	Home Entertai n-ment	TV	% of HE sector	Home video	% of HE sector	VOD	% of HE sector	Games	% of HE sector	Mobile content	% of HE sector
NL	**3.826,1**	2.929,7	*76,6%*	475,8	*12,4%*	14,8	*0,4%*	364,2	*9,5%*	41,6	*1,1%*
BE	**2.780,1**	2.265,2	*81,5%*	316,2	*11,4%*	9,4	*0,3%*	154,3	*5,6%*	35,0	*1,3%*
SE	**2.757,6**	2.172,8	*78,8%*	388,2	*14,1%*	9,0	*0,3%*	na	-	187,7	*6,8%*
PL	**2.693,7**	2.627,1	*97,5%*	61,0	*2,3%*	5,6	*0,2%*	na	-	na	-
NO	**2.422,0**	1.709,7	*70,6%*	366,6	*15,1%*	14,4	*0,6%*	114,0	*4,7%*	217,4	*9,0%*
DK	**1.971,5**	1.569,4	*79,6%*	281,0	*14,3%*	12,2	*0,6%*	na	-	108,9	*5,5%*
AT	**1.607,7**	1.352,1	*84,1%*	106,8	*6,6%*	1,2	*0,1%*	112,6	*7,0%*	35,0	*2,2%*
PT	**1.560,5**	1.403,0	*89,9%*	106,2	*6,8%*	25,3	*1,6%*	na	-	26,1	*1,7%*
IE	**1.461,4**	945,9	*64,7%*	259,1	*17,7%*	13,1	*0,9%*	215,2	*14,7%*	28,1	*1,9%*
CH	**1.402,4**	994,8	*70,9%*	163,3	*11,6%*	na	-	187,0	*13,3%*	57,3	*4,1%*
FI	**1.153,7**	994,3	*86,2%*	88,7	*7,7%*	8,7	*0,7%*	na	-	62,1	*5,4%*
GR	**968,4**	920,0	*95,0%*	18,3	*1,9%*	1,8	*0,2%*	na	-	28,3	*2,9%*

Source: peacefulfish/MCG based on information from Oliver & Ohlbaum, OBS, IVF, PwC and MEF

Rest of Europe

The rest of Europe includes Iceland, Liechtenstein and all new EU member States except Poland (Table 14). Although these countries' home entertainment markets are undervalued due to the lack of data available apart for linear TV, we can identify three groups of countries. The Czech Republic, Romania and Hungary which markets are significantly bigger than €0,5b. Bulgaria, Slovakia and Slovenia which markets are estimated around €300m. The other countries have very small markets mainly due to the size of their population.

Table 14: Rest of Europe

YEAR 2006	Home Entertain-ment	TV	% of HE sector	Home video	% of HE sector	VOD	% of HE sector	Games	% of HE sector	Mobile content	% of HE sector
CZ	**744,2**	694,9	*93,4%*	48,0	*6,5%*	1,3	*0,2%*	na	-	na	-
RO	**689,6**	674,8	*97,9%*	na	-	14,8	*2,1%*	na	-	na	-
HU	**536,9**	489,0	*91,1%*	46,9	*8,7%*	1,1	*0,2%*	na	-	na	-
BG	**311,3**	311,3	-	na	-	na	-	na	-	na	-
SK	**233,5**	233,5	-	na	-	na	-	na	-	na	-
SI	**222,5**	222,5	-	na	-	na	-	na	-	na	-
CY	**92,9**	92,9	-	na	-	na	-	na	-	na	-
LT	**92,4**	92,4	-	na	-	na	-	na	-	na	-
EE	**92,3**	92,3	-	na	-	na	-	na	-	na	-
IS	**68,8**	54,3	*79,0%*	14,5	*21,0%*	na	-	na	-	na	-
LV	**58,0**	57,4	*99,0%*	0,6	*1,0%*	na	-	na	-	na	-
LU	**48,0**	48,0	-	na	-	na	-	na	-	na	-
MT	**26,9**	26,9	-	na	-	na	-	na	-	na	-
LI	**0,0**	na	-	na	-	na	-	na	-	na	-

Source: peacefulfish/MCG based on information from Oliver & Ohlbaum, OBS, IVF, PwC and MEF

European TV market

Market size

In these times of digital convergence, new technologies and other emerging and revolutionary changes within the home entertainment sector, traditional linear television content remains the preferred mode of audiovisual content viewing, with Europeans spending 3,4 hours per person per day in front of the TV set. This number increases yearly, totaling a 1% increase between 2001 and 2005. In Europe, 95% of audiovisual content viewing (outside the cinema) takes place on the traditional linear television set.[49]

Size of the Audiovisual TV Market in Europe, 2005[50]

Broadcasters Net Revenues	Operating Revenues (in millions)
Public broadcaster (TV and radio-TV)	29288
Private television companies financed by advertising	21042
Pay-TV Premium companies	3448
TV packagers	13184
Thematic channels	5139
Other	2136
Total	**74237**

Using the latest available figures from all 31 European MEDIA countries, we can evaluate the total TV market at about €74 billion in 2005, with an average 4,27% increase year on year since 2001.

In order to understand how the European television industry is functioning as a whole, one approach can consist of establishing a map of the market by examining where the highest grossing television companies are based.

[49] in The Digital Video Consumer - Transforming the European Video Content Market, Bain & Company, Boston, 2007
[50] in Yearbook 2007 Vol. 1, 2 & 3, André Lange et al., European Audiovisual Observatory (OBS), Strasbourg, 2007

The following table totals the unconsolidated operating revenues of the leading European television companies[51]:

Country of Origin	Number of Companies	Total Operating Revenues (millions of euros)
United Kingdom*	9	15215,8
Germany	13	12902,8
France**	7	9085,1
Italy	3	7509,9
Spain	5	4407,0
Switzerland	1	994,8
Austria	1	917,6
Luxemburg	1	638,6
Netherlands	1	553,0
Portugal	1	527,2
Poland	1	504,1
Belgium	1	469,0
Norway	1	463,7
Denmark	1	457,3
Sweden	1	452,8
Ireland	1	405,0
Finland	1	369,4

*Includes estimates for total operating revenue of ITV Network Ltd
**Includes estimates for total operating revenue of Canal+ and TPS
Source: « Yearbook 2007 Vol. 1, 2 & 3 », André Lange et al., European Audiovisual Observatory (OBS), Strasbourg, 2007

Of the 50 leading European television companies, five clear frontrunners emerge in terms of total operating revenues in 2006: the UK, Germany, France, Italy, and Spain. The Big 5 concentrate 37 of the 49 leading companies, and cumulate 87,91% of the total operating revenues generated by these leading companies. Other leading companies are from Western Europe and Scandinavia, with the exception of Poland, so there is most certainly a "western divide" in terms of the importance of European television companies which broadcast, produce, and distribute across Europe.

Market segmentation

Platforms

There are a variety of ways in which televisual content is delivered to the consumer, either directly into the household or on portable devices. The end devices tend to become more and more interchangeable in function. Meanwhile, standards being put into place and economic viability will lead to a simplification of the market.

[51] in Yearbook 2007 Vol. 1, 2 & 3, André Lange et al., European Audiovisual Observatory (OBS), Strasbourg, 2007

Overall television penetration in Europe is very high[52]:

Television households, 2006	%
Households owning a television set	95%
Satellite	19,6%
Digital Terrestrial Television*	13%
Cable	5,92%
IPTV	1,4%

*as of June 2005.

For the moment, the following options coexist:

Satellite: Digital satellite services, both free and through subscriptions, are continuously expanding, and represent the most widespread platform for digital television in Europe.[53] In 2006, over 36 million households were receiving satellite television. The strongest markets for this transmission mode were Germany, France, the UK, and Italy, with 9 million, twice 6 million, and 4 million receiving households, respectively. Satellite television experienced a 39% increase from 2006 to 2007, thus retaining its preeminence over other digital TV forms.[54]

Digital Terrestrial Television: The second most popular digital transmission mode is DTT, with the UK, France, Italy, Germany, and Spain leading the market with respectively 7,7 million, 5,2 million, 4 million, 3,6 million, and 2,2 million receiving households, leaving the other European countries far behind.[55]

This mode of broadcasting is growing rapidly. In many countries, DTT is a free service, requiring only a set-top box but no monthly subscription fees. Due to an EU digital rollout policy, DTT will increasingly replace analog broadcasting as a source of terrestrial broadcasting. By Q2 2005, the number of DTT households in Europe reached 24,7 million, which represented around 13% of total households.[56]

Cable: With the advent of digital satellite services and IPTV, cable operators have been digitizing their networks in order to remain competitive, especially with the emergence of *triple play* offers from telecoms. The cable industry has been undergoing a process of concentration for the past several years, with a tendency toward a single dominant operator per national market.

IPTV: Digital channels can be delivered through Internet protocol television, thanks to major initiatives on the part of telephone companies. This new option first became available from telecom operators in 2002, with the launch of *triple play* offers. The European Audiovisual Observatory has counted over 60 IPTV services throughout Europe at the end of 2006, with a total of 2,768 million subscribers (data is missing from the following countries: Cyprus, Liechtenstein, Portugal, Poland, and Slovenia)[57]. This market remains very small compared to other digital TV platforms, with a penetration rate of 1,4% as of the end of 2006.

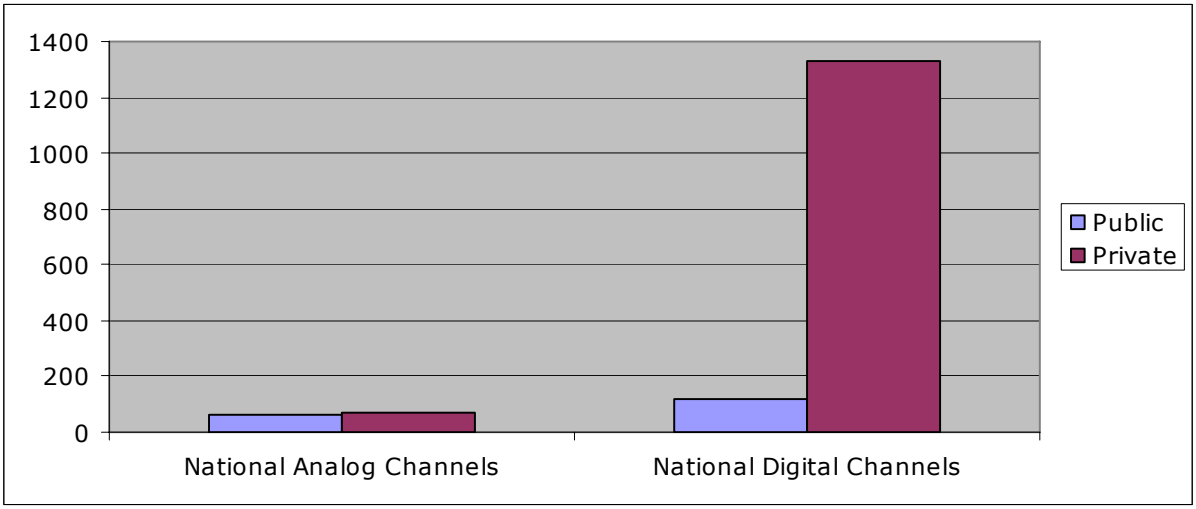
[52] in Yearbook 2007 Vol. 1, 2 & 3, André Lange et al., European Audiovisual Observatory (OBS), Strasbourg, 2007
[53] in Global Entertainment and Media Outlook: 2007-2011, Wilkofsky Gruen Associates Inc., Pricewaterhouse Coopers LLP, New York, 2007
[54] in Yearbook 2007 Vol. 1, 2 & 3, André Lange et al., European Audiovisual Observatory (OBS), Strasbourg, 2007
[55] in Yearbook 2007 Vol. 1, 2 & 3, André Lange et al., European Audiovisual Observatory (OBS), Strasbourg, 2007
[56] in Global Entertainment and Media Outlook: 2007-2011, Wilkofsky Gruen Associates Inc., Pricewaterhouse Coopers LLP, New York, 2007
[57] in Yearbook 2007 Vol. 1, 2 & 3, André Lange et al., European Audiovisual Observatory (OBS), Strasbourg, 2007

By offering the same channels as other platforms – i.e. national channels, major thematic channels, international channels, etc. – IPTV operators are directly competing with cable and satellite operators. Our sources indicate that it is difficult to ascertain to what extent IPTV motivates the decision to subscribe to a *triple play* service rather than telephony and Internet access options. With regard to IPTV penetration, France is the leading market in this sector, with 1,321 million households receiving digital television via an ADSL operator in *triple play* subscriptions.[58]

Channels

In Europe, in mid-2006, there was a total of 1579 channels nationally established and broadcast.[59]

Public and Private Channels in Europe*[60]



*The channels were counted on the basis of being established and broadcast nationally. We have not included foreign channels targeting the country, or channels targeting foreign markets.

In terms of the overall number of channels, the following breakdown can be applied:

Number of TV Channels in Europe[61]

The Big 5	
Over 50 channels	
360	GB
178	IT
126	FR
124	DE
79	ES
Groups of Countries	
Between 30 and 49	NL, RO, BE, SE, AT, BG, HU, PL
Between 10 and 29	GR, MT, PT, CY, CZ, FI, NO
Less than 9	DK, LT, SI, LU, LV, SK, CH, IS, IE, EE

[58] in Yearbook 2007 Vol. 1, 2 & 3, André Lange et al., European Audiovisual Observatory (OBS), Strasbourg, 2007
[59] in Yearbook 2007 Vol. 1, 2 & 3, André Lange et al., European Audiovisual Observatory (OBS), Strasbourg, 2007
[60] in Yearbook 2007 Vol. 1, 2 & 3, André Lange et al., European Audiovisual Observatory (OBS), Strasbourg, 2007
[61] in Yearbook 2007 Vol. 1, 2 & 3, André Lange et al., European Audiovisual Observatory (OBS), Strasbourg, 2007

The digital switch-over

The most important change in the history of television since its invention is taking place at this moment: the transition from analog to digital broadcast. This transition is driven by two international communications agencies, the ITU and CEPT, and backed by policies from the European Commission. Rollout dates vary within the different European member states, depending on a number of factors, but the transition is scheduled to be completed by 2015. The biggest challenge facing each country is ensuring that a majority of consumers will be equipped to receive digital television.

The switch-over to digital is of course instrumental to the full development of the array of new technologies and viewing options available, pulling Europe out of the era of traditional linear viewing and into that of new interactive and personalized options, while creating new growth possibilities for audiovisual companies.

Examining the penetration rate of digital television – incorporating the different delivery means, i.e. cable, satellite, DTT, and IPTV – can lead to the following breakdown:

Digital TV penetration rate in 2006	**Countries**
More than 50%	UK, Finland, Luxemburg, Ireland, France
Between 40% and 49%	Austria, Sweden, Malta, Germany
Between 30% and 39%	Spain, Norway, Switzerland, Italy, Netherlands
Between 15% and 29%	Cyprus, Iceland, Denmark, Latvia, Portugal, Greece, Poland
Less than 14%	Slovak Republic, Romania, Belgium, Slovenia, Lithuania, Hungary, Czech Republic, Estonia, Bulgaria

Source: « Yearbook 2007 Vol. 1, 2 & 3 », André Lange et al., European Audiovisual Observatory (OBS), Strasbourg, 2007

As usual, the picture that emerges is one of an East-West divide. The Western countries on the whole are further along in digitizing the TV network than Central and Eastern European countries.

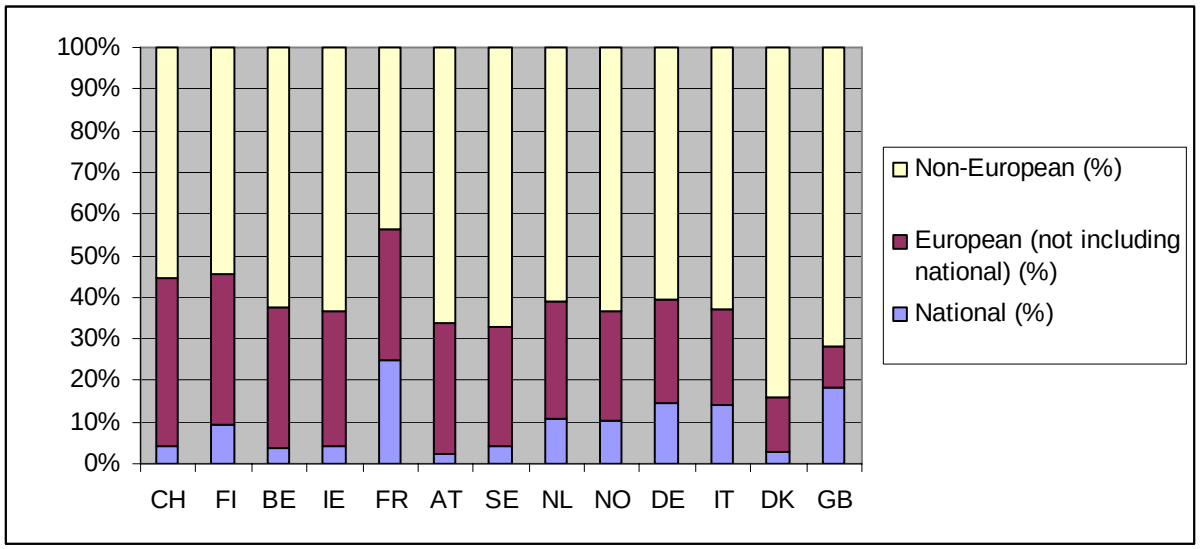
By 2012, analysts expect that 80% of all Western European households—and 30% in Eastern Europe—will have access to some form of digital television.[62] The Netherlands was the first country to become completely digital when it discontinued analog terrestrial broadcasts in 2006. Finland and Sweden switched off in 2007; Switzerland plans a total switch-off in 2008; Denmark plans to become fully digital in 2009; and Austria, France, Germany, and Spain plan to follow in 2010. Italy plans to discontinue analog broadcasts in 2012, and the United Kingdom in 2013.[63]

[62] in The Digital Video Consumer - Transforming the European Video Content Market, Bain & Company, Boston, 2007

[63] in Global Entertainment and Media Outlook: 2007-2011, Wilkofsky Gruen Associates Inc., Pricewaterhouse Coopers LLP, New York, 2007

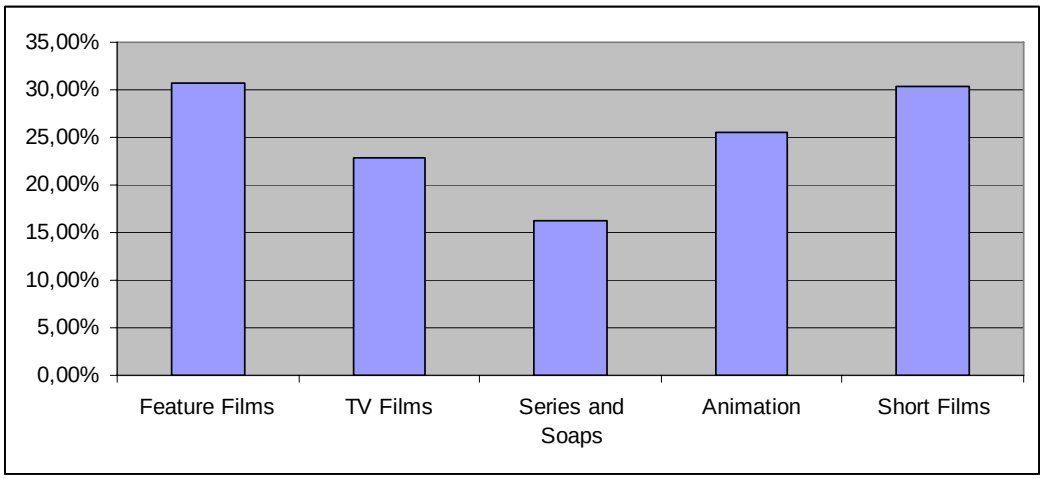
Share of European audiovisual works on the market

Origin of fiction broadcast programs by TV channels in Europe, 2006 (by descending order of countries broadcasting the most European content)[64]



The average amount of European fiction broadcast on European networks was 37,6% in 2006, the breakdown between national and non-national was 14% and 10,9%, while non-European fiction programs represented 62,4% of total programming.[65]
In each of the featured countries, non-European fictional works (i.e. TV films, series and soap operas, TV animation, feature films and short films) dominate the programming of local TV channels, sometimes overwhelmingly, as is the case in Denmark, with 83,9% of its TV programmes originating from outside of Denmark and the EU. National content usually represents not much more than 10% of total fiction programming, with the notable exception of France, and to a lesser degree, Great Britain. In France's case, this is most likely due to the obligation for channels to devote at least 40% of overall programming to national audiovisual works.

Origin of fiction by format, 2006
(AT, BE, CH, DE, DK, FI, FR GB, IE, IT, NL, NO, SE)



[64] in Yearbook 2007 Vol. 1, 2 & 3, André Lange et al., European Audiovisual Observatory (OBS), Strasbourg, 2007
[65] in Yearbook 2007 Vol. 1, 2 & 3, André Lange et al., European Audiovisual Observatory (OBS), Strasbourg, 2007

European home video market

Home Video Rental and Retail Markets

A number of factors have impacted the DVD retail and rental market since 2005.

Depending on the selection of European countries taken into account, the DVD retail market undergoes an overall increase or decrease in terms of turnover. Using the available information on the markets of countries included in this study, DVD retail turnover experienced a slight decrease, from €9135,8 million in 2005 to €9082,8 million in 2006, which represents a 0,58% decrease. However, the number of transactions in DVD retail has increased, going from 642,5 million in 2005 to 685,9 million in 2006, i.e. a 6,75% increase. These apparently contradictory phenomena are directly correlated to the decline in consumer spending, for which dropping DVD sales prices are the main cause.

The rental market follows a different pattern. DVD transactions experience a 7,27% decrease between 2005 and 2006, from €714 million to €662,1 million, and DVD rental turnover follows suite, declining 7,8% from €2323,7 million in 2005 to €2142,4 million in 2006.[66]

This phenomenon is directly reflected within the Big 5:

	Retail		Rental	
	Variation 2006/05 Units sold	Variation 2006/05 Turnvover	Variation 2006/05 Units rented	Variation 2006/05 Turnvover
IT	10%	3,8%	-6%	-11,7%
UK	7%	-4,1%	-11%	-9,6%
ES	3%	-0,7%	-13%	-12,1%
DE	2%	-2,0%	-9%	-10,1%
FR	-4%	-5,8%	-6%	-13,5%
Average	3,6%	-1,8%	-9,0%	-11,4%

Source: European Video Yearbook, International Video Federation (IVF), Brussels, 2007

France represents the exception in this case, where the number of units sold has also decreased. It is also interesting to note that France has the highest growth of IPTV.

[66] in European Video Yearbook, International Video Federation (IVF), Brussels, 2007

The situation is quite different with regard to Eastern, Central and Northern Europe:

	Retail		Rental	
	Variation 2006/05 Units sold	Variation 2006/05 Turnvover	Variation 2006/05 Units rented	Variation 2006/05 Turnvover
SE	33%	26,7%	17%	16,1%
DK	26%	7,0%	-3%	-3,5%
IS	23%	-3,2%	0%	-8,8%
FI	22%	18,6%	7%	6,4%
CZ	21%	10,4%	10%	17,7%
HU	15%	-8,6%	4%	-1,6%
NO	13%	15,4%	-1%	1,7%
NL	7%	-0,9%	-16%	-15,0%
PL	6%	13,0%	24%	30,8%
Average	18,0%	8,7%	4,7%	4,9%

Source: European Video Yearbook, International Video Federation (IVF), Brussels, 2007

In these countries, DVD transactions are experiencing above European average growth, for the most part, with an 18% average increase across all countries in this group. As opposed to Western Europe, the DVD market in these countries is growing, both in the retail and rental sectors.

Miscellaneous other countries of our selection follow the same trend:

	Retail		Rental	
	Variation 2006/05 Units sold	Variation 2006/05 Turnvover	Variation 2006/05 Units rented	Variation 2006/05 Turnvover
IE	39%	43,8%	2%	6,2%
PT	24%	10,0%	-1%	-1,0%
CH	10%	2,8%	-12%	-15,1%
BE	6%	0,7%	-11%	-10,4%
AT	4%	0,9%	4%	3,3%
Average	16,6%	11,6%	3,6%	3,4%

Source: European Video Yearbook, International Video Federation (IVF), Brussels, 2007

Other factors impacting directly on turnover include the quasi disappearance of VHS on the rental and retail markets, for which DVD sales have not compensated fully[67], VOD being the main reason put forward for this. This could be corroborated by the fact that until 2005, the home video market had enjoyed sustained growth, until spending abruptly began to decline. Also, the increasing use of free DVDs as a marketing means to sell magazines and newspapers, known as covermounts, has been cutting into the DVD market in Western European countries, particularly the UK,[68] where DVD covermounts accounted for nearly the same volume as the number of DVDs sold.[69]

[67] in European Video Yearbook, International Video Federation (IVF), Brussels, 2007
[68] in Global Entertainment and Media Outlook: 2007-2011, Wilkofsky Gruen Associates Inc., Pricewaterhouse Coopers LLP, New York, 2007
[69] in Global Entertainment and Media Outlook: 2007-2011, Wilkofsky Gruen Associates Inc., Pricewaterhouse Coopers LLP, New York, 2007

The declining VHS market:

YEAR 2006	VHS retail	VHS rental	DVD retail	DVD rental	Total revenue
LV	21,60%	3,22%	62,48%	12,70%	0,60
HU	8,74%	10,45%	67,80%	13,01%	46,90
PL	5,74%	4,75%	72,79%	16,72%	61,00
BE	2,10%	1,20%	77,00%	19,70%	316,20
CZ	2,05%	1,86%	59,53%	36,56%	48,02
IT	1,29%	1,69%	60,24%	36,78%	710,50
FI	1,01%	2,03%	84,44%	12,51%	88,70
DE	0,75%	0,05%	81,40%	17,80%	1.591,30
IE	0,42%	0,39%	72,17%	27,02%	259,10
FR	0,24%	0,00%	9,01%	90,75%	1.823,00
UK	0,16%	0,04%	86,17%	13,63%	3.653,50
NL	0,15%	0,00%	80,92%	18,94%	475,80
CH	0,12%	0,00%	98,41%	1,47%	163,30
NO	0,03%	0,00%	67,40%	32,57%	366,60
AT	0,00%	0,00%	63,60%	14,80%	106,80
CY	0,00%	0,00%	0,00%	0,00%	0,00
DK	0,00%	0,00%	75,20%	24,80%	281,00
ES	0,00%	0,00%	58,91%	41,09%	651,80
GR	0,00%	0,00%	42,08%	57,92%	18,30
IS	0,00%	0,00%	67,35%	32,65%	14,48
LI	0,00%	0,00%	0,00%	0,00%	0,00
PT	0,00%	0,00%	73,35%	26,65%	106,20
SE	0,00%	0,00%	66,80%	33,20%	388,20
Total	**1,93%**	**1,12%**	**62,05%**	**25,27%**	**472,72**

Source: peacefulfish/MCG (based on information mainly from OBS, Eurostat and MEF)

We see that it is primarily three Eastern European countries – Latvia, Poland, and Hungary – in which VHS still has a somewhat significant market share, especially in retail. These remnants of the VHS market will most likely fade away in coming years, following the rest of Europe.

DVD-Player Penetration

Sixty-two percent of European households own a DVD player, a percentage which has been rapidly increasing since 1999. The penetration rate increase reached a peak in 2003, before beginning a gradual slowdown.

Percentage of households with DVD player, 2006

	Percent. of households with DVD player
IS	84,7%
NO	83,5%
DK	79,9%
NL	79,2%
UK	76,7%
IT	73,6%
CH	73,4%
DE	70,3%
ES	67,6%
SE	67,6%
FR	64,3%
PT	63,4%
IE	62,5%
BE	60,3%
AT	58,3%
HU	41,9%
FI	41,7%
GR	40,8%
CZ	29,9%
PL	26,0%
Average	**62,3%**

Source: European Video Yearbook, International Video Federation (IVF), Brussels, 2007

A small portion of Central and Eastern European countries are situated below the European average in this matter. With DVD-player sales on the rise, the DVD retail and rental sector should maintain some amount of growth for the next few years at least.

High-Definition

Many in the industry are predicting the imminent demise of the DVD, in the same way that VHS has all but completely died out within the last few years. Direct competition to the format in the form of VOD services and other digital download options are seen as the future of the home video market

However, according to research conducted by PriceWaterhouse Coopers, the new high-definition DVD format Blu-ray should stimulate new – albeit limited – growth until 2011, with physical sell-through being projected to grow 1,9% in Western Europe, while Central

and Eastern Europe should reach a 6,7% growth rate.[70] The British Video Association (BVA) estimates that digital films will absorb only a fraction of home entertainment spending - about 6% by 2012 while Screen Digest predicts that by 2012 digitally delivered films will make up 2,6% of total spending of about £2,2bn on full-length films.

The rest will consist of buying and renting Blu-ray discs and standard DVDs, it predicts. Film studios argue Blu-ray will help the overall market grow as consumers seek formats that make the most of their high-definition television sets. Other industry experts argue that major practical considerations mean that digital delivery, i.e. VOD, has a long way to go before becoming mass market and that the predicted boom will be longer in coming than currently portrayed in much of the media.[71]

However, the very recent news of the launch of Apple's i-tunes feature film download service in the UK, with launches in other European markets to follow soon, might well alter these forecasts considerably. Yet the question of quality and viewing comfort remains, as will be discussed in the following section.

[70] in Going the way of VHS: DVD industry braces itself for march of the download, Katie Allen, The Guardian, 02.06.2008
[71] in Going the way of VHS: DVD industry braces itself for march of the download, Katie Allen, The Guardian, 02.06.2008

European VOD market

VOD market share on the audiovisual market

According to the European Audiovisual Observatory [72], the term "video on demand" (VOD) "covers a wide range of technologies, all of which allow the selection and rental – or remote purchase in dematerialized form – of video content for immediate or later viewing on various types of devices (computer, television, telephone, portable player) for a limited or unlimited period."

A real VOD market has recently emerged in Europe. VOD services were first launched in 2001 in Italy and the UK. Since 2001, the number and the type of VOD services in Europe have increased to reach 142 services in 2007. More than 2 000 feature films were available in Europe in 2006, of which 700 in French language.[73] Between 2006 and 2007, the number of Europeans watching online video or TV grew 150%.

Despite the fact that VOD is still an emerging market, in the first nine months of 2007, the VOD market turnover reached €20 million and 5,8 million pay-viewings.[74] Experts expect that turnover will double in 2007, compared to 2006, to reach €30,5 million. The share of the European TV and movie Internet VOD services market increases between 10% and 20% each year.[75] This growth is enabled by the development of broadband connections in homes. By 2013, viewers accessing video on the Internet will quadruple to reach 1 million homes, which will generate revenues of €6 650 million[76].

VOD revenues in Europe, 2005

Country	2005 (€m)
Austria	2,1
Belgium	0,6
Czech Republic	0,0
Denmark	23,4
Estonia	0,0
Finland	1,4
France	114,1
Germany	26,7
Greece	2,6
Ireland	0,5
Italy	152,1
Luxembourg	0,0
Poland	0,0
Portugal	2,5
Spain	43,4
Sweden	22,9
The Netherlands	2,2
United Kingdom	141,2
Total	536,0

Source: Screen Digest [77] and Association of Commercial Television in Europe[78]

[72] Video on Demand in Europe, npa conseil, Paris, 2007
[73] The Development of VOD in Europe, npa conseil, Boulogne-Billancourt, 2006
[74] Communiqué de presse NPA Conseil-GfK, Paris, November 2007
[75] The Digital Video Consumer, Transforming the European Video Content Market, Bain & Company, Boston, 2007
[76] On-demand TV & PVRS, 6th EDITION, Informa telecoms&media, Byfleet, 2008
[77] Interactive content and convergence, Screen Digest, CMS Hasche Sigle, Goldmedia, Rightscom for the European Commission, Brussels, 2006

There is a gap between on-demand revenue, including all types of content and platforms (VOD, user-generated content, platforms such as YouTube…) and VOD revenues, which represent only 7% of total on-demand revenues in France, 26% in Germany, 3% in Italy, 7% in Spain and 24% in The Netherlands.

Total VOD subscribers in Europe (thousands)

Country	2006	2007	2008	2011
France	898	1269	1757	3789
Germany	486	1128	1863	4289
Italy	417	705	903	1820
Netherlands	81	158	253	645
Spain	351	466	576	1002
UK	154	371	761	1996
Rest of Region	407	991	1935	5804
Europe total	2796	5088	8048	19345

Source: Association of Commercial Television in Europe (ACT) [79]

Despite the fact that most VOD service providers do not communicate the number of downloads on their platforms, ACT achieved an assessment of the number of VOD subscribers in 2006/07, and a forecast for 2008 to 2011. All the services providers agree on the fact that the market took off in the first quarter of June 2006. In the UK, BSkyB announced that Sky Anytime recorded more than one million downloads in 2006. The table above shows that the number of VOD subscribers in Europe should at least double between 2006 and 2008, and quadruple between 2006 and 2011.

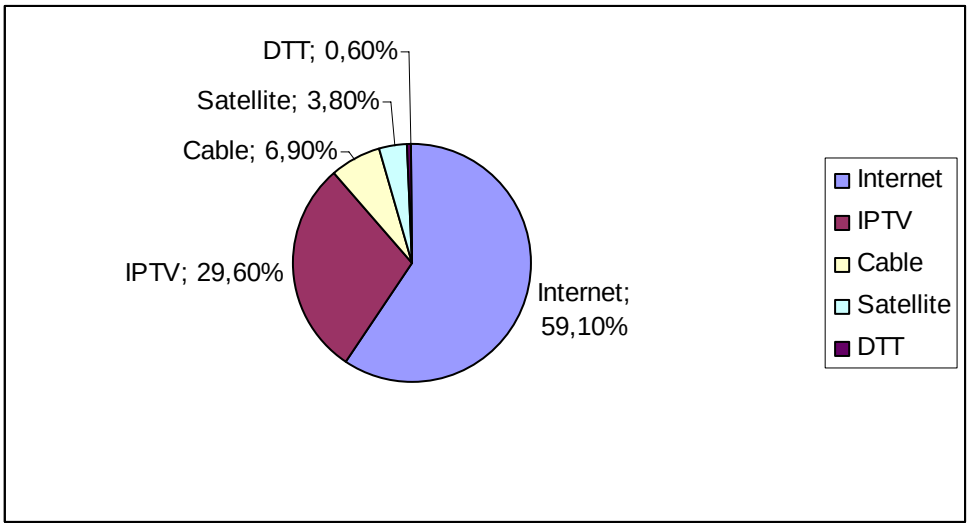
Market segmentation

There are several possible segmentation factors on the VOD market, which could possibly redefine the market in the future. For example, it is possible to operate a technological distinction in the mode of transmission, between VOD services provided on Internet or on IPTV, and even via cable or satellite networks. We can also differentiate market segments by business models used by the providers: rental VOD, download-to-own model, or subscription VOD, pay-VOD or free VOD supported by advertising… Another segmentation can take into account the type of content provided by the suppliers. Some providers are specialized in documentaries, films or independent production while others have adopted a mixed content strategy with films, documentaries, TV programs, music videos… We will focus on the technological segmentation and the segmentation by type of content, because it allows establishing a clear overview of the marketplace. The different business models of VOD service providers will be examined in section 3, the industry.

VOD via the Internet or IPTV offerings:

The main market segmentation in the VOD sector is the distinction between the various platforms providing digital services: IPTV, Internet, cable, digital terrestrial television, and satellite.

[78] Factbook 2007, Association of Commercial Television in Europe (ACT), Brussels, 2007
[79] Factbook 2007, Association of Commercial Television in Europe (ACT), Brussels, 2007



Source: NPA Conseil[80]

Revenues generated in €m	2004	2005	2006	2008	2010
Online VOD	1.4	2.8	18.7	205.9	1.032
Walled garden VOD	0.5	28.3	100.8	177.3	237.6
Total digital	1.9	31.1	119.5	383.2	1269.6

Source: Screen Digest[81]

VOD via Internet

Most VOD services (59%) are accessible directly over the Internet, without the intermediary of a dedicated set-top box. Videos may be watched on the computer and be streamed or downloaded. For example in France in 2006, 10 VOD services were available via Internet, 5 via both Internet and IPTV and 5 only via IPTV.

According to André Lange of the European Audiovisual Observatory[82], there are six main advantages to launching VOD services on Internet. First of all, this B2C model enables smaller players to deliver content at minimal cost. This platform also allows editorial complements and customized marketing. For example, the portal can follow the user's habits and preferences in order to make personalised offers, such as: "If you liked this film, you might like this one." This Internet model is ideal for international or niche strategies. However, this platform also has some disadvantages and weaknesses. First, many reports affirm that it is still more comfortable for the consumer to watch a film on his television set than on a PC screen, although this view is seen as increasingly untrue. In reality, the PC screen is taking up more and more of consumers' viewing time. On the other hand, it can be argued that the lack of an established revenue model and threats to historical revenue models prevent content owners from exploiting this platform more widely.

VOD via IPTV

Internet Protocol Television (IPTV) is the delivery of content using Internet protocol within a "walled garden" network, over a broadband network. Most of the Internet access providers have integrated VOD services on their multiplay packages via set-top box-based digital TV networks. These VOD services delivered through Internet protocol represent 29,60% of the European VOD market. Delivery through the TV set has a clear

[80] Video on Demand in Europe, npa conseil, Paris, 2007
[81] Interactive content and convergence, Screen Digest, CMS Hasche Sigle, Goldmedia, Rightscom for the European Commission, Brussels, 2006
[82] Legal aspects of Video on Demand, European Audiovisual Observatory, Strasbourg, 2007

advantage compared to delivery via Internet. Viewing habits are strongly linked with television and not yet with the PC screen. The second advantage to providing VOD on IPTV is the existence of a basis of subscribers. However, this model also has disadvantages, such as the limited capacity of telephone networks. VOD services on IPTV also have smaller catalogues compared with VOD services on the Internet and have difficulty accessing niche content or independent catalogues.

Cable and satellite such as digital terrestrial television are also platforms enabling the provision of VOD services but they represent a limited part of the market (11%).

Market segmentation by type of content

Cinematographic works represent the largest portion of titles offered by the different VOD services (67% in 2007 according to NPA Conseil) but there is also a growing trend to integrate television works, such as series, documentaries, news magazines or even educational programs[83]. For example, the Belgian VOD supplier 7 Days provides 12,5% documentaries, 47,5% animation and 17,5% music videos. France's Orange VOD services offer 11% documentaries and 89% films. The French cable operator Ojo offers 47,9% films, 11,8% TV series, 14,2% documentaries and 10,9% audiovisual and music programs.

In the US, consumers who regularly watch programs over the Internet generally view different types of content compared to traditional television. The largest categories of content are movie previews, user-generated content and music videos.

Marketing aspects of VoD

VoD distribution can occur through different channels, and is subject to different types of consumption.

MEDIUM	DESCRIPTION	TYPE OF OPERATOR
INTERNET	VOD on IP based networks using the open Internet	Anyone
IPTV	VOD on restricted proprietary IP networks	Internet Service Providers
CABLE	VOD on restricted CATV networks	ISP through Cable
SATELLITE	VOD on restricted SATV networks	ISP through Satellite
DTT	VOD on restricted DTT networks	DTT Channels

CONSUMPTION	DESCRIPTION
VoD – Streaming	VOD enabling the user to watch a programme for limited period of time. The content remains stored on the operator's servers.
VoD – Temporary Download	VOD enabling the user to watch a programme for limited period of time. The content is transferred from the operator's servers to the user's personal computer. The user can therefore watch his/her content offline.
VoD – EST (Electronic Sell Through)	VOD enabling the user to watch a programme for unlimited period of time. The content is transferred from the operator's servers to the user's personal computer.

[83] The Development of VOD in Europe, npa conseil, Boulogne-Billancourt, 2006

NVoD – Near Video on Demand	Pay per view model broadcasting the same content at very short intervals, allowing the user to experience a mock of VoD. not based on IP networks.
FVoD – Free Video on Demand	VOD enabling the user to watch content on demand for free. So called Ad-supported models.
SVoD – Subscription Video on Demand	VOD enabling the user to watch unlimited content on demand for a subscription fee.

As far as consumer habits are concerned, VoD streaming and temporary download are the models that convinced most of the regular users. This is mainly due to a question of price/quality ratio versus the other consumption modes. For instance, EST models are far too expensive (normally between 10 and 20 eur) for the service they provide, users would still rather purchase a DVD for the same price. As for models such as FVoD, and SVoD, their business models still have not convinced right-holders, as the potential opportunities to monetise their content in that are still unproven. Therefore, we find a very limited offer on FVoD and SVoD services in Europe as of today (except for the recent arrival of iTunes VOD on the French, UK, and German markets).

The number of available services is currently increasing exponentially. Most of these services are being introduced directly on the internet as it is the environment with the least barriers to entry. Anyone who can code can develop a VoD service and render it accessible to whoever has an Internet connection. Indeed, out of the 116 services introduced in Europe last year, 97 were Internet-based services[84].

The total number of European VoD services amounts to 258, which can be broken down in four distinct categories ranging from countries with more than 20 active services (France, The Netherlands, Germany), to countries having from 1 to 4 services (Iceland, Slovenia, etc.)

	Country	Number of services	Growth in total number over one year
20 +	France	32	+12
	Netherlands	30	+11
	Germany	26	+14
10 - 20	Sweden	16	+8
	United Kingdom	16	+3
	Norway	14	+7
	Spain	15	+9
	Italy	12	+4
	Denmark	11	+4
	Belgium	10	+0
	Austria	10	+5
5 - 10	Switzerland	9	+6
	Hungary	8	+4
	Finaland	8	+4
	Ireland	7	+2
	Poland	6	+3
	Portugal	6	+4
	Slovakia	5	+4
1 - 4	Estonia	4	+2
	Iceland	4	+3
	Slovenia	4	+4

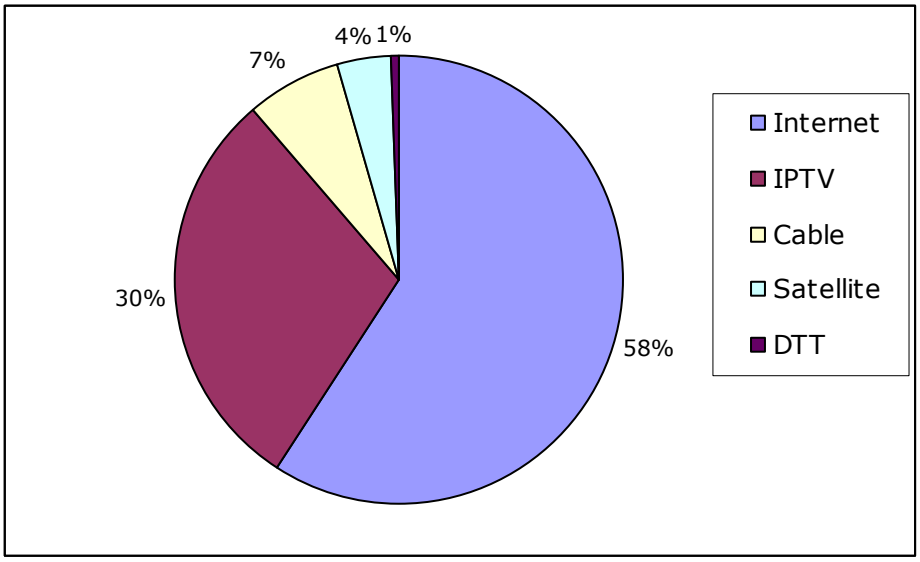
[84] NPA conseil : Video on Demand in Europe, Second survey of VoD services as of January 2008.

	Cyprus	2	+0
	Turkey	1	+1
	Luxembourg	2	+2
	Total	**258**	**+116**

Source : NPA Conseil

The internet is where we find the most available services, so most of the consumption is currently going through the Internet, with 58% of the market in terms of delivery. IPTV operators are normally Internet Service Providers, that use their existing infrastructure to provide their clients with delivery of content directly to their television screens. This type of consumption is believed to represent 30% of total VoD consumption[85].

Breakdown of European VOD Service by Delivery (end 2006)[86]



It is interesting to note the strong correlation between Internet Broadband Penetration and the number of available VoD services on the Open Internet. However, high levels of broadband penetration might not necessarily mean sufficient Bandwidth in order to propose seamless IPTV experiences. For instance, the Netherlands are well under way to reaching an objective of 89% broadband penetration in 2012 versus 64% for France. On the other hand, the Netherlands have an average bandwidth offer of 5 Mbps versus 20 Mbps for France[87], which proves to be rather inadequate for IPTV services.

As a result, the numbers communicated by the European Audiovisual Observatory concerning the number of IPTV subscribers, immediately make more sense (close to 3.5m subscribers to IPTV services in France vs 26,000 in the Netherlands).

According to the trends that can be analysed in France[88], movies represent from one month to the other close to 70% of VoD consumption. The high correlation between the industry's turnover and cinema leads us to another issue, which remains a true challenge for policy makers: territoriality of rights.

Indeed, most VoD services address "local" markets, such as filmklik.hu (Hu), universcine.com (F), sf-anytime.com (DK), etc., while some services follow a global

[85] idem
[86] NPA conseil : Video on Demand in Europe, Second survey of VoD services as of January 2008.
[87] Bain & Co
[88] GFK Barometer

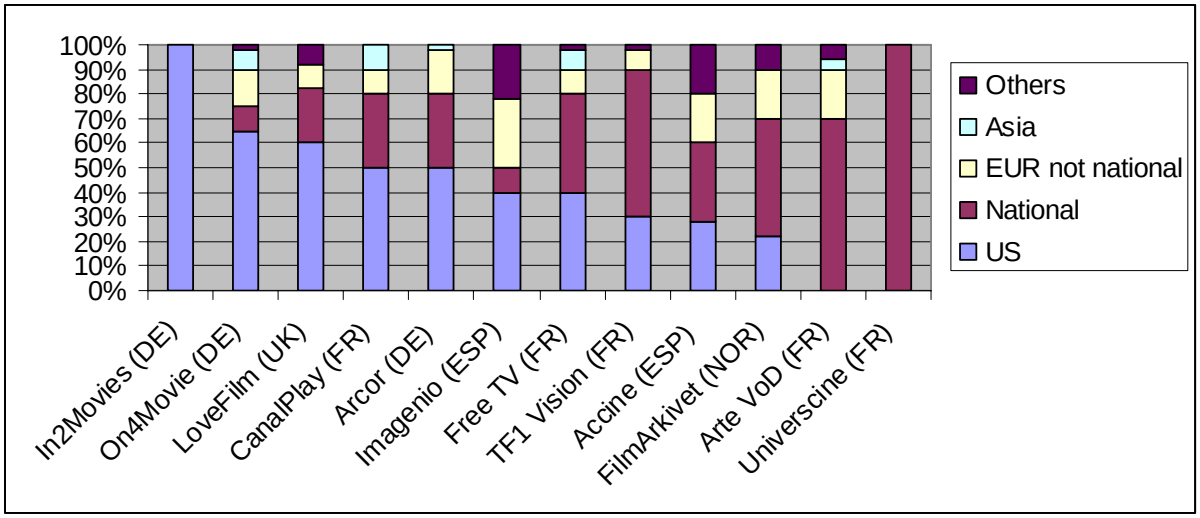
distribution approach while geofiltering content (movieurope.com, jaman.com, theauteurs.com, etc.). In other words, a local platform will distribute content to a national audience only. It will negotiate only national VoD rights on all types of content. If a user tries to download a movie from another territory, the service will not be available to that user. On the other hand, "global platforms" will negotiate world rights while taking into consideration territorial exclusions. Therefore a user based in a given country will have access to the service and the content that has been cleared for this particular territory.

Cross border VoD rights clearance is still hindered by many factors such as the reluctance of rights holders to let go of VoD rights without bundling them with other rights.

Role of European audiovisual works

US films account for 90% of the content offered on European platforms. National films vary from 1% to 71% of the market share and non-national European films account for 5% to 25% of the market share. Titles from American majors usually form the largest share of the individual European VOD markets.

VOD titles on offer in Europe, by country of origin, 2006



Source: NPA Conseil[89]

The origin of the films available on a VOD provider's catalogue varies widely from one player to another. The German In2Movies, which results from a joint venture between Arvato Mobile (Bertelsmann) and Warner, offers only American titles, logically coming from Warner's backlist. The French broadcaster Arte provides only national and European content and no titles from American major studios.

Main groups of countries

The VOD market has reached different stages of development in the various European countries, as it depends on numerous changing factors, such as consumers, advertisers, technology, market participants, regulatory frames… The size of the language pool is an important factor to determine which national market will grow more or less quickly. With

[89] The Development of VOD in Europe, npa conseil, Boulogne-Billancourt, 2006

regard to the technology, broadband penetration will also be a decisive factor, determining the size and the growth of the emerging VOD market in the different European countries. Bain & Company segments European markets into six key categories[90]:

- UK / Ireland
- "Southern" (France, Portugal, Spain, Italy)
- "Connected" (Netherlands, Switzerland and Belgium)
- "Nordic" (Sweden, Denmark, Finland, Norway)
- "Germanic" (Germany and Austria)
- "Central and Eastern Europe" (Hungary, Bulgaria, Poland, Romania, Czech Republic).

For WebTV, the issues revolve around PC penetration and broadband bandwidth, making the playing field more level as these factors tend to reach similar levels within the different European countries. However, unlike with IPTV, these are absolute requirements: older PCs and slower networks can also provide WebTV, albeit with a variable user experience.

Trends

In general, content creators are actively testing the Internet as a distribution channel, and we expect to see this tendency accelerate. However, the business rationale for developing this channel at the expense of TV VOD is limited. There are four main reasons for not aggressively pursuing video distribution over the public Internet:

- Copyright protection (lack of digital rights, national limitations) is restricting pan-European distribution, which is over-protected in the face of lingering fears linked to piracy.
- Many content creators expect distribution over the public Internet to be more costly and complex in the short term.
- They expect additional marketing and rights clearance costs, as well as the cost of enforcing staggered release windows, copyrights and content exclusivity agreements.[91]

Bain & Company, in the report "The digital video consumer", states that the most likely evolution for the VOD market in the five next years will be the following scenario: In this view, consumers will gradually move from analogue to digital TV and will soon adopt on-demand television, which will continue to grow 4 to 6 %, while traditional business models will stay profitable. Youth habits are already changing toward online video-on-demand and until 2012, they could opt to watch 20% of their TV programs on-demand. However, the rest of the population still favors the "lean back" experience of watching traditional television, as opposed to the "lean forward" attitude associated with interactive and on-demand viewing experiences. In this scenario, 10% of consumers could shift to on-demand services within the next five years, and VOD will be offered to 100% of digital cable and IPTV homes (35% of the audience). [92]

Piracy is a major challenge for the European video market. The Motion Picture Association states that in 2005, the European audiovisual industry has lost €2 billion to

[90] The Digital Video Consumer, Transforming the European Video Content Market, Bain & Company, Boston, 2007
[91] in The Digital Video Consumer - Transforming the European Video Content Market, Bain & Company, Boston, 2007
[92] The Digital Video Consumer, Transforming the European Video Content Market, Bain & Company, Boston, 2007

piracy[93] It is one the main obstacle for mass market supply of digital content and video-on-demand. Video content players have to develop solutions to protect their content for illegal downloading of movie DVDs, TV programs and Internet video content. The various solutions for protecting content of illegal exploitation, such as DRM, carry some risks for the deployment of a mass-market. DRM solutions restrict for example the portability of the content, which often cannot be transferred in various devices. Some content owners have launched more sophisticated DRM systems, to allow a single copy for each consumer's device. The VOD could also be seen as a way to limit the piracy, by shortening the release window. The possibility to watch a movie a short time after its theatrical exhibition through VOD platforms could help to develop a mass-market and to reduce the piracy. American distribution companies have adopted the strategy of "day-to-date" release, to release films simultaneously on DVD and VOD. Some European countries, such as the Nordic countries, are also moving in this direction. However, the "Audiovisual Media services " Directive stated that "Member states shall ensure that media service providers [including non-linear services] under their jurisdiction do not transmit cinematographic works outside periods agreed with the rights holders"[94]

Technological innovations enabling content to be moved from computer to television set support the development of VOD: for example, the German publishing giant Axel Springer and Dutch consumer electronics producer Philips have developed a system that will make it possible for television viewers to create personalized channels from their favorite TV and Internet video content.[95]

[93] The Digital Video Consumer, Transforming the European Video Content Market, Bain & Company, Boston, 2007
[94] Video on Demand in Europe, NPA Conseil for DDM, Paris, 2007
[95] Axel Springer, Philips customize TV, Bonnie J. Gordon, The Hollywood Reporter, 30.05.2008

European video sharing market

The video sharing market is the youngest market in the home entertainment sector, and started to emerge in 2006.

In this market there are two content sources: user-generated content or professionally produced content. Professional content encompasses all content produced with a commercial intention, while user-generated content can be described as amateur filming with no commercial intentions.

Some video sharing platforms specialize in promoting professionally produced content and offer independent artists a stage to present their work. Nevertheless, most sites specialise in the uploading and watching of user-generated content by users. Because of strict copyright laws, platform operators must work out deals or partnerships with content owners (mainly media companies).

When it comes to genre, the leading video sharing communities do no actually focus on any special type of content. They pretty much let the user decide what to host. The genres on most sites range from miscellaneous user-generated content to professionally produced videos, music videos, remixes of all sorts of content and even news broadcasts. However, there are communities focussing on one genre only, so-called niche communities.

When it comes to social networking aspects the communities do not differ very much. Users are able to create a profile and connect it with other users as well as commenting and discussing videos with all registered users.

To simply watch videos there is no need to register or create a profile whereas uploading content is only allowed to registered users.

World-wide Market Leaders

The market leader is YouTube with a market share of nearly 43%. North American sites dominate the market with eight of the top ten video sharing communities originating from the USA.

Rank	Name	SME?	Market Share	Origin of Main Stakeholder
1	YouTube	No	42,94%	USA
2	MySpace Videos	No	24,22%	USA
3	Yahoo!Video Search	No	9,58%	USA
4	MSN Video Search	No	9,21%	USA
5	Google Video Search	No	6,48%	USA
6	AOL Video	No	4,28%	USA
7	iFilm	Yes	2,28%	USA
8	Grouper	No	0,69%	Japan
9	Dailymotion	Yes	0,22%	France
10	vSocial	Yes	0,09%	USA

Source: Adapted from www.hitwise.com

After launching in Europe in 2006, YouTube became the market leader on the European market as well. However, a great number of local video sharing sites are appearing on the market, such as Sevenload and MyVideo in Germany, Dailymotion in France, U-boot in Austria, and Netlog in Belgium, are just a few examples of emerging European sites.

Market Size

Due to a lack of data it is hard to say how big the market actually is. Due to the fact that video sharing sites are mostly SMEs or parts of big media conglomerates they are not very keen on publishing data and especially numbers. But based on the fact that most of the sites generated revenue exclusively from advertisement, the overall adspend in Europe might be an indicator for the size of the market and the impact of video sharing on the market. In 2005, when video sharing sites were not so popular, online advertising was already generating €40,57 billion and in 2006 when video sharing sites started to spread the market generated €49,1 billion and is expected to reach €57,2 billion in 2007.[96]

[96] in Global Entertainment and Media Outlook: 2007-2011, Wilkofsky Gruen Associates Inc., Pricewaterhouse Coopers LLP, New York, 2007

European games market

Market segmentation

The European games market consists of five different market segments: online gaming, console, PC, handheld, and mobile games. Mobile games are included in the section on mobile content. The games market is one of the fastest growing in the Home Entertainment sector. According to PricewaterhouseCoopers Entertainment and Media Outlook the market is projected to grow 10% from $ 9.4 billion in 2006 to $11.1 in 2007. This makes Europe the second largest market in the world behind the Asia Pacific Market. Main drivers for this growth are the mobile and online gaming markets which are expected to grow by 17% and 24.6 % respectively.

Console Market

The console gaming market will continue to be the largest segment within the market. The console market is divided between three manufactures: Sony, Microsoft and Nintendo.
Hardware sales alone represented revenue of € 3 Billion Euros in 2006. However revenue nearly doubled in 2007. Thanks to the market introduction of the "next generation" consoles, Wii, Xbox and Playstation 3 the Hardware market grew to € 5.7 billion Euros.
Even though some of the older consoles were online compatible, the new consoles took the online console gaming market to the next level. According to Reuters, Microsoft claims that they have reached 12 million subscribers for their Xbox Live online service[97] while Sony´s online Playstation network has 8 million subscribers[98]. There are no numbers for Nintendo´s Wii as they operate on a pay-per-item and not a subscription model. It is believed that further broadband diffusion will boost the online console gaming market.

PC games Market

The PC games market is stagnating and sales will remain flat - around $1.5 billion in 2006[99] - but it is still the second largest segment in the market. Furthermore, PC games can still profit from the growing popularity of MMORPG (Massively Multiplayer Online Role Playing Games) as they are very complex and often require a keyboard. The PC market is dominated by a number of global acting publishers.

Handheld Market

The handheld games market consists of Nintendo's DS (dual screen) and Sony's PSP (Playstation Portable). A total of 8.5 million devices were sold in 2006, mostly Nintendo DS due to a delayed launch of the PSP.

Online gaming Market

The online gaming market is the fastest growing segment of the market and generated $1,2 billion in 2006 and is projected to grow by 24,6% and reach $1,6 billion in 2007.

[97] http://news.yahoo.com/s/nm/20080514/tc_nm/microsoft_xbox_dc_2
[98] Press release Sony, May 16, 2008;
http://www.us.playstation.com/News/PressReleases/471
[99] Global Entertainment and Media Outlook: 2007-2011; PricewaterhouseCoopers;
New York, 2007

The most popular online game is the MMORPG World of Warcraft by French publisher Vivendi with more than 10 million subscribers and an estimated market share of 60%[100].

The online gaming market consists of three main segments:

1) Browser Based casual games:

Games with simple gameplay streamed or quickly downloaded from the internet. Browser games usually use open internet technologies like java or flash and are most likely puzzle word or card games.

2) MMORPG

Games designed for a large number of players who share the games world. These open ended games allow players to enter and exit when they wish.

3) Online console and PC gaming

PC or console games with network options enabling online multiplayer gameplay.

Role of European AV works in the offer on the market

Most games are created in Asia, mainly Japan and North America and are imported to Europe.

Even though market share of European Software in other regions is relatively low compared to foreign market shares in the European Market (US share of EU market amounts to 34% whereas EU share of US market amounts to 11%[101]) European development studios created a number of successful games and some of the largest publishers are European. For example:

- The famous GTA series was created in England by Rockstargames, the newest version of the game, GTA VI is the bestselling game so far. It sold 3,6 million units within the first week,
- British company Eidos published the well-known Tomb Raider series,
- Codemasters published the famous racing game Colin McRae Rally,
- French publisher Ubisoft published Rayman, one of the best selling games of all time,
- Spanish Publisher Pyro had a huge success with the game Commandos.

European development studios often develop very successful games which are usually created by non-European publishers; thus, they are usually not considered "European". Apart from the GTA series which was published by US company Take2 Interactive. The Harry Potter game is another example: The game was developed in England but published by Electronic Arts, a global publisher headquartered in the US.

The casual online games market is centered on North America. Most companies servicing these markets are based there and most are still targeting North Americans only. European launches are fraught with difficulties - from adherence to local laws and customs, to catering for language and currency diversity. As a result up until 2004 not many North American companies had tried to tap the European market to any great degree and, in some markets, this has precipitated the formation of indigenous service providers who are relishing their unfettered ability to exploit this market gap. However, the major US online games service providers are increasingly concluding that Europe, with its higher population level, PC homes and Internet users is the key to the

[100] Vivendi Annual Report 2007;Vivendi;Paris;2007
[101] Interactive content and convergence, Screen Digest, London;2006

maintenance of their long-term growth. However, the implementation of a multi-lingual strategy is both costly and complicated and is the principal reason why the pay-per-play market leaders were slow to make international moves. The UK, French and German markets have all spawned their own indigenous service providers. They have been joined more recently by the major US pay-per-play service providers. Whereas US operators have managed to achieve scale more effectively due to the nature of the market, European operators have been undermined by the diversified nature of the region. North American operators are now steadily entering the European market by acquiring local players, and they are able to leverage their existing scale to absorb the costs of localizing their services. In 2010 the difference in market size between regions will remain marked, although the impact of large scale operators on the EU region will considerably improve the relative size of the market.[102]

Whereas in the MMORPG market, Europe has a leading role not only due to the earlier mentioned market leader World of Warcraft by French publisher Vivendi but also due to several other European companies active in the market. British company Jagex Ltd. developed the very popular Java-based MMORPG RuneScape which counts more 150 servers throughout the world.

As another example, Travian, developed by German companies Travian Games GmbH, has been translated into 30 languages and has just over 3 million players worldwide.

In the hardware market there is no European offer as the market for handheld and console is divided between Sony, Microsoft, and Nintendo.

Trends

These market developments have been underpinned by the increase in penetration and use of broadband Internet access by consumers interested in gaming. This addressable market will continue to expand and help drive the demand for downloaded game content, while helping convince publishers that they should be considering download as a legitimate sales channel. Aside from premium PC game downloads, there is now a burgeoning download-to-own market for console game content through Microsoft's Xbox 360, Nintendo's Wii and Sony's Playstation 3, console platforms, and through handheld devices from Sony and Nintendo. The console download market will continue to increase.

The will be a growing impact of digitally distributed games content on the total European games market over the next few years. Online games revenue covers subscription MMORPG as well as PC-based casual games downloads subscription services, and pay per play revenue. Both online and mobile games markets will grow the European market to €7.3 billion by 2008. Overall, however, the retail market is expected to show minimal growth over the next few years, while strong growth is expected to come from networked content utilising digital distribution methods whether that be online or mobile in nature. €699 million or 11 per cent of the European market value is non-retail, while €5.5 billion or 89 per cent of the market is retail.[103]

The fast growing mobile games market is dominated by content providers, which are most likely the big game companies, and the operators which deliver the content to the consumer.

[102] Interactive content and convergence. Implications fort he information Society; European Commission; Brussels,2006

[103] Digital Broadband Content: The online computer and video game industry, OECD, Paris, 2005

Country focus

Focus in this section is set on the five largest games markets within the countries included in the study.

Overview of the five biggest European markets for games

2006	Market size in €m	Market share in % of the overall turnover of the HE market	PC penetration Rate[104]	Console penetration rate[105]
UK	2.199,8	10,2%	71,0%	36%
France	1.174,8	8,5%	58,5%	35%
Germany	1.126,0	6,3%	66,0%	28%
Italy	600,2	6,0%	54,0%	34%
Spain	459,9	6,1%	55,0%	36%

Source: peacfulfish/MCG

United Kingdom

Market segmentation

The UK game market is the largest one in Europe generating €2.3b in 2007[106] (€2.2b in 2006) and has grown by more than 100% over the last six years, making the United Kingdom the third largest market in the world behind Japan and the United States. More than 25 million game consoles have been sold since 1995, equivalent to one for every household or a console penetration rate of 36% one of the highest in Europe and a PC penetration rate of 71%.

SOFTWARE PUBLISHERS' MARKET SHARE IN UNITS (According to ELSPA):

1. Electronic Arts: 15.8 per cent
2. Nintendo: 12.3 per cent
3. Ubisoft: 8.6 per cent
4. THQ: 6.7 per cent
5. Activision: 6.2 per cent
6. Sega: 5.2 per cent
7. Microsoft: 5.0 per cent
8. Sony: 4.8 per cent
9. Take 2: 3.8 per cent
10. Eidos: 2.7 per cent

The chart shows the great impact of foreign publishers on the UK Market. Only Ubisoft and Eidos were able to secure a significant market share.

[104] Eurostat
[105] Eurostat
[106] Video Gamers in Europe 2008, ISFE, Brussels 2008

BEST-SELLING GAMES ALL FORMATS 2007:

1. FIFA 08 (Electronic Arts)
2. Dr Kawashima's Brain Training (Nintendo)
3. Call of Duty 4: Modern Warfare (Activision)
4. Pro Evolution Soccer 2008 (Konami)
5. More Brain Training (Nintendo)
6. Halo 3 (Microsoft)
7. The Simpsons Game (Electronic Arts)
8. Wii Play (Nintendo)
9. Assassin's Creed (Ubisoft)
10. WWE Smackdown Vs Raw 2008 (THQ)

The list above shows that only one game (Assassin's Creed) of the top ten best-selling games in the UK, was published by a European company. This underlines the great impact of foreign companies on the UK games market.

FORMAT MARKET SHARE BY UNITS (According to ELSPA):

PC:	23.3 per cent
Nintendo DS:	19.7 per cent
PlayStation 2:	18.7 per cent
Xbox 360:	12.9 per cent
Wii:	10.4 per cent
PSP:	7.4 per cent
PS3:	5.6 per cent
GBA:	1.1 per cent

The console market is the strongest segment in the UK market with an overall format market share of 47,2%, followed by the handheld segment with 28,2% and the PC segment with 23,3%.
The format market share of the Playstation 2 is likely to decrease as newer consoles emerge on the market, with the Playstation 3 expected to compensate the delayed market introduction.[107]

Trends

The UK market is commonly used to set the trends for the European market as new products set for Europe-wide distribution are first introduced in the UK. The latest example of this was the introduction of Sony's Playstation 3.
Many of the big game companies have their European headquarters in the UK; best examples are Sony and Electronic Arts.

[107] http://www.mcvuk.com/interviews/176/UK-GAMES-MARKET-2007-The-definitive-report

Germany

Market segmentation

Germany is the third most important game market in Europe. When it comes to computer games, it is even the biggest market in the EMEA region[108]. Because of the more intense competition, the videogames market is not as strong as in the other European countries and the console penetration rate is relatively low with just 28,0%[109], whereas the PC penetration rate is high (66% of households). But as the console penetration rate was 16% in 2006, this situation is changing rapidly. According to the German Software Association (BIU) a total of 49.9 million games were sold in 2007 which means a growth of 21% in comparison to 2006 and the market is projected to continue expanding in 2008 as well.
A total turnover of €1.4 billion[110] was made in 2007 and is projected to double by 2010[111].
While PC game sales have slightly decreased by 5%, videogames and handhelds gained 12% and 67% in comparison to 2006. The market leader in the handheld segment is Nintendo DS and in the console market, Sony's Playstation2.

Trends

The strong PC games market is likely to lose ground as newer consoles emerge onto the market. The handheld market is growing rapidly as well and is also likely to overtake PC games.

Difference from the European norm

The console market and the console penetration rate are low compared to other European countries. This is due to a strong PC games market and the preference of strategic and simulation games in Germany, which are played on PC.

France

France is the second largest important games market in Europe with a turnover of 1.6 billion Euros in 2007 [112] The PC market decreased by 5 % compared to 2006, and also with regard to the console market. The console market volume splits into 44,5 % video console and 55,5 % handheld market. The overall console market grew thanks to the market introduction of the next generation consoles.

[108] German Entertainment and Media Outlook:2006-2010, PricewaterhouseCoopers, Frankfurt, 2005
[109] German Entertainment and Media Outlook:2006-2010, PricewaterhouseCoopers, Frankfurt, 2005
[110] Video Gamers in Europe 2008;ISFE;Brussles;2008
[111] German Entertainment and Media Outlook: 2006-2010, PricewaterhouseCoopers, Frankfurt, 2005
[112] Video Gamers in Europe 2008;ISFE;Brussles;2008

Italy

Italy's games market was 741,9 million euros in 2007. Software sales accounted for 64% of the market and hardware sales for the remaining 36%.

A total of 2,4 million consoles were sold in 2007 of which 53,8% were portable and 46,2% were television consoles. The television console market was boosted by next generation consoles and the console penetration rate reached 34,0 % in 2007.
In total, nearly 18 million games were sold in 2007, 2 million more than in 2006. The console market is far larger as 80,8% of all games sold were console games and just 19,2% were PC games, which represents a loss of 5,2% for PC games and an increase of console games by 13,1% compared to 2006.
With 14,5 million console games sold in 2007 (compared to 12,2 million in 2006) this segment is the strongest in the market. 62,4% of the games sold were for video consoles and the remaining 37,6 for handheld consoles.
The PC games market decreased by 5,0% compared to 2007, with 3,5 million games sold. Underlying this trend is the fact that of the 9.221 game titles available in 2007, 65% were console and 35% PC games.

BEST-SELLING GAMES ALL FORMATS 2007:

1. Pro Evolution Soccer 2008 (Konami)
2. Brain Training (Nintendo)
3. Pokémon (Nintendo)
4. FIFA 08 (Electronic Arts)
5. Nintendogs (Nintendo)
6. Dragon Ball Z Budokai Tenkaichi 3 (Atari)
7. Spider-MAN 3 (Activision)
8. Need for Speed Postreet (Electronic Arts)
9. Assassin's Creed (Ubisoft)
10. Grand Theft Auto Vice City Stories (Take2)

Like in the UK, most of the games listed in the Top Ten were published by a non European publisher. However, two games (Dragon Ball Z Budokai Tenkaichi 3 and Assassin´s Creed) published in Europe were able to reach the Top Ten 2007 (numbers according to AESVI).

Spain

The Spanish games market has grown rapidly and totalled 0.7 billion Euros in 2007, [113] up almost 13% from the previous year. 2,2 million consoles were sold and 36% of all households in Spain have a video game console. A very high penetration rate compared to other states which indicates a large video console games market and leads to a decreasing PC market. The market decreased by 8.5 % compared to 2006.
The console market had a volume of about 391 million Euros and within the console segment the television console sector accounts for 41,9% of the volume and the handheld consoles for the remaining 58,1%.

BEST-SELLING GAMES ALL FORMATS 2007:
1. Brain Training (NINTENDO)
2. Dr. Kawashima Brain Training (Nintendo)
3. Pro Evolution Soccer 2008 for PS2 (KONAMI)

[113] Video Gamers in Europe 2008;ISFE;Brussles;2008

4. WII Play (NINTENDO)
5. Pokemon (Nintendo)
6. New Super Mario Bros. (NINTENDO)
7. WWE Smackdown! VS. Raw 2008 (THQ)
8. Pro Evolution Soccer 6 PLATINUM (Konami)
9. Pro Evolution Soccer 2008 for PS3 (Konami)
10. Animal Crossing: Wild World (Nintendo)

In Spain, none of the European published games made it into the Top Ten 2007, which is not surprising as none of the big publishers originates from Spain or creates games specially for the Spanish market (numbers according to ADESE).

European market of audiovisual content for mobiles

Market Size

The new third generation (3G) mobile devices enable users to access multimedia content via their mobile phones, i.e. Internet access, television, music, games, and accessories such as screen backgrounds. However, mobile television enjoys a special status and has come to represent one of the main elements of a broadband service and an important selling point to the consumer, with particular emphasis laid on the quality and diversity of the channels offered.[114]

In 2007, video delivered via mobile phone or other handheld devices (either simulcast or downloaded) is a very limited market, with only less than 5% of mobile subscribers regularly using mobile video options in Europe.[115]

The following table illustrates the mobile content market across a number of European countries:

YEAR 2006 in €m	Mobile content	*% of HE sector*
IT	296,9	*2,9%*
DE	229,6	*1,3%*
NO	217,4	*9,0%*
UK	197,1	*0,9%*
SE	187,7	*6,8%*
FR	163,2	*1,2%*
ES	130,2	*1,7%*
DK	108,9	*5,5%*
FI	62,1	*5,4%*
CH	57,3	*4,1%*
NL	41,6	*1,1%*
AT	35,0	*2,2%*
BE	35,0	*1,3%*
GR	28,3	*2,9%*
IE	28,1	*1,9%*
PT	26,1	*1,7%*
Total / Average	**1.844,5**	***1,9%***
EU15	**1.569,8**	***1,8%***
EU27	***na***	**-**

Italy leads the way in terms of turnover, while the highest market share for mobile content within the home entertainment market is in Norway.

[114] in Yearbook 2007 Vol. 1, 2 & 3, André Lange et al., European Audiovisual Observatory (OBS), Strasbourg, 2007

[115] in The Digital Video Consumer - Transforming the European Video Content Market, Bain & Company, Boston, 2007

The Mobile TV Market

Two types of networks enable mobile transmissions: cellular and broadcast networks. The former is the traditional mobile telephone network, offering several technical solutions for mobile TV, especially with consumers gradually switching to 3G mobile devices, providing incentive for mobile video development. However, some technical limitations to this growth still remain at present. In the case of **unicast** broadcasting on traditional cellular networks, in order to receive audiovisual content in sufficient quality to make the offer attractive to consumers, a bandwidth of at least 200 to 300 Kbps is required. This means that with the current available bandwidth, extensive adoption by consumers could lead to network congestion. Taking into account the fact that consumers are unlikely to be prepared to pay proportionally to the bandwidth they consume in order to watch mobile TV, this form of broadcast cannot be as profitable as voice services, thus limiting the investment in this sector. **Multicast** – i.e. from one point to multiple points – services began rolling out in 2006, but they require that part of the 3G spectrum be reserved for them, allowing only a limited amount of channels, much like traditional analog multicast, but with many more potential channel operators competing for limited bandwidth.[116]

The new broadcast network options, using the standards DVB-H, DMB-T and MediaFlo, provide an alternative to cellular. However, these solutions require the allocation of a specific spectrum and the construction of a new network, either terrestrial or terrestrial and satellite-based. One significant advantage is that the number of users does not affect the network costs.[117]

The European Commission leans strongly toward a single mandatory broadcasting standard – DVB-H –, in order to stimulate the growth of Mobile TV, but this has not been adopted by the Council of the European Union. France is the only country to have recognized this standard as mandatory[118]. With several standards now being deployed throughout Europe and also within countries, the idea of a centralized mobile television broadcasting service being deployed on a national level is receding.

[116] in Yearbook 2007 Vol. 1, 2 & 3, André Lange et al., European Audiovisual Observatory (OBS), Strasbourg, 2007
[117] in Yearbook 2007 Vol. 1, 2 & 3, André Lange et al., European Audiovisual Observatory (OBS), Strasbourg, 2007
[118] in Yearbook 2007 Vol. 1, 2 & 3, André Lange et al., European Audiovisual Observatory (OBS), Strasbourg, 2007

The Mobile TV market in 2007 at a glance

2007	Mobile TV Market (in €m)	Mobile Content Revenue (in €m)	Unicast TV Providers	Broadcast TV Providers
IT	65,9	531	Tim, Vodafone, H3G	Tim, Vodafone, H3G
UK	44,8	483	Vodafone, Orange, T-Mobile, 3	Virgin
FR	39,7	336	Orange, SFR, Bouygues	
ES	17,2	322	Movistar, Vodafone, Orange	
DE	16,6	351	T-Mobile, Vodafone	Mobilcom, Debitel, Simplytel
SW	5,2	72	Swisscom, Sunrise, Orange	
PT	4,1	51	TMN, Vodafone, Sonaecom	
AT	1,9	97	Vodafone Live, T-Mobile, One, H3G	
SE	1,9	34	Telia Sonera, Tele2, Telenor, 3	
GR	1,2	27	Cosmote, Vodafone, Tim/Wind	
PL	1,0	73	Orange	
FI	0,9	30	Telia Sonera, Elisa	Telia Sonera, Elisa, DANN
IE	0,8	36	Vodafone	
NO	0,8	31	Telenor, Netcom	
NL	0,7	82	KPN, Vodafone	
HU	0,5	21	T-Mobile, Pannon, Vodafone	
BE	0,3	62	Vodafone, Orange	
DK	0,3	26	TDC Mobile, Sonofon, 3	
CZ	0,1	47	O2	
Total	**203,9**	**2.712**		

Source: The Netsize Guide 2008, Netsize, Paris, 2008

Consumers are thus gaining the ability to watch programs while on the move. The industry refers to this as "place-shifting"—for example, being able to watch TV programs on a mobile phone or via the Internet while away from home. The types of mobile TV channels on offer today encompass a number of thematic channels encompassing the consumers' supposed main interests, i.e. sports, music, news, entertainment. In 2006, the industry generally regarded broadcast mobile as the most promising in terms of revenue growth per subscriber. Operators began offering a number of incentive sales plans – such as free trials, unlimited access to channels, reduced or free broadcast-enabled devices – to introduce this new form of television to the consumer and hasten mainstream adoption.[119] However, the uptake of Mobile TV is stagnating and probably needs the introduction of better adapted devices (such as the iPhone?) before it can develop to its full potential.

[119] in Yearbook 2007 Vol. 1, 2 & 3, André Lange et al., European Audiovisual Observatory (OBS), Strasbourg, 2007

Two types of content are being developed: simulcasting of fixed transmissions offering continuous service, very much in the tradition of linear television, and innovative content designed specifically for mobile phones. Created with the needs of viewers on the move in mind, this new type of content is better suited to this customer base, and takes into account – or even makes use of – the constraints of the mobile phone format. Broadcasting content created by the large media companies presents advantages and disadvantages. While broadcasting unique and original content developed by the operators themselves enables them to evade the control of the large media groups, this solution is of course more expensive. On the other hand, simulcasting existing programs is cheaper, the brand names behind the content provide powerful marketing leverage, and consumers tend to prefer having content they are familiar with from the fixed networks made available to them on their mobile phones.[120] In practice, however, 100% simulcast is almost invariably impossible due to rights, background music issues and costs, and border issues. It often involves costly and complicated repackaging. The same is true with repackaging for the Internet, and indeed many content owners are investing in repackaging once for both mobile and web (economies of scale, convergence), using common agreements and technical standards where possible.

A quick look at the programming already on offer from the biggest operators of the three main markets confirms this:

Operator	Launch Date	Original Programming	TV Network Programming
3 Italia	2006	▪ 3 Live ▪ 3 Sport	▪ Sky Italia package (incl. sports) ▪ RAI package (incl. sports) ▪ Mediaset package ▪ Boing (youth channel)
Mobiles Fernsehen Deutschland	2006		▪ ARD ▪ ZDF ▪ MTV ▪ N24 (from ProSiebenSat.1) ▪ ProSiebenSat.1 Mobile (compendium of programming from both networks)
Orange (France)	2004	▪ 60+ mobile TV channel basic package ▪ Optional thematic channel package	▪ CanalSat and Canal+ packages

Source: Yearbook 2007 Vol. 1, 2 & 3, André Lange et al., European Audiovisual Observatory (OBS), Strasbourg, 2007.

A recent Telephia Mobile Video Report showed that Europe had 8.4 million mobile video subscribers in the first quarter of 2007, a year-to-year growth of 155%. According to Orange, 10% of its 3G network customers in France are using mobile video and TV about once a month, while Virgin Mobile TV has had only limited success with just 10,000 users. Since its launch for the 2006 World Cup, Italy's 3 Italia, a pioneer of mobile digital video broadcasting in Europe, has won 400,000 subscribers for its mobile video broadcasting service—just 5.5% penetration of its subscriber base. However, from this relatively slow start, analysts forecast mobile video and TV will reach more than 30% of mobile users by 2012.[121]

[120] in Yearbook 2007 Vol. 1, 2 & 3, André Lange et al., European Audiovisual Observatory (OBS), Strasbourg, 2007

[121] in BBC and SKY dominate the third screen in the U.K. with leading mobile video and web offerings, Nielsen Mobile, San Francisco, 2006

Country focus

This section provides an insight into France and Italy, markets with the highest mobile TV penetration rates in Europe.

YEAR 2006	Percentage of mobile users with mobile TV subscription
AT	0,1%
CH	0,6%
DE	0,1%
DK	0,1%
ES	0,2%
FI	0,1%
FR	**1,3%**
IE	0,3%
IT	**1,4%**
NO	0,1%
PT	0,0%
SE	0,1%
UK	0,9%
Total/ Average	**0,4%**
EU15	**0,0%**
EU27	**na**

Source: peacefulfish/MCG (based on information mainly from OBS, Eurostat and MEF)

Italy[122]

Market segmentation

With a total revenue of €296,9 million (i.e. games, video, and mobile TV), Italy is the largest mobile content market in Europe and as such, its components are worth a closer examination.

The market experienced year-on-year growth from 2002 to 2005 of about 50%, before slowing down as of 2006. At this point, half of that year's revenue was generated by off-deck mobile services, or services offered and purchased from third-party providers outside of mobile operators.

Among the services consumed via mobile, the share of video and TV content is the only one to have experienced any significant growth from 2004 to 2006:

[122] in Mobile content : Waiting for mobile Internet and mobile TV, Osservatori ICT & Management, School of Management of Politecnico di Milano, Milan, 2007

	2004	2005	2006
Other Infotainment (SMS, MMS, micro-browsing)	47%	38%	41%
Customization	35%	35%	30%
Infotainment Video	**2%**	**9%**	**11%**
Games	5%	8%	8%
Communication & Community	7%	7%	7%
Interaction Services	2%	2%	1,5%
Music	1%	1%	1,5%
Other	1%	0%	0%

Source: Mobile content : Waiting for mobile Internet and mobile TV, Osservatori ICT & Management, School of Management of Politecnico di Milano, Milan, 2007

As is the case within other mobile markets in Europe, mobile TV services have failed to increase as much as forecasts had predicted, for which the Osservatori ICT & Management in Milan, conducting in-depth research on the Italian mobile market, puts forward several explanations.

Video services delivered via the newer DVB-H standard have not truly taken off so far. This can be explained by the fact that a number of complex elements have not quite hinged together seamlessly to enable unhindered development in that segment, i.e. signal availability and quality, number of telephone devices, range and quality of content, communication campaign, etc. Services delivered via the established UMTS standard could reasonably have enjoyed more success; however, marketing efforts directed toward DVB-H and unencouraging pricing policies have hindered the growth potential of this market.

A more strongly emerging trend is that of video in the category Communication & Community, such as video blogs, video communities and video messages. This trend, which tends to blend characteristics of mobile and web, has already been marked as the next area of growth within mobile content services in the United States, and has truly begun to take off in Italy from 2006.

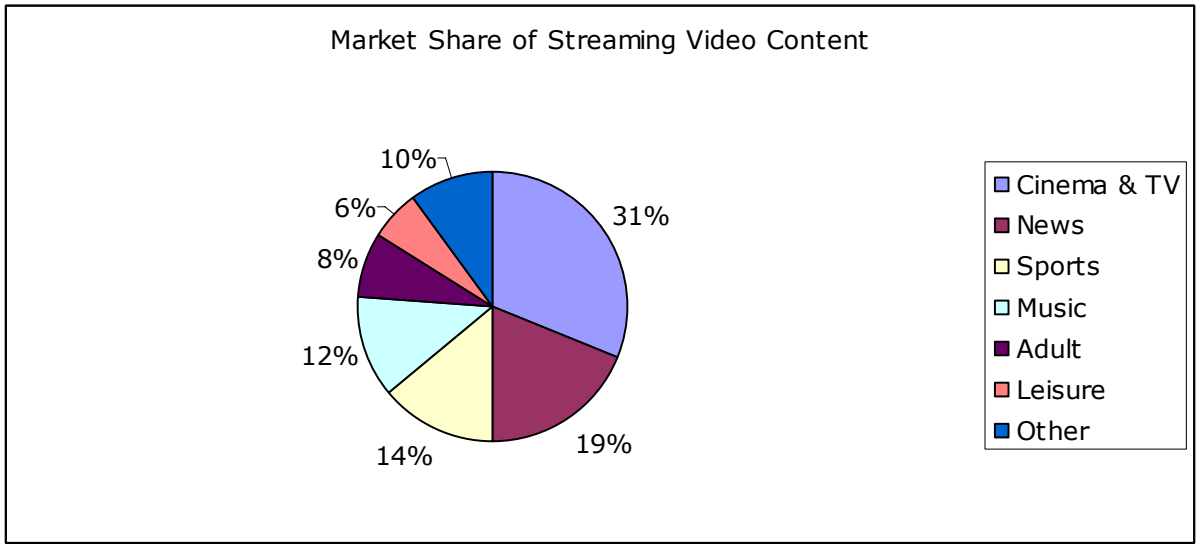
However, as is the case in other European markets, a certain lack of conviction in the potential of multimedia services characterizes mobile operators' attitudes in Italy at the moment, leading to the lack of a clear strategy in this area. Furthermore, mobile operators have not yet relinquished some control of content supply to third party suppliers; still according to the Osservatori ICT & Management, it is believed that strategically, operators should take on more a role of facilitator and enabler rather than that of a direct proponent of services. This is particularly true in the case of video.

Important factors in the continued development of the Italian mobile TV market are:
- the general quality and appeal of the content on offer
- the quality, usability, and affordability of new devices
- the quality and coverage of the signal (particularly in the case of DVB-H)
- pricing policies
- communication strategies of all players involved.

Accessing Video Content – the Italian Mobile TV Market

Different means of accessing video content coexist, such as downloading, streaming, or video-call.

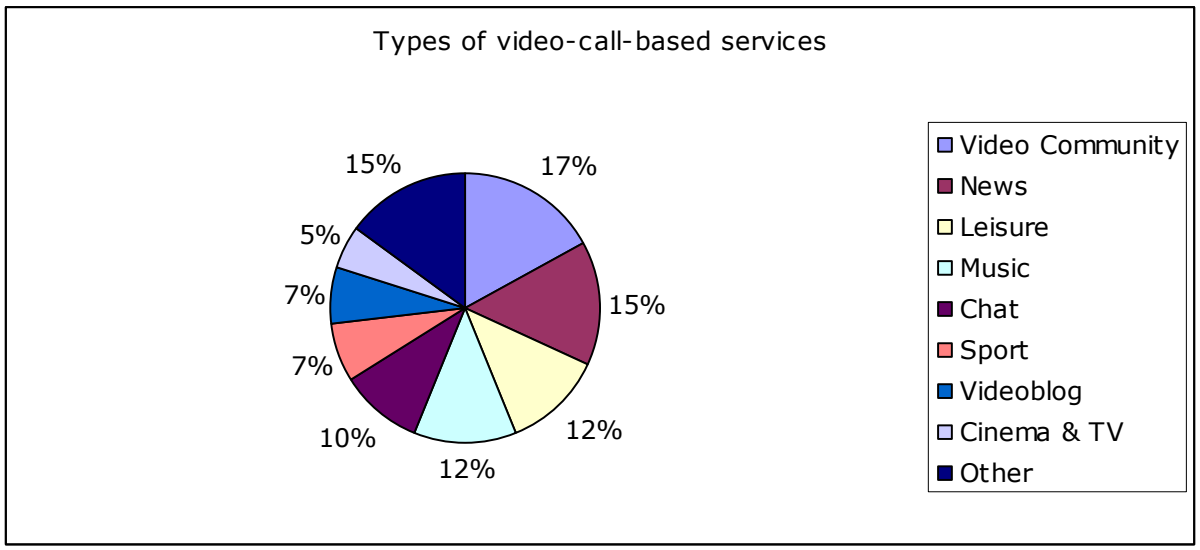
In 2006, there are about 448 download-based content providers (offering both audio and video content), and 111 streaming video content providers.



Source: Mobile content : Waiting for mobile Internet and mobile TV, Osservatori ICT & Management, School of Management of Politecnico di Milano, Milan, 2007

As far as modes of use are concerned, on-demand services account for 65% of consumed video content, while flow services, based on a fixed schedule comparable to traditional TV, make up the rest. 89% of these streaming services are pay. Among the cheaper pricing models are subscriptions (21%) and hire (8%), while pay-per-use remains the most widespread (59%).

Video-call – i.e. browsing of content on video portals and upload of user-generated content to video portals – constitutes another form of accessing content from a mobile device.

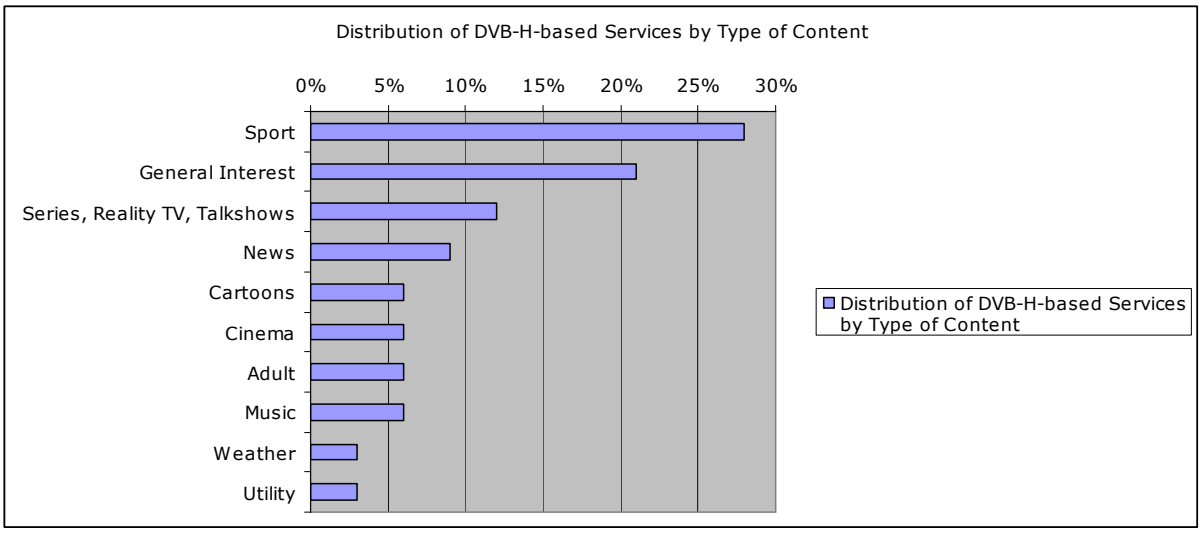


Source: Mobile content : Waiting for mobile Internet and mobile TV, Osservatori ICT & Management, School of Management of Politecnico di Milano, Milan, 2007

Personal Mobile TV on DVB-H in Italy

In 2007, there were already over 33 DVB-H channels offered in simulcast from the traditional broadcasters – MediaSet, Rai, Sky, etc., shared among the three main operators as follows:

- 3: 43%
- Vodafone: 30%
- Tim: 27%



Source: Mobile content : Waiting for mobile Internet and mobile TV, Osservatori ICT & Management, School of Management of Politecnico di Milano, Milan, 2007

France

Personal Mobile TV

Mobile usage in France draws on an EDGE-3G unicast network, which is, however, insufficient for mass market audiovisual services over mobile. For this reason, DVB-H is the standard chosen for mobile television in France. Mobile TV will be officially launched at the end of 2008, with 13 private channels (selected through a public call for tender) and 3 public ones. In Phase 1, the network will cover 30% of the country, in Phase 2, 60%, depending on technical and economic developments.[123]

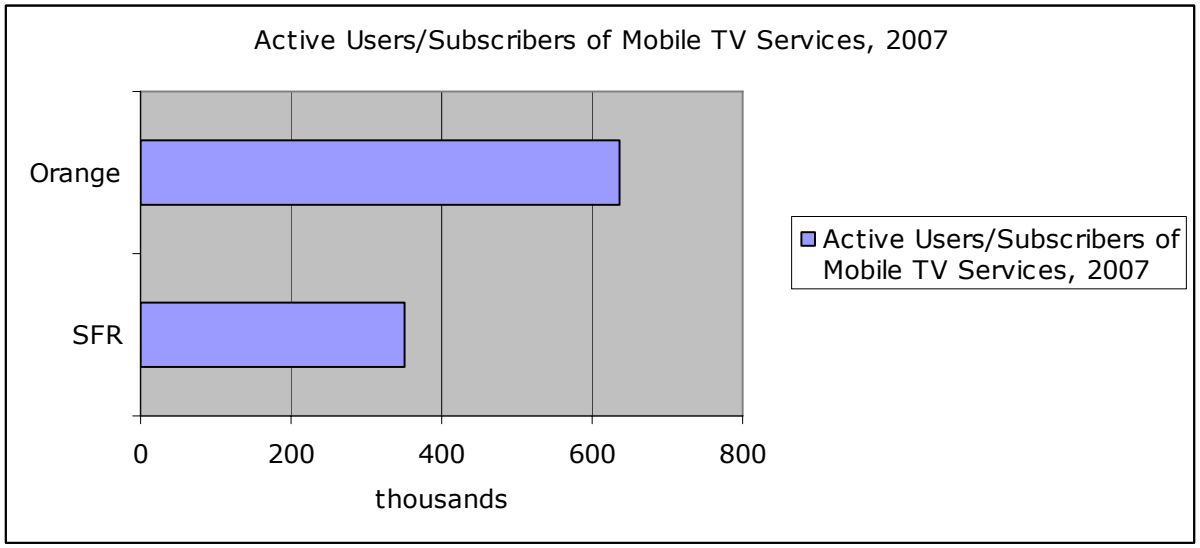
PMT Channels	Public / Private
FR2	Public
FR3	Public
FR5	Public
Canal Plus	Private
i-tele	Private
M&	Private
BFM TV	Private
Direct 8 Mobile	Private
EuropaCorp. TV	Private
Eurosport	Private
NRJ 12	Private
NT1	Private
Orange Sport TV	Private
TF	Private
Virgin 17	Private
W9	Private

There is little available information at the moment on mobile TV usage. At the end of 2007, Orange and SFR combine a total of 1 million active subscribers to a mobile

[123] in French mobile TV channels chosen: CSA includes France Television's public stations, Rebecca Leffler, The Hollywood Reporter, 27.05.2008

television service. The number of subscriptions remains low due to the fact that in 2006, only 29% of users own "multimedia" devices. With new mobile devices on the market able to receive broadband audiovisual content, the potential consumer base will expand.[124]

Number of active subscribers to TV mobile services[125]



Source: French mobile operators

[124] in Guide des chaînes numériques, Association des Chaînes Conventionnées éditrices de Services, Paris, 2008
[125] in Guide des chaînes numériques, Association des Chaînes Conventionnées éditrices de Services, Paris, 2008

C. European home entertainment industry

This section provides an overview of the home entertainment industry in Europe and brings up some crucial issues: Who are the main players of the home entertainment industry in Europe and how do they relate to one another? How are the value chains structured? How do established players adapt to fundamental shifts of consumer behaviours, market trends and technological innovations? Do the traditional business models resist against the growth of new digital platforms such as Video-on-Demand or mobile television? What's the role of SMEs in this industry and how do they adapt to changes?
In order to analyse these different issues, we will still focus on the five main platforms that constitute the home entertainment sector:

- Linear television (terrestrial TV, cable TV, satellite TV, IPTV, pay TV)
- Home video (retail and rental)
- Non linear video and TV platforms (including VoD services, catch-up TV and video sharing websites, which will be presented separately)
- Games
- Mobile content (games and video/TV content).

The second part of this section focuses on the home entertainment industry on a national level in order to understand the differences in the deployment of new technologies and the development of new platforms for video content in each European country. Some countries are leading the home entertainment market in Europe and the digital shift, such as France, Germany or the Netherlands, while other countries are penalized by a slower development of their infrastructures, especially Eastern European countries. In other countries (especially the Nordic countries) developments take place within a larger regional framework where single players develop their offer across different countries.

The European home entertainment industry

The EC report "Cinema, TV and radio in the EU" states that there were about 53 700 enterprises in the audiovisual sector in the EU15 in 2003, of which about 40 100 in motion pictures and video activities and 13 600 in radio and television activities[126]. Among the ten largest audiovisual companies worldwide, two are European (Vivendi Universal (FR) and Bertelsmann (DE)), seven are US companies (Walt Disney, Time Warner, News Corporation, NBC Universal, The DirectTV Group, CBS Corp. and Viacom) and one is Japanese (Sony) (see Table 15).

Table 15: Ranking by audiovisual turnover of the 50 leading audiovisual companies worldwide (European companies are highlighted in grey)

Rank	Company	Coun-try	Activities	Turnover in 2006 (in m$)
1	Walt Disney	US	Prod, dis, TV, Vid, Rec	24.360
2	Time Warner	US	Prod, dis, TV, Vid, Rec	20.898
3	News Corporation	US	Prod, dis, TV, Vid, Rec	19.417
4	Sony	JP	PROD, DIS, VG	16.819
5	NBC Universal	US/FR	TV, PROD, DIS	16.200
6	The DirectTV Group Inc.	US	TV	14.756
7	CBS Corp.	US	TV, RAD	13.513
8	Vivendi	FR	PROD, DIS, TV, VG, REC	11.885
9	Viacom	US	TV, PROD, DIS	11.467
10	Bertelsmann	DE	TV, PROD, DIS	10.084
11	Nintendo	JP	VG	
12	BBC (Group)	GB	TV, RAD, PTOD, DIS, VID	8.180
13	ARD	DE	TV, RAD	7.937
14	Liberty Media corp.	US	TV	7.326
15	NHK	JP	TV, RAD	
16	Microsoft (Entertainment and devices division)	US	VG, IPTV software	6.053
17	Blockbuster Inc.	US	VID (retail)	5.524
18	Gamestop Corporation	US	VG (retail)	5.319
19	ITV PLC	GB	TV	4.281
20	Mediaset	IT	TV, PROD	4.888
21	Clear Channel Communications	US	RAD, TV	4.299
22	RAI	IT	TV, RAD, PROD, DIS	4.237
23	Sony BMG	JP/DE	REC	4.200
24	Fuji Television Network	JP	TV	4.012
25	Warner Music Group	US	REC	3.520
26	TF1	FR	TV, PROD, DIS	4.097
27	France Televisions	FR	TV	3.890
28	HMV Music Group	GB	VID, VG (retail)	3.789
29	EMI group	GB	REC	3.541
30	Grupo Televisa	MX	TV	3.312
31	HSN (IAC/Interactivecorp)	US	TV	3.292
32	Electronic Arts	US	VG	3.091
33	Nippon Television Network	JP	TV	2.928

[126] Cinema, TV and radio in the EU, Statistics on audiovisual services, European commission, Brussels, 2003

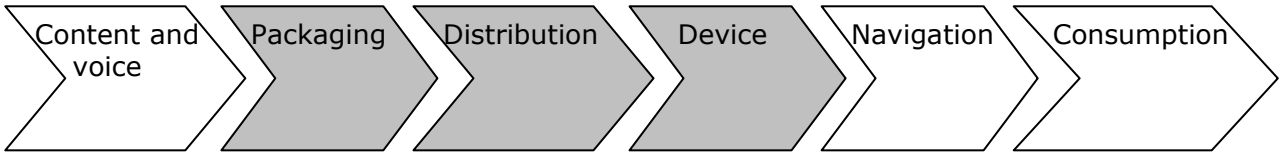
Rank	Company	Coun-try	Activities	Turnover in 2006 (in m$)
34	ProSiebenSat.1 Media AG	DE	TV	2.788
35	Tokyo Broadcasting System	JP	TV, PROD, DIS	2.716
36	ZDF	DE	TV	2.589
37	Movie Gallery	US	VID, VG (retail)	2.542
38	Sogecable	ES	TV	2.185
39	Univision Communications Inc	US	TV, RAD, REC	2.167
40	Asahi National Broadcasting Co.	JP	TV	2.140
41	Telefonica (Contenidos y Media)	ES	TV, PROD, DIS	2.123
42	Apple Inc (Other music related products and service)	US	MUS	1.885
43	Globo - Comunicacao	BR	TV, PROD	
44	Channel 4	GB	TV, PROD, DIS	1.839
45	AMC	US	EXH	1.775
46	TRVE Grupo	ES	TV, RAD	1.739
47	Regal Entertainment Group	US	EXH	1.727
48	Métropole Télévision (M6)	FR	TV, PROD	1.712
49	The Game Group PLC	GB	VG (retail)	1.565
50	Premiere AG	DE	TV	1.431

Source: European Audiovisual Observatory, Yearbook 2007[127]

Behind these global enterprises that provide content and services across Europe, there are numerous national small and medium-sized companies as well as larger ones active at each stage of the audiovisual content value chain, which compose the industry of home entertainment in Europe. However, the audiovisual sector tends to be dominated by significantly large operators, such as TV operators, telecom operators and local distributors, which invest heavily in audiovisual production or distribution and shape the business models.

Media convergence is disrupting traditional business models as it represents both a challenge and an opportunity for all players of the industry: content creators, content aggregators, broadcasters, distributors, telecommunication operators, advertisers… The traditional value chain is also shifting, following these evolutions. Thanks to digital technologies enabling convergence between Internet, television and telecommunications, the traditional value chain of what UK's communications regulator Ofcom designates as "the communications industry" (which includes anything producing, distributing or using content) has opened.

Figure 1: The converged communications value chain



Source: Ofcom[128]

[127] Yearbook 2007 Vol.2, André Lange, European Audiovisual Observatory (OBS), Strasbourg, 2007
[128] The International Communications Market 2007, Ofcom, London, 2007

According to Ofcom, the changes brought about by media convergence have had the most impact on four of these six main segments of the value chain (see Figure 1):

- **Content and voice and Packaging**: Content can now be packaged for television, mobile and computer
- **Distribution**: Some networks types are now able to transmit various forms of content, for example 3G mobile which is able to carry data, voice and audiovisual content
- **Devices**: Many devices are now able to receive multiple wireless signal types

Each operator now needs to collaborate more extensively with the players from other segments in the value chain through deals and partnerships. For example, content owners have to deal with distribution networks, and networks owners with manufacturers. The Ofcom has analysed some of these partnerships between players of different segments of the value chain, such as Virgin Media and HBO, Vodafone and ZTE Corporation, or Tiscali and Setanta (Setanta Sports allowed Tiscali to offer three of its premium sports channels on Tiscali TV to its subscribers). Some historical players of the communication value chain, such as incumbent telecommunication operators, have decided to go beyond their core business to move into content creation or packaging. Telecommunications providers and Internet players are also converging.

In such a context, it is now harder to provide an overview of the home entertainment industrial landscape because most players are now involved in different platforms, in different countries with different business models… A fundamental shift in the audiovisual European content market and industry is taking place and new business models and value chains will emerge in the next few years. Given this context of technological innovations and consumer behaviour (r)evolutions, the future of the home entertainment industry is unclear and the balance of power within the industry could experience a profound transformation.

The European television industry

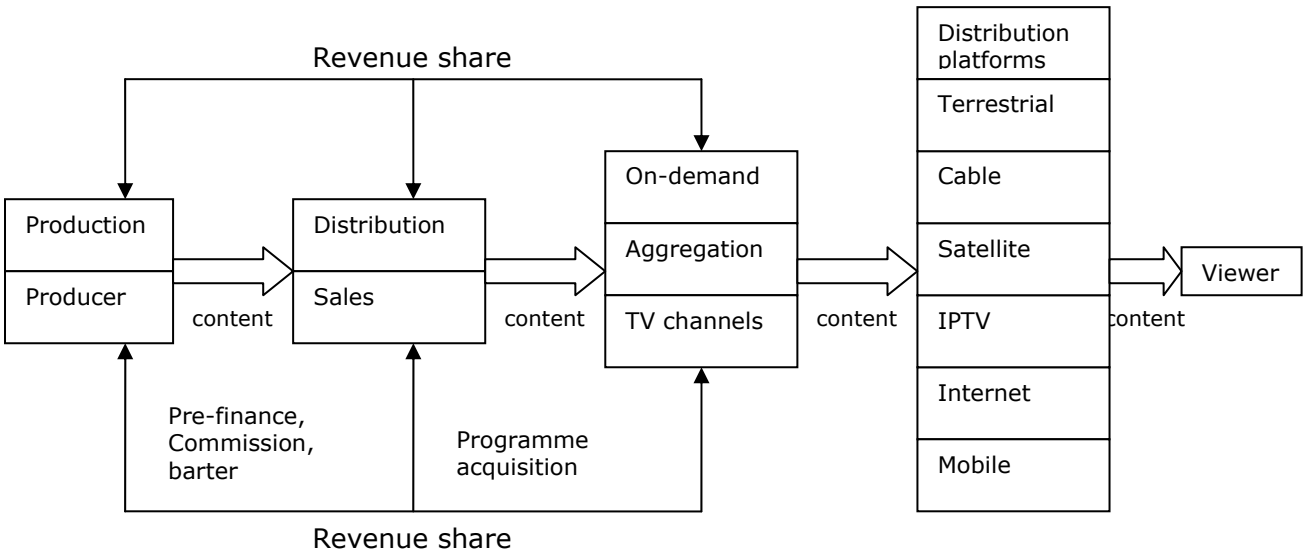
Value chain, main actors and role of SMEs

Despite the fundamental shifts that have been predicted for the near future, more than 95% video content viewing is still traditional linear television programmes at scheduled times in Europe according to a 2007 report by Bain & Company[129]: The "lean back experience" of traditional television is still more important for consumers than a "lean forward" experience. Hence, the value chain of linear television is still prevalent and traditional television channel business models remain dominant.

There are four main categories of stakeholders in the television value chain (see Figure 2):

- production (television content creation)
- aggregation
- distribution (sale of the content)
- transmission to the end consumer (channels, cable, satellite and IPTV operators)

Figure 2: The television content value chain



Adapted from Screen Digest[130]

Content production

Television content in Europe is often created either by European producers of films and television programmes, non-European producers (mainly American majors) or sports rights organisations – nevertheless, sports content is not included in the scope of this study which focuses on European audiovisual "works".

The category European producers includes in-house production arms of large domestic broadcasters (public or commercial), such as TF1 or the BBC, and also smaller domestically focused independent production houses, such as Shed Production in the UK or Studio Canal in France. It includes also larger pan-European production companies, like Netherlands' Endemol or FremantleMedia, owned by Luxembourg's RTL Group but based in the UK. Public broadcasters, like Arte or the BBC, were among the first to produce exclusive content for the new digital platforms like internet and mobile phones.

[129] The digital video consumer, Bain & company, USA, 2007

[130] Interactive content and convergence, European commission, Brussels, 2006

Content creators have great assets with regards to the current context, particularly owners of "must see content", i.e. top-rated TV programmes like popular TV series or hit DVD rentals. Content owners can protect and reinforce their market power especially by increasing their influence on the distribution of their content through copyrights, distribution channels, DRM, exclusive distribution arrangements, minimum guarantees, etc.

Content aggregation

Within the aggregation segment, established television content aggregators (public or commercial-free TV broadcasters and providers of multi-channel programming) are increasingly threatened by new digital players, such as Internet content aggregators offering audiovisual content.

Content distribution

Distribution is the most impacted segment by the convergence of media. IPTV providers are already disrupting the television distribution marketplace and Pay TV distributors like cable and satellite are confronted with new digital distributors. Furthermore, the emergent sector of IPTV is the theatre of an intense competition between players of various size and from different sectors of the telecommunication market. Traditional television broadcasters have now to compete with two kinds of new entrants which redefine the television landscape: telecommunication operators, and cable and satellite companies. However, in the long run, the awaited impact of this market segment might not last as long as expected. The industry is pushing IPTV, but it is not clear whether consumers are rushing to take it up. It is also not clear yet whether IPTV will prevail against ad-supported or other Internet/webTv offerings.

Firstly, telecommunication operators offer IPTV services through their "multiple play" offers (telephone, internet, television and sometimes mobile). The stagnation/decrease in fixed-lined telephone revenues and the opportunities offered by broadband internet access, led fixed-line telecommunication operators to look for additional revenue sources by adding video services to their DSL offerings. Operators made a successful entry into the television market, but larger sized operators need to undertake considerable network upgrades in order to support the distribution of video services. Because of these necessary investments, the deployment of IPTV has mainly taken place on a regional level, thus sometimes enabling alternative and relatively small-sized telecommunication operators to lead on these markets. One of the most emblematic examples of this evolution can be found in France with the success of independently-owned ISP Free which was the first company to offer a triple-play service through its self-produced singular Freebox set-top box in 2002.

Many cable companies are also moving into IPTV services and compete with traditional broadcasters and telecommunication operators. Some satellite broadcasters such as DirectTV and Sky provide a Personal Video Recorder allowing the consumer to control real-time content (record, stop and rewind). In October 2005, UK-based BSkyB bought the fixed-line operator EasyNet. As the cable operators are often relatively small and fragmented, incumbent telecommunication operators will likely have a competitive advantage on the IPTV market.

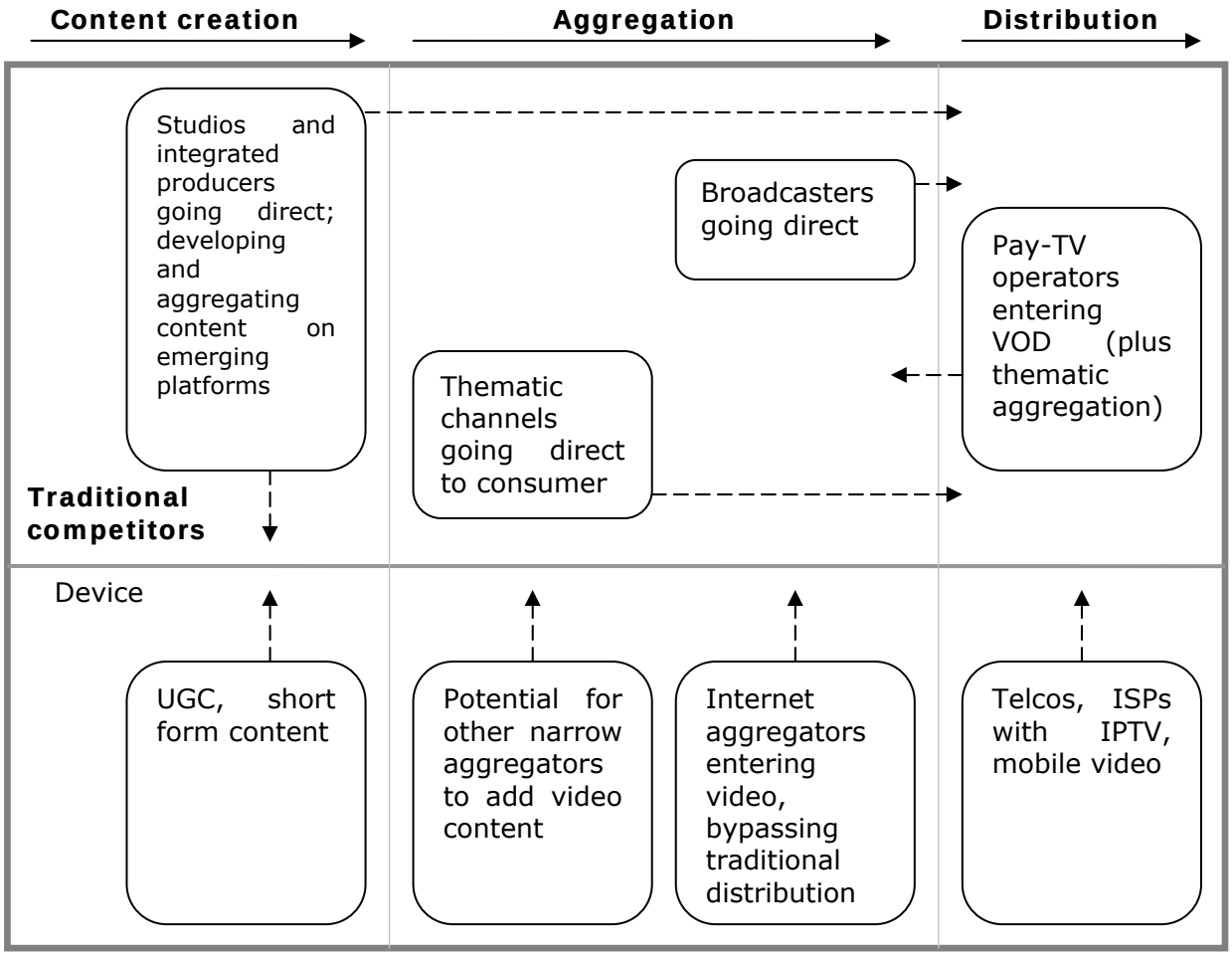
Current trends

The current state of the European TV sector is characterised by transition. Indeed, traditional players and new entrants are developing activities across the value chain through vertical integration or by engaging new partnerships with actors from other segments (see Figure 3). Content creators are entering into distribution as well, establishing direct relationships with end-users. Distributors are entering into aggregations activities; and aggregators are entering into distribution...[131]

[131] The digital video consumer, Bain & company, USA, 2007

As Raghay Gupta, VP of International Partnerships at Internet TV platform and services company Brightcove, puts it: "The Internet and broadband video market arena is now a battleground where you have the traditional TV companies moving in and investing, but also telcos, print publishers, music companies, start-ups and production companies, that are launching shows and new content"[132].

Figure 3: Increasing scope for market entry and new roles for existing players



Source: Bain & Company[133]

At the same time, the European television industry is becoming increasinglyconcentrated. In 2006 and 2007, some major consolidations took place in the context of an intensifying competition for audiences. Vivendi's CanalSat, the French leader in satellite platforms, merged with TPS to create the largest pay TV provider in the French market under the name CanalSatellite. Ypso gained control of France's four leading cable companies – UPC, Noos, Numericable and France Telecom Cable – and unified them within the Numericable brand. The NTL/Telewest consolidation was completed with a platform rebranding as Virgin Media and it became the first operator in the UK to provide a quad-play offering. In the UK, the satellite operator BSkyB obtained a 17,9% stake in the broadcaster ITV. In Spain, the media conglomerate Grupo Prisa obtained a 20% stake in the cable

[132] The death of linaer TV: exaggerated, imminent, or simply premature ?, Informa telecoms&media, Pricewaterhousecoopers, Byfleet, 2007
[133] The digital video consumer, Bain & company, USA, 2007

operator Sogecable. Finally, in Norway, Memcom acquired the broadcaster E! Entertainment Television Inc. [134]

Business models

Advertising, subscriptions and public funding make up the main sources of revenue within Europe's television industry. However, their respective importance varies significantly from country to country, the category of player and the business model (see Table 16).

Table 16: Television revenues by source, 2006

	Subscription	Public funding	Advertising
Ireland	35%	23%	43%
Sweden	44%	28%	29%
Spain	27%	20%	54%
Poland	30%	4%	66%
Italy	29%	18%	53%
Germany	34%	36%	31%
France	47%	19%	35%
UK	40%	25%	35%
Netherlands	43%	24%	33%

Source: Ofcom [135]

The business models of the different players are rapidly evolving with the digital shift but traditional business models are still used. Public service broadcasters and other broadcasters relying on licence fees expect that most of their revenues in the future will continue to come from licensing (ZDF expects 80% from licensing and 5% from advertising). Commercial aggregators are diversifying beyond advertising (ITV expects 65% of its future revenues will come from advertising, 15% from production, 10% from other activities and 5% from mobile and interactive content). Many large new entrants use and will continue to use an advertising-funded model. [136]

The "TV channel" business model

The "TV channel" business model is still dominant today and generates the majority of revenues of television content production. A commercial linear channel derives its revenues from carriage fees, subscription fees and advertising proceeds. The different types of channels combine in various ways these three sources. For example, a free-to-air commercial channel derives the majority of its revenues from advertising, and a pay TV channel from both advertising and carriage fees. This dominant business model is however threatened by the development of the PVR, Personal Video Recorder, which gives the viewer control over real-time television content. Users can record TV programmes and delete commercial advertising before viewing these programmes. Hence, free-to-air commercial channels are particularly threatened by the penetration of such devices, because their business model is based on advertising revenues.

[134] The International Communications Market 2007, Ofcom, London, 2007
[135] The International Communications Market 2007, Ofcom, London, 2007
[136] The digital video consumer, Bain & company, USA, 2007

The "platform" business model

The "platform" business model is the second most frequent business model in Europe, used for cable and satellite TV as well as IPTV. It consists in a platform which operates as a channel aggregator to be accessed using a special device (set-top box) connected to the subscriber's television. The business model is based on subscription revenues to the channel package offerings and, in many cases, also offers pay-per-view services.

In most European countries, the diversification of the way people access TV programmes brought about an explosion in the number of available channels. This diversification has led to a fragmentation of audiences and of market shares between an increasing number of players. As a result, most commercial networks have experienced a loss in advertising revenues. These aggregators answered to this threat with three strategies:

- Launching their own digital channels
- Developing direct distribution capabilities for digital media
- Securing digital rights agreements for their contents

Business models for the digital platforms

Most traditional players now make their content available on digital platforms, such as online or mobile platforms. But these players want and need to protect established sources of income. Indeed, the optimal business model combining established revenue streams from the traditional exploitation of content with new potential revenue streams from content exploitation on the new digital platforms is still to be found.

The main stakeholders of all segments of the value chain are still experimenting economical models but some patterns have started to emerge. New media platforms currently use business models similar to those of their "old world peers" [137], but digital distribution allows a different approach for advertising revenues. Advertising-supported free content is the most frequent business model on the internet and will likely continue to drive usage until 2010. On the Internet, the advertising message can be included within the programme, like in the traditional television model. But online diffusion of video content also allows for the addition of banner advertising within or around the video player. Internet content distribution allows for a better valorisation of advertising, because it offers better targeting and makes the direct sale of goods possible, creating new sources of revenue.

Nevertheless, for traditional television players, the exploitation of audiovisual content on the internet still means a devaluation of its value. And it is clear for them that new digital platforms can't yet produce enough income to make up for this devaluation. But in some instances, a simultaneous exploitation on different platforms, if well-managed, can increase revenue. The EU Commission's report "Interactive content and convergence" mentions, for example, the French programmes Les Rois Maudits and L'Odyssée de la vie (a drama and a documentary), packaged both for TV and for Internet (streaming and download-to-own) that resulted in a successful operation.

Digital strategies of traditional TV players

In order to recover some of the eroded profitability, in part due to the fragmentation of audiences and the competition of new digital entrants, traditional TV players are also trying to diversify their offers and services, and to expand internationally: TF1 purchased a stake in AB Groupe, ProSiebenSat.1 signed an agreement with Sony Pictures, Paramount, Constantin Film and Kinowelt to aggregate their content for its VoD service, RTL launched a new VoD service (RTL Now!) and the BBC launched channels in Poland, Spain, Italy and Scandinavia[138]…

[137] Interactive content and convergence, European commission, Brussels, 2006
[138] The International Communications Market 2007, Ofcom, London, 2007

Strategies of telecommunication players in IPTV

IPTV services have already disrupted the content distribution marketplace. Telecommunication operators are using IPTV as a way to hold on to their customers. Hence, their economic strategy is very much marketing-driven and consists mainly in purchasing rights of hit programming, and if possible exclusive rights, like Orange did for the Rugby World Cup in 2007. This strategy has already forced pay TV operators to invest more in premium rights in order to offer similar services, including multiple-play services (such as BSkyB with Easynet in the UK).

Trends, Challenges and Opportunities

Who will control distribution?

Does the fast development of linear and non-linear services such as IPTV or VoD announce the end of the traditional television industry as we know it today? Experts' opinions vary. Some, like Michael Garin, CEO of CME, think that "TV networks have a very short life expectancy… When advertisers no longer get value for what they are paying, they will no longer subsidise the creation of episodic programming"[139]. Others think that in the next four or five years, traditional TV players will have a growing business in digital formats, but that does not mean the end of the classic television value chain and economic model.

The only assumption on which all experts and professionals agree is that traditional players from linear television will have to adapt in the face of increasing competition fromtelcos and internet portals. According to Bain & Company[140], the most likely evolution in the next five years will be that traditional TV players will continue to be in business, but a dramatic increase of competition, with numerous new entrants, will force them to innovate to stay in the game. For these new competitors, success will depend on their ability to offer services which answer the consumer's demand, rather than to copy existing offerings.

How fast will VoD establish itself?

Another major challenge for the next years will be the role which content owners will play in digital distribution. The phenomenon of piracy made them reluctant to distribute their content online, the digital shift being viewed as much a threat as an opportunity. Furthermore, the development of legal digital distribution often goes together with exclusive distribution arrangements which sometimes limit the possibilities of wide distribution over the Internet and on mobile. The influential position of content creators and aggregators could incite them to be less innovative and cautious with regards to digital opportunities. In this respect, an important element will be to know how fast video-on-demand services can establish themselves and who will control this distribution channel.

What will be the business model for HDTV?

High-definition television (HDTV) will also constitute a major challenge for the stakeholders of the television industry in the short term. Even if its development is still limited in Europe, high-definition television will probably become the new standard format in the future and broadcasters will have to define new business models.
In France, the CSA (Conseil Supérieur de l'Audiovisuel) surveyed the main players of the audiovisual sector in 2006. It appeared that some of the main media companies involved

[139] The death of linaer TV: exaggerated, imminent, or simply premature ?, informa telecoms&media, PricewaterhousecoopersByfleet, 2007
[140] The digital video consumer, Bain & company, USA, 2007

in the development of HD television, such as Groupe Lagardère, wanted to promote pay TV services. Others like M6, TF1 and NRJ, said they would prefer to test free HD services. At the moment, it is hard to say which model will finally prevail. However, experts consider that a launch of HD as a free TV service is the most likely to ensure a wide and fast adoption by consumers. Some pay TV HD channels could compete with free offerings, the challenge being to make such a service economically viable, given the fact that producing HD standard programmes costs 25% more.

What will be the impact of private equity?

Another consequence of media convergence is the emergence of important private equity stakeholders (often from the IT sector) acquiring established media players or financing newcomers on digital platforms. These private equity actors have a major impact on the consolidation of the industry in Europe.

One typical example is Ypso Holding, owned by equity firms Cinven (UK) and Carlyle (US) together with Luxembourg-based cable operator Altice. These companies succeeded in acquiring within the space of five years the four leading cable companies in France (UOC, Noos, Numericable and France Telecom Cable), grouped under the brand Numericable. This company now owns 99,6% of the French cable network[141].

Likewise, private equity firms Permira (UK) and KKR (US) merged their assets in July 2007 to create a pan-European broadcasting group under the name ProSiebenSat.1. which is now a major player in 13 European countries (Austria, Belgium, Bulgaria, Denmark, Finland, Germany, Greece, Netherlands, Norway, Romania, Sweden, Hungary and Switzerland).

Almost half of the funds nurturing private equity firms based in Europe are raised in the USA and in the UK (28,9% and 21,3% respectively)[142]. It remains to be seen if European governments will try to regulate their activities more closely, considering the strategic importance of media.

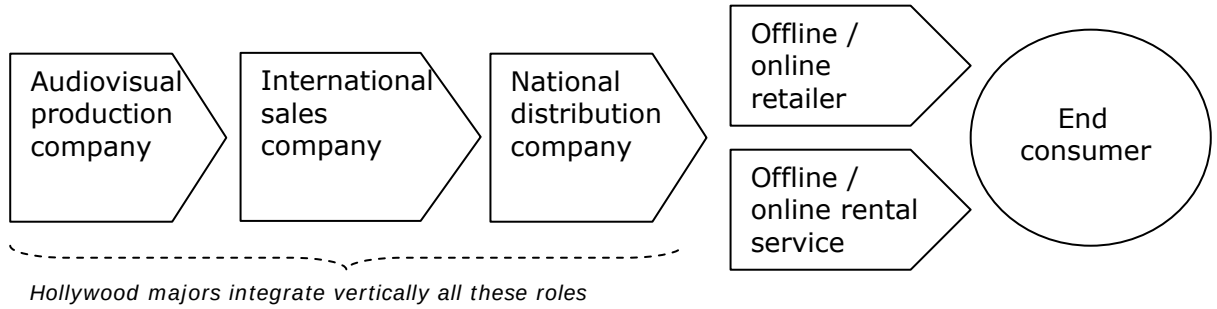
[141] Thomas Pagbe, Numericable (ex Noos) remonte-t-il en puissance ?, Silicon.fr, 28 août 2007

[142] EVCA Yearbook 2007

The European home video industry

Value chain, main actors and role of SMEs

Figure 4: Value chain of home video



Source: peacefulfish/MCG

39 of Europe's top 50 video publishing and distribution companies are entirely or partly controlled by the "Big Six" US majors:

- Sony (MGM, Columbia),
- News Corp. (20th Century Fox),
- The Walt Disney Company (Disney, Buena Vista, Miramax),
- Time Warner (Warner Bros., HBO),
- Viacom (Paramount, United International Pictures, DreamWorks),
- General Electric/Vivendi (Universal, NBC).

The value chain of DVD retail and rental is currently changing given the growth of VoD, video-sharing and piracy, and the continuous decrease of video sales and rental. As a result, one of the main trends within the home video industry is the migration to VoD. Most incumbent players of the DVD rental industry, such as Glowria in France, LoveFilm in the UK, or the Spanish online DVD rent mailer MediaXpress Cine have launched VoD services. They have to redefine their strategies, their business models and their services to compensate for the loss of physical DVD rental and retail.

Finally, the relatively new market of online DVD rental has undergone an important consolidation phase: In March 2006, UK-based LoveFilm and Video Island joined forces to become the largest online DVD rental operator in Europe. LoveFilm's catalogue has more than 60 000 titles and the company is present through its subsidiary LoveFilm International in Germany, Norway, Sweden and Denmark.[143]

In spite of the predominance of these large players, the home video industry includes a number of relatively small players which are mostly active on a national level, specialising in national audiovisual works and genre films. Some of these players also have strategic partnerships with US majors in relatively small markets. For example Finland's Finnkino manages theatrical and home video distribution of the productions of Viacom-owned studios in Finland and the three Baltic countries.

[143] European Video Yearbook, International Video Federation (IVF), Brussels, 2007

Business models

Business models are impacted by the changes in the value chain as well. Indeed, DVD publishers have to find a way to stay competitive despite new entrants in the digital video and TV market. Therefore, most of them have started getting involved in digital distribution. A comparison between the EU countries with a video association member of the International Video Federation (IVF) show important differences not only in consumer prices (which can be explained by the different living standards in the countries) but also in trade prices and retailer margins (see **Table 17**).

Table 17: Prices of DVD and VHS retail and rental in Europe

YEAR 2006	VHS retail			DVD retail			VHS rental		DVD rental	
	Trade level	Consumer level	Retailer margin	Trade level	Consumer level	Retailer margin	Trade level	Consumer level	Trade level	Consumer level
BE	4,00 €	6,60 €	39%	6,60 €	9,90 €	33%	37,80 €	3,10 €	27,60 €	3,10 €
DE	2,20 €	5,20 €	58%	8,30 €	12,90 €	36%	15,80 €	2,50 €	16,70 €	2,50 €
DK	no VHS	no VHS	no VHS	7,60 €	12,50 €	39%	no VHS	no VHS	17,80 €	4,70 €
ES	no VHS	no VHS	no VHS	6,80 €	12,10 €	44%	no VHS	no VHS	24,70 €	2,30 €
FI	3,40 €	4,50 €	24%	7,00 €	12,40 €	44%	18,50 €	2,80 €	23,40 €	3,80 €
FR	2,70 €	4,30 €	37%	9,80 €	15,10 €	35%	no VHS	no VHS	29,20 €	3,00 €
HU	4,00 €	7,50 €	47%	6,50 €	10,30 €	37%	12,90 €	1,40 €	12,00 €	2,50 €
IE	4,00 €	6,00 €	33%	10,50 €	16,80 €	38%	20,00 €	4,00 €	21,50 €	4,70 €
NL	2,60 €	3,50 €	26%	7,40 €	11,50 €	36%	no VHS	no VHS	16,40 €	3,30 €
NO	1,50 €	5,70 €	74%	7,30 €	14,80 €	51%	no VHS	no VHS	13,80 €	6,20 €
PL	5,20 €	6,00 €	13%	8,30 €	11,60 €	28%	13,60 €	1,40 €	13,60 €	1,40 €
PT	no VHS	no VHS	no VHS	6,90 €	7,90 €	13%	no VHS	no VHS	23,00 €	2,00 €
SE	no VHS	no VHS	no VHS	5,70 €	9,70 €	41%	no VHS	no VHS	15,40 €	4,30 €
UK	0,10 €	7,10 €	99%	8,80 €	13,90 €	37%	15,90 €	4,30 €	12,40 €	4,30 €
Average	**2,97 €**	**5,64 €**	**45%**	**7,68 €**	**12,24 €**	**37%**	**19,21 €**	**2,79 €**	**19,11 €**	**3,44 €**

Source: IVF Yearbook 2007

The retailer margin shows how much of the consumer price is being channelled back to the video publisher. For VHS, retailer margin is the highest in the UK (99%) followed by Norway (74%) and Germany (58%). The lowest margins can be found in Poland (13%), Finland (24%) and the Netherlands (26%). For DVD, differences in retail margins between the countries are not as important. Retailer margins are the highest in Norway (51%), Spain and Finland (both 44%). The lowest margins can be found in Portugal (13%), Poland (28%) and Belgium (33%).

Trends, Challenges and opportunities

In terms of trends, all agree that the market for VHS will soon disappear. This is already the case in some countries like Denmark, Spain, Sweden and Portugal.

Although it is clear that the DVD market has also reached maturity with revenues starting to decrease in most countries, professionals and analysts are not clear about how fast this market is going to collapse, or even if it ever will entirely (as in the case of the music industry where a surviving niche market for gramophone records shows that DVD might also live on a little longer), and to what extent online DVD retail and rental will be able to slow down this process.

One factor which is likely to prolong the longevity of DVD is the HD format. Indeed, given the amount of data necessary for the transfer of video in HD format, it will take some time for IP networks to be able to broadcast in HD. Customers looking for films in HD format will therefore turn to DVD at first.

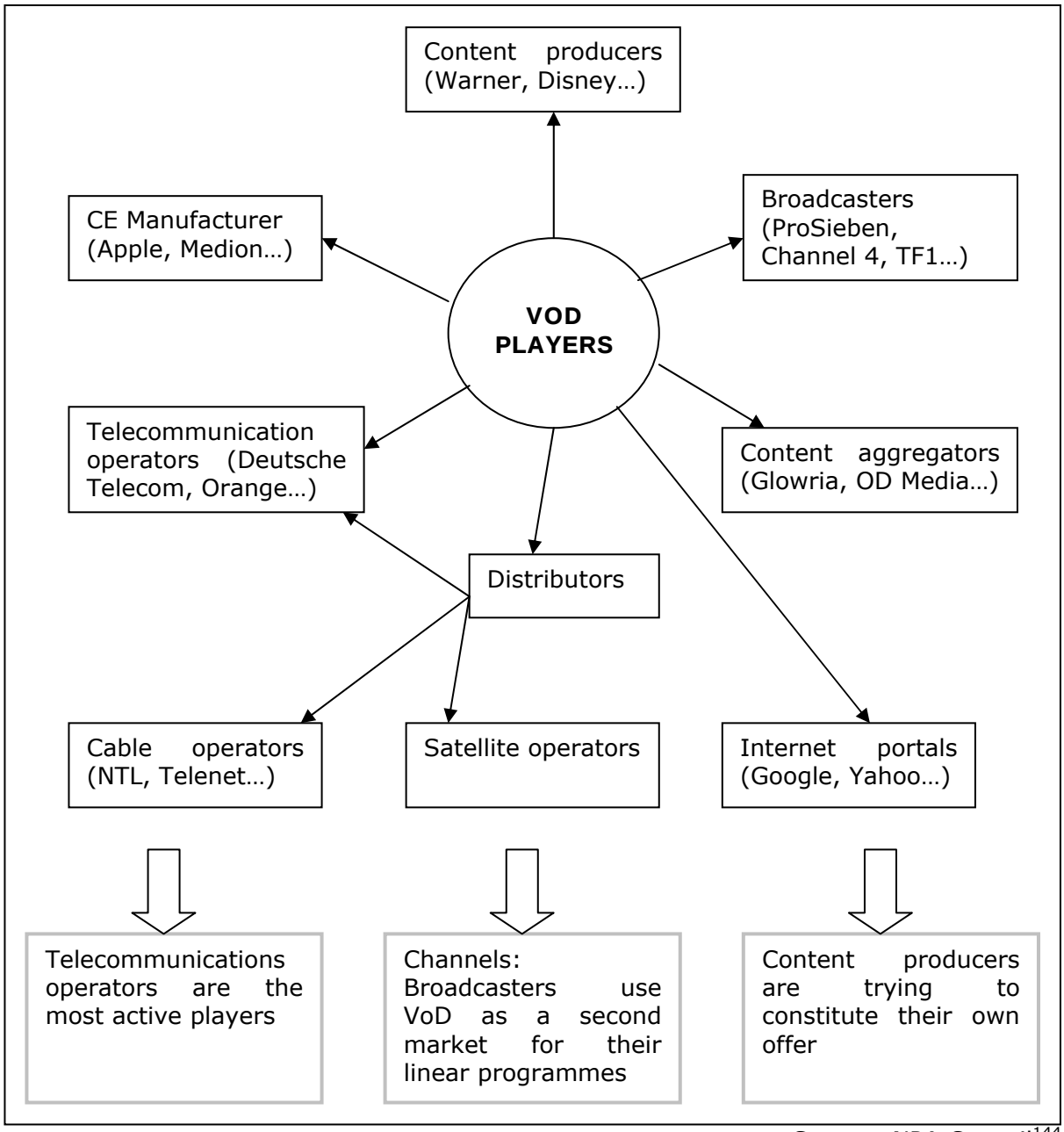
What is clear though is that the days of DVD retail and rental as a significant part of the revenue for content producers are numbered, albeit not immediately, as DVD production costs continue to decrease, keeping it competitive, and HD is not yet appropriate for download. It is not clear whether VoD and licensing revenues from new digital platforms will be able to compensate for rights owners' loss of revenue ; even more so if the new business models are not as favourable to rights owners as the one in place for home video. Indeed, those were historically greatly influenced by the Hollywood majors which, being at the same time distributor and content producer, had a clear interest in having content producers receive their fair share of market revenues.

The European video-on-demand industry

The development of Video-on-Demand services in European countries is greatly influenced by the fierce competition between the different stakeholders. Traditional cable and satellite operators compete with new market entrants mainly coming from the telecommunications industry: DSL providers with multiple-play services which consider VoD services as a natural component of their telecommunication offering.

Value chain, main actors and role of SMEs

Figure 5: The VoD value chain



Source: NPA Conseil[144]

[144] La vidéo à la demande en Europe, Direction du développement des médias et Observatoire européen de l'audiovisuel, mai 2007

Stakeholders

- **Telecommunication operators** (telcos) are the dominant operators of VoD services, with 39 services in Europe (end 2006).
- **TV broadcasters** are also increasingly moving into this market with 23 services in Europe at the end of 2006.
- **Content aggregators** come in third position with B2B as well as B2C models. They can exploit their rights catalogue by launching their own VoD service.

There is a multiplicity of players involved in the European VoD industry. Their differences in terms of core business and of size make it easier to categorise them than in the case of linear television players.

Telecommunication operators (telcos) are the dominant operators of VoD services, as they are in the IPTV market, with 39 services in Europe (end 2006). These companies include incumbent telecom giants like Deutsche Telecom with its T-Online Vision VoD service (750 titles) in Germany and Orange in France. But newcomer ISP players are also very active, such as Free in France or the Italian Tiscali with its Alice DSL brand, operating in a number of major European countries (currently Italy, the United Kingdom, Germany and the Czech Republic).

Nevertheless, media conglomerates which own the content or the television "brands" recognised by consumers are also fully engaged in this emerging distribution platform.

TV broadcasters are also increasingly moving into this market with 23 services in Europe by the end of 2006. Most of them focus primarily on catch-up TV services, although not exclusively. VoD is seen by broadcasters as a new way to exploit their linear programming. The French CanalPlay and TF1 Vision are among the leading VoD services in Europe in terms of their catalogue size (respectively 1 300 and 1 000 films). [145]

Content aggregators come in third position with B2B as well as B2C models. Being able to constitute significant rights catalogues, they can exploit this catalogue by launching their own VoD service. For example, the Spanish Digital Society of Authors and Editors (SDAE - Sociedad Digital de Autores y Editores) has launched in 2003 Accine.com, which has become one of the first European VoD services. Content aggregators also use a B2B model by licensing their content to third party VoD platforms. For example, one of the European leaders, the French Glowria, offers its own VoD service but also provides films to other players' platforms such as Fnac and Neuf.

Content creators in Europe have not rushed into VoD, fearing piracy and the potential "cannibalisation" of their existing revenue streams. Nevertheless, they are increasingly considering VoD as an opportunity rather than a threat. Although some have started building their own offer, only a few of them have enough content for a B2C offering, and most would rather turn to content aggregators in the hope of increasing their revenues by taking advantage of the "long tail" effect[146].

Finally, among the value chain of VoD services, there are numerous cable and satellite operators providing also VoD services (9 services at the end of 2006), as well as DVD retailers who see VoD as a way to compensate the loss of revenue from DVD sale and rental.

At the end of 2006, the leading services in Europe in terms of catalogue size were CanalPlay (FR), TF1 Vision (FR), Homechoice (UK), Free VoD (FR), VirginMega (FR), T-Online Vision (DE), SF Anytime (SE, DK, NO), Cyta (CY), Virgin Media (UK), Alice Home

[145] La vidéo à la demande en Europe, Direction du développement des médias et Observatoire européen de l'audiovisuel, mai 2007
[146] The digital video consumer, Bain & company, USA, 2007

TV Movie (DE), Filmflex (UK), OD Media catalogue (NL), Film Arkivet (NO), Clix Smart TV (PT) and In2Movies (DE).

Level of market concentration

The VoD industry is characterised by a relatively high number of players considering the current size of the market. This industry is still emerging and relationships between players are perpetually changing and each stakeholder is still trying to find the right business model. In the short term, market regulations and a stronger concentration is likely to take place within VoD industry.

Although the relatively small level of investment necessary to create a VoD service does not constitute a significant barrier to entry, the integration of a VoD offering within a well-established group constitutes an important discriminating factor. Indeed, the determinant factors of success are access to content (the case within big media production companies like Vivendi), access to consumers (the case for big telecommunication companies like T-Online) as well as brand awareness among targeted consumers (the case with big television companies like the BBC). An easy access to content and to DSL networks makes it possible to reach a large subscriber base, to profit from economies of scale and, in theory, to benefit from additional margins by virtue of the "long tail" theory. Although the market is still emerging, thus allowing a large number of players, these factors will probably lead to a stronger concentration in the future.

In terms of positioning, the current situation does not allow players to base their strategy on differentiation since, for the time being, they are not able to negotiate exclusive rights transfers with the American majors whose content enjoys broad consumer appeal. In a middle term scenario, we could see a more intensive concentration movement, with the merger of large VoD services and maybe the disappearance of the smaller. Small and middle-sized companies could answer with a stronger market differentiation, by offering niche content, such as the French Vodeo.tv, which offers only documentaries on its VoD platform or German Nowtilus which provides genre content to Internet community websites.

Impact of the European strategy of US majors

In the middle term, American majors could change their distribution strategy which would impact the European VoD landscape. At the moment, they still have a country by country distribution strategy because of the different national regulation frames. But in the future they could adopt a strategy of pan-European commercialisation which could result in a selection of the largest and most powerful players, and subsequently a stronger market concentration. Some international groups, which would be able to buy rights on a European level could rapidly emerge and dominate the market. These future incumbent groups may be continental telecommunication operators such as Deutsche Telecom, Telecom Italia, Tiscali or Orange/France Telecom or major private broadcasters like RTL Group, SBS Broadcasting, ProSiebenSat.1 or Modern Times Group. Apple could also emerge as a major player in the European market after launching its iTunes Video Store.

For most small and middle-sized players (independent distributors, associations of producers or content aggregators) such a shift in the strategy of the majors would mean a marginalisation or a specialisation on niche contents. A number of middle-sized European distributors or aggregators might be able to implement a successful multi-country strategy though. For instance, Swedish distributor Bonver launched its Film2Home VoD services across three Nordic countries (Sweden, Norway and Finland), which constitutes a first step in this direction. However, the issue of the chronology of windows in the various European countries as well as the access to sought-for local content remains one of the biggest barriers to such an evolution, after rights management.

Business models

The number of business models used to market VoD services is almost equivalent to the number of players on this market. It is however possible to identify prevalent models and determine which will dominate in the short term.

There are four main business models in the VoD industry: rental VoD, sale (download-to-own), subscription VoD (SVoD) and advertising-support free VoD (FVoD). The choice of business model tends to depend heavily on the type of content offered, both for traditional players and new entrants :

Table 18: VoD business models

	Free model			Pay model	
	Without advertising	With advertising	Sponsor links	Pay-per-view	Subscription
General news	●	●			
Documentaries				●	
Magazines	●	○			
Movies		○		●	○
Culture/ entertainment	●				
Sport	●	●		○	
Animation		○		●	●
Education				●	●
Clips					●

● Very prevalent ● Prevalent ○ Less prevalent

Adapted from Direction du développement des médias[147]

VoD rental

The rental Video-on-demand is currently the main business model. At the end of 2006, 101 VoD services in Europe were applying it, including LoveFilm (UK), Arcor (DE) and Rosso Alice (IT). It allows consumers to download video content for anywhere between 1,5 to 6 Euros and view it within 24 to 48 hours. Some services also offer the possibility to buy rental packages with more than one film.

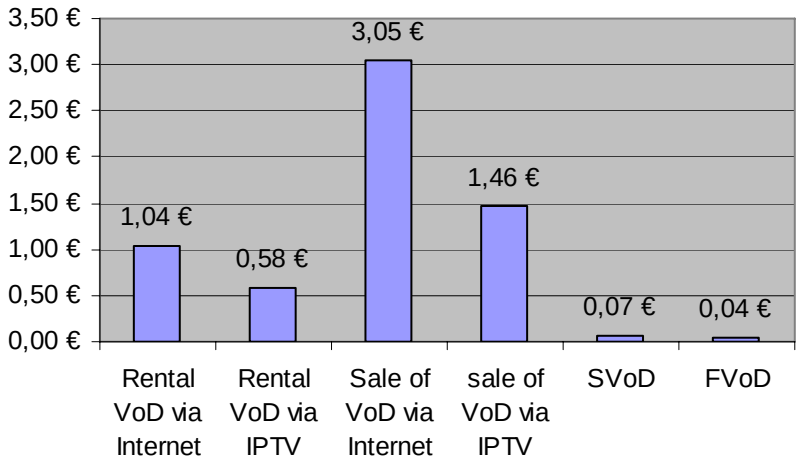
[147] Audience et stratégies des acteurs en ligne face aux acteurs traditionnels du marché de la diffusion des contenus, Direction du Développement des Médias, France, Décembre 2006

The rental model is the most used by telecommunication operators and internet service providers, because it is adapted to their subscription-based commercial model. Thus, the VoD service can be easily included in a global supply.

VoD "retail"

There are two options when buying a film from a VoD service: download-to-own or download-to-burn (possibility to burn the film on a DVD). . In 2006, 27 services in Europe were offering this service, such as Coolroom (UK), CanalPlay, Imineo (Fr) or Film2Home (Scandinavia). Pricing ranged from 5 to 15 Euros for download-to-PC and 15 to 20 Euros for download-to-burn. The sale of VoD films is the most profitable model for the video publisher (see Chart 3).

Chart 3: VoD publisher's gross profits in France according to different business models



Source: MCG[148]

VoD subscription

Only 25 VoD services were based on subscription fees in 2006, but this business model may become prevalent in the future. MovieFlix (UK, international) and the German One4Movie use this business model. However, it is still limited because of the weakness of the margins generated.

Advertised "free" VoD

There were 24 advertising-supported free services in 2006. Some broadcasters market premium content based on that model. In July 2006, TF1 Video offered its fiction "Le maître du Zodiaque" for free with an advertising cut.

Numerous questions remain as to which business models will prevail: VoD over Internet or within "walled gardened" IPTV offerings? For rental or for sale? Free or pay? At which price? (see Table 19).

Traditional media players are experimenting innovative business models, sometimes faster than new entrant VoD-focused actors. For example, in 2005, the BBC launched "MyBBCPlayer" later renamed "BBC iPlayer", available on a website, P2P and cable television, where customers can download and share programmes.[149]

[148] L´économie de la VoD en France , MCG (Media Consulting Group), Paris, 2008
[149] The end of television as we know it, IBM Corporation, USA, 2006

Table 19: Types of possible VoD business models

Type of model	Content	Market model	Provider	Example
Film offering	Films	VoD or SVoD	Right holders or aggregators	CanalPlay, Movielink, FilmFlex
Premium delinearised channel	Films, premium programmes	SVoD	Premium channel or with strong content	HBO on Demand, Premier Direkt+, Disney
Pre-recorded programmes	TV programmes	VoD or fVoD	Broadcasters and TV channels	France Television (Les rois maudits), M6
Distribution of pay-TV channels	Various: films, TV, musique, Kids…	All: VoD, SVoD and/or fVoD	Telco, cable operator…	Comcast, Homechoice
Niche content	Specialised content	All: VoD, SVoD and/or fVoD	Internet Platform	Vodeo.tv, Google

Source NPA Conseil[150]

Main groups of countries

It is interesting to compare the number of VoD services available in different European countries:

- 2 countries have more than 15 VoD services: France and the Netherlands
- 3 countries (Belgium, the UK and Germany) count between 10 and 15 services.
- 7 countries (Sweden, Italy, Norway, Denmark, Estonia, Ireland and Austria) have between 5 and 10 VoD services
- 7 countries (Finland, Switzerland, Portugal, Poland, Cyprus, Iceland and Slovakia) have less than 5 services.[151]

France, UK, Germany, Belgium and the Netherlands lead the VoD market with more than 10 VoD services. In France, VoD is frequently provided over IPTV as a result of the fierce competition between multiple-play operators. VoD services over the Internet and VoD services over IPTV tend to interpenetrate, because DSL providers frequently integrate a VoD service over the Internet in their own offering. In the Netherlands, most VoD services are over the Internet with no connection to the DSL providers. In the UK, most VoD services are provided by cable or satellite operators such as Virgin Media or BSkyB but services over the Internet are also numerous (6 to 13), as is the case in Germany (11 to 13).

In Belgium, the market is dominated by broadcasters with an extensive offer of catch-up TV services.

Pan-European VoD services mainly come from Scandinavia and content aggregators such as Sweden's Bonnier Entertainment (SF Anytime), Film2Home or Live Networks. It is also interesting to note that Internet-based providers offer the greatest selection of pan-European catalogues.

[150] The Development of VOD in Europe, npa conseil, Boulogne-Billancourt, 2006
[151] Video on demand in Europe, npa conseil, Paris, 2007

Trends, Challenges and opportunities

- The majority of TV network executives and IPTV/video telecom executives tend to think that on-demand subscriptions and on-demand content rentals will provide the most significant part of their revenue in the future.[152]
- According to Bain and Company[153], traditional business models will stay profitable in the next five years but the distribution of profits will change. Content creators should have stable profits as VoD consumption over the internet increases. Content aggregators can also expect stable profits. TV broadcasters and cable TV channels will only be able to increase their revenues through internet advertising by providing content directly to consumers over the internet.
- With the development of VoD and the uptake of new technologies such as PVRs (personal video recorders) which can block advertising, a key challenge for commercial broadcasters will be the potential loss of advertising revenue.
- An important challenge for the development of VoD will be the access to content and the chronology of windows. The European Commission recently suggested the idea of creating a multi-territory licence to promote content online, but explains that such a step will take time to develop and implement.

Current situation

Most companies providing audiovisual content over various platforms including VoD, expect revenues generated by VoD activities to increase much more significantly than traditional TV advertising and premium subscription revenues. The majority of TV network executives and IPTV/video telecom executives tend to think that on-demand subscriptions and on-demand content rentals will provide the most significant revenue streams in the future.[154]

According to ABI Research analyst Cesar Bachelet, "A wide variety of actors aim to gain a share of this fast-growing market. Not only content owners such as the BBC and NBC Universal, and Internet portals such as AOL and Yahoo but also a range of new entrants, including user-generated content sites such as YouTube and Dailymotion, broadband video sites such as CinemaNow and LoveFilm and Internet TV providers such as Apple and Tattoo"[155].

With the development of VoD going along with the consumers' adoption of new technologies such as Personal Video Recorders able to block advertising, a key challenge for commercial broadcasters will be the potential loss of advertising revenue. These technological improvements allow the viewer to be in control, and hence to bypass advertising messages.

Important challenges for the development of VoD will be the access to content and the chronology of windows. The European Commission recently suggested the idea of creating a multi-territory licence to promote content online. Nevertheless, in view of some reactions from the European audiovisual industry, the Commission recognized that such a groundbreaking regulatory change would take time to develop and implement.

[152] The end of television as we know it, IBM Corporation, USA, 2006
[153] The Digital Video Consumer, Transforming the European Video Content Market, Bain & Company, Boston, 2007
[154] The end of television as we know it, IBM Corporation, USA, 2006
[155] Internet video to reach 1 bil viewers by 2013, Leo Cendrowicz, The Hollywood reporter, May 29, 2008

According to Bain & Company's "evolving" scenario[156], traditional business models will stay profitable in the next five years but the distribution of profits will change. Content creators should have stable profits as VoD's consumption over the Internet increases. Content aggregators can also expect stable profits but TV broadcasters and cable-TV channels might increase their revenues by providing content directly to consumers over the Internet. At the same time, the competition for audience will reduce revenues and margins. Finally, as IPTV gains a significant share of all TV viewers, pay-TV distributors will have to look for additional revenues in VoD services.

Eventually, the future of this industry will depend greatly on the success or failure of actors determined at making the most of what digitalization can contribute to audiovisual content. Such players might not be traditional media players but could also come from the IT industry (for example Joost and Apple).

In 2008, Joost launched a one-of-its-kind type of service enabling the distribution of TV shows and other forms of video over the web using peer-to-peer TV technology. The company was created in 2006 by the founders of Skype and Kazaa (Niklas Zennström and Janus Friis) with the backing of major private equity firms: Sequoia Capital (US, which invested in Yahoo, Google and YouTube) and Index Ventures (CH, which invested in Skype), of US media giants such as CBS Corp. and Viacom, and of the Chinese telecommunication tycoon Li Ka-shing.
Joost's video content is not user-generated but professionally produced and the business model is based on advertising to enable free access for the consumer. To nurture their platform, they have signed content and advertising deals with a large number of established players, including Warner, Viacom, Microsoft, CBS Corp., Coca-Cola, Nike, Sony, CNN… Direct deals with rights owners such as the National Hockey League or Creative Artist, a talent agency, were also signed.
It remains to be seen whether such a platform will be able to find its audience and prove the viability of its business model.

On June 4th, 2008 the United Kingdom became the first European country to be able to buy and rent films on Apple's iTunes Store at £2.49 per rental and £6.99 to buy. The company is planning a rollout in most European countries. It is too early to tell whether they will be as successful with video content as they have been with music.

Where is this leading us?

"Anytime, Anywhere" are the main features of VoD distribution and constitute its comparative advantages against traditional distribution networks. Thus, VoD:
- Enables users to watch their films on demand, thus overcoming the constraint of time,
- Enables all audiovisual content to be accessible to the audience, therefore surmounting the constraint of space.

VoD is therefore a truly singular distribution channel. Just like traditional television, it is dematerialised and can be consumed directly in households. However, like DVDs, it is made for mass distribution through various retailers. These particularities lead to a market structure that has yet to be fully defined, but by looking into the objectives of the market players involved, we can anticipate and speculate on the direction that it might be taking.

Right-holders

From a rights-holder point of view, many approaches are possible in order to distribute a catalogue as VoD :

[156] The Digital Video Consumer, Transforming the European Video Content Market, Bain & Company, Boston, 2007

- The centralised approach: the rights-holder opens and operates his own platform, with a view to serving niche audiences directly;
- The decentralised approach: through agreements signed with various VoD operators.

It is still too early to assess the superiority of one approach versus the other (which could also be variable from one territory to another). However, effective audiovisual content distribution in VoD demands a sharp editorial approach. As far as distributing content outside of their national territory goes, in order to reach optimal distribution conditions, right-holders need local partners that share their approach, values and propose adapted economic models.

VoD Platforms

From a platform point of view, we have to consider that VoD distribution is still at a very early stage and will continue to evolve over the next 2-5 years.
Media companies, telecommunication companies, independents and online retailers are currently positioning themselves on this segment. As the costs of editing a VoD platform will ineluctably decline over the next few years, thus lowering the barriers to enter a competitive market, we can anticipate that many more players will position themselves. From the association of women's rights of Manchester, to the Klaus Kinsky fan club, every single organisation could be a potential prescriber of content, and will become one if they can turn a profit from it without much effort.
As mentioned before, most of the platforms are being introduced on the internet, and they are normally controlled by traditional players of the value chain. The only actors positioning themselves directly on IPTV, are the Internet Service Providers themselves. Since it is the preferred distribution medium, at least in countries with sufficient bandwidth, we will hopefully see the development of set-top boxes as a means for editors to directly propose their content to consumers, thus creating an open and competitive environment. Such measures would certainly benefit SMEs and avoid an IPTV market controlled by a limited number of dominant actors.

Contributors

Therefore, bringing it down to a user point of view, in this context, differentiation through content will not be sufficient, and VoD services will have to differentiate themselves either through their community of contributors[157] and/or through premium services.

VoD, an opportunity for European SME's?

Looking at the VoD value chain, we can see that this new distribution medium offers many entry points for new players. However, from an SME point of view, each of these contains both opportunities and threats.

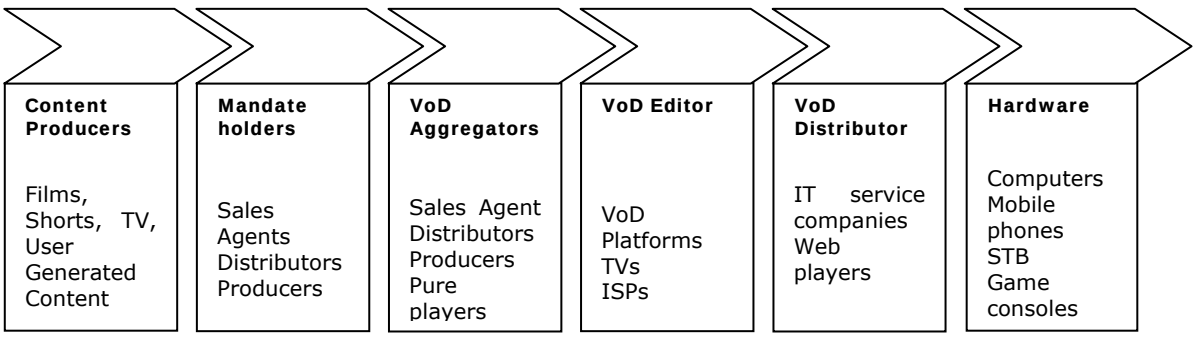


Figure 6: Value chain of VoD

[157] If we want to fit in the current trends marking the evolution of the internet, contributors tend to be a more appropriate term than users when its comes to web services.

Content producers

Opportunities: as production costs decrease, opportunities to make content accessible to audiences dramatically increase;
Threats: failure to determine the audience before production, resulting in the production of either major productions constantly innovating (3D etc.) or rather small budget independent movies, with no middle ground.
SMEs in content production: Future is bright!

Mandate holders

Threats: Distributors acquiring IP rights for a specific territory see broadcasters trying to bundle up IP with TV rights, and the balance of power seems to be in distributors' favour. Distribution is a key strategic position in the value chain, and most of the actors understand that now.
SMEs as Mandate holders: Future is grim!

VoD Aggregators

Opportunities: As the market grows, platforms will most likely need to deal with various aggregators specialised in certain types of content. Moreover, IP distribution and abundance of content will probably generate many opportunities in this field in order to create high added-value services.
SMEs as Aggregators : Future is bright!

VoD Editors

Opportunities: Major platforms addressing generalist audiences will most probably follow a long-tail approach (proven by the success of the Amazon long-tail business). These services will most likely recoup most of VoD consumption. However, smaller platforms will have to follow a different strategy. They will need to anticipate the needs and desires of their community and seek content that can match their requirements, creating customer loyalty.
SMEs as VoD Editor : Future is bright!

VoD Distributors

Threats: There is room on the market for SMEs providing fully integrated VoD downloading services. However, the most efficient solutions will probably come from open source communities.
SMEs as VoD Distributors : Future is uncertain!

Hardware Manufacturers

Opportunities: This is another key strategic point in the value chain where most of the value is likely to be reaped. However, the value is not being recouped by the manufacturers of these boxes, but by the service providers using them to deliver their services. Users will most likely use devices that they already own in order to access services instead of buying an additional one dedicated to this service. Therefore, competition is likely to occur through portable devices, game consoles, and television sets.
SMEs as VoD Hardware Manufacturers: Future is grim!

The European video sharing industry

Value chain

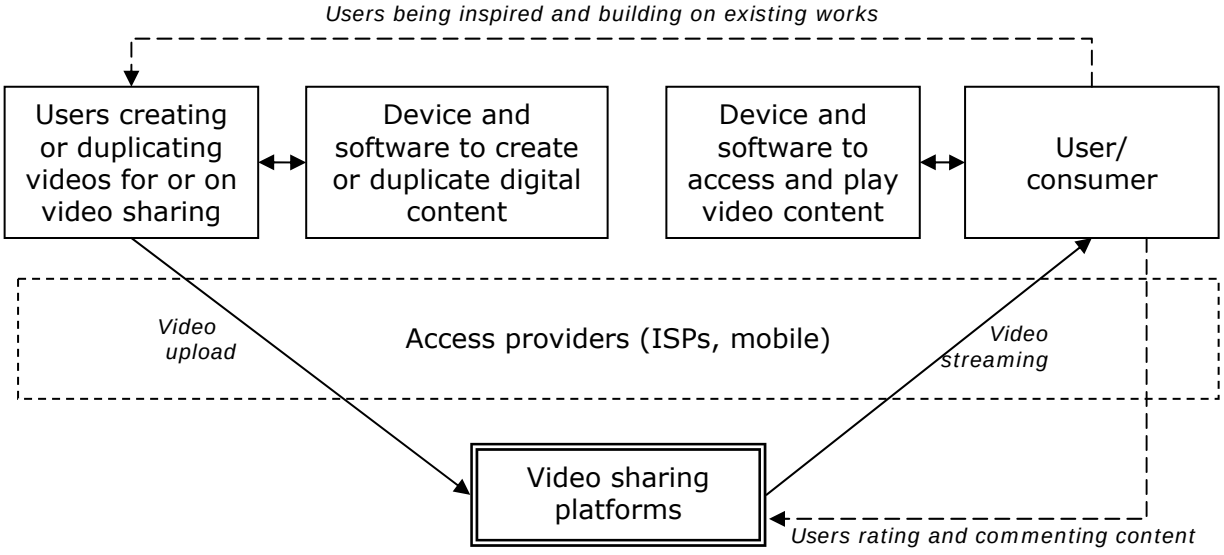
Video sharing websites are websites offering video hosting services to users, enabling them to upload video clips and access video clips shared by other users. Costs are covered mainly through advertisement and branded content and/or channels on the website. Most also include social networking services allowing users to set up a personal profile (such as a personalised area within the website) and to interact with other users.

The video sharing industry has just recently emerged with YouTube leading the way. Most companies offering video sharing services in Europe are based in North America. Since the industry is purely internet-based, most of them run their worldwide operations from the headquarters and have commercial offices in the biggest non-domestic countries to market the website's advertising space.

Until recently, video sharing websites were essentially non-commercial ventures set up by enthusiasts or start-ups with little or no revenues backed by private equity finance. These sites often did not publish much company information as the business model is quite challenging, some losing significant money on a day-to-day basis due to the high bandwidth costs needed to transfer video content over the internet.
Their objective was rather to increase their user-base which could potentially be monetised at a later stage by selling their business or to reach a size on which to build a viable commercial business models.
Being a very young industry, established value chains are only beginning to emerge, mainly following the entry of larger companies on that market (Google acquired Youtube in November 2006 for the price of US$1.65 billion in Google stock).

Users post audiovisual content for free on a web-based platform provided by an operator which develops the tool and offers hosting space to archive the content and bandwidth to broadcast it (see Figure 7).

Figure 7: Value chain of video sharing websites



Source: peacefulfish/MCG

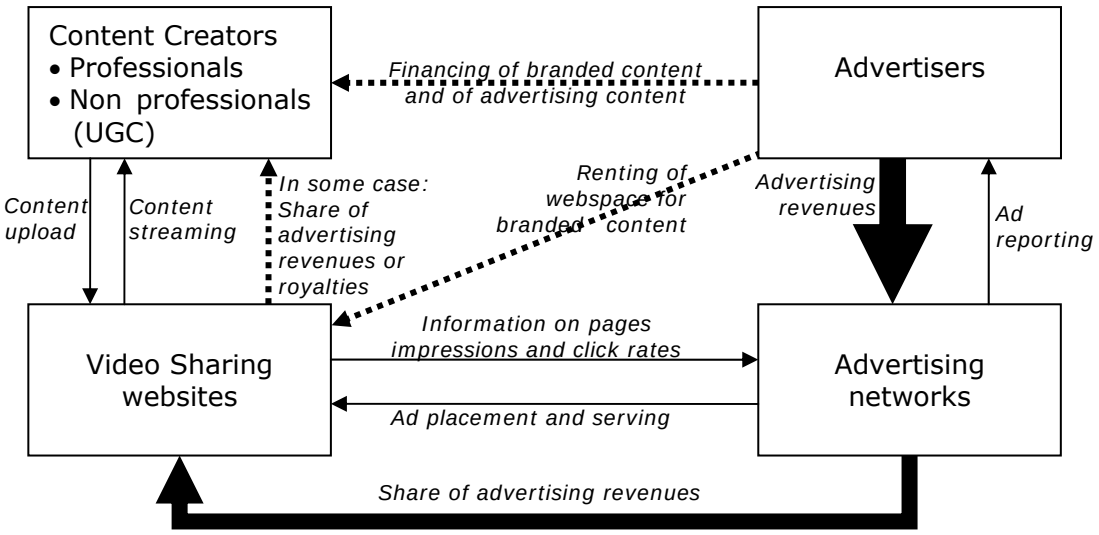
Business models

The advertising business model is used by all popular video sharing sites like Youtube, Dailymotion, MyVideo, Sevenload, MySpaceTV and Netlog. It is believed to be the most profitable one, although other business models are also in use, which are sometimes a better fit for platforms that aim to reach a limited target group. These alternative business models which are often used in combination with one another include the content and technology licensing model, the voluntary donations model, the pay-per-item model and the subscription model.

Advertising-based model

Advertising is the most common business model so far. This model enables users and host to access the site for free while still creating revenue. This model is comparable to free web mail services where users receive a free account and the owner of the service sells advertising spots to companies. When users click on the advertisement, the company providing the advertising software receives per-click revenues and shares them with the platform owners (see Figure 8). The main challenge for video sharing platforms is to reach a user base large enough and targeted enough to attract advertisers.

Figure 8: Advertising business model



Source: peacefulfish/MCG

Payment for advertising depends mainly on the site's popularity (number of registered users) and on the monitored usage (time spent on site/ video viewed per session/ repeated visits/ clicks on the advertisement banner linking to the website of the company advertising). The three most common ways in which online advertising is purchased are CPM, CPC, and CPA.[158]

- CPM (Cost Per Impression) is where advertisers pay for exposure of their message to a specific audience. CPM costs are priced per thousand impressions. The M in the acronym is the Roman numeral for one thousand.
- CPV (Cost Per Visitor) or (Cost per View in the case of pop-ups and -unders) is where advertisers pay for the delivery of a Targeted Visitor to the advertisers' website.
- CPC (Cost Per Click) is also known as Pay per click (PPC). Advertisers pay every time a user clicks on their listing and is redirected to their website. They do not actually pay for the listing, but only when the listing is clicked on. This system allows advertising specialists to refine searches and gain information about their market. Under the Pay per click pricing system, advertisers pay for the right to be listed under a series of

[158] http://en.wikipedia.org/wiki/Online_advertising

targe-rich words that direct relevant traffic to their website, and pay only when someone clicks on their listing which links directly to their website. CPC differs from CPV in that each click is paid for regardless of whether the user makes it to the target site.

- CPA (Cost Per Action) or (Cost Per Acquisition) advertising is performance-based and is common in the affiliate marketing sector of the business. In this payment scheme, the publisher takes all the risk of running the ad, and the advertiser pays only for the amount of users who complete a transaction, such as a purchase or sign-up. This is the best type of rate to pay for banner advertisements and the worst type of rate to charge. Similarly, CPL (Cost Per Lead) advertising is identical to CPA advertising and is based on the user completing a form, registering for a newsletter or some other action that the merchant feels will lead to a sale. Also common, CPO (Cost Per Order) advertising is based on each time an order is transacted.
- Cost per conversion describes the cost of acquiring a customer, typically calculated by dividing the total cost of an ad campaign by the number of conversions. The definition of "conversion" varies depending on the situation: it is sometimes considered to be a lead, a sale, or a purchase.

Video sharing files offer different kinds of advertising on the site, banners, embedded video ads before the video starts and branded channels to generate revenue. For instance, many record companies buy web space on Youtube or Myspace in order to create a branded web environment to promote their artists (see Table 20).

Most of these ads are context-driven: When users search or watch a video, related advertising is shown on the sidebar. Ad networks like Google's AdSense provide programmes which automatically contextualise the advertising with the page viewed.

Table 20: Different types of advertising

Floating ad	An ad which moves across the user's screen or floats above the content.
Expanding ad	An ad which changes size and which may alter the contents of the webpage.
Polite ad	A method by which a large ad will be downloaded in smaller pieces to minimize the disruption of the content being viewed
Wallpaper ad	An ad which changes the background of the page being viewed.
Trick banner	A banner ad that looks like a dialog box with buttons. It simulates an error message or an alert.
Pop-up	A new window which opens in front of the current one, displaying an advertisement, or entire webpage.
Pop-under	Similar to a Pop-Up except that the window is loaded or sent behind the current window so that the user does not see it until they close one or more active windows.
Video ad	similar to a banner ad, except that instead of a static or animated image, actual moving video clips are displayed.
Map ad	text or graphics linked from, and appearing in or over, a location on an electronic map such as on Google Maps.
Mobile ad	an SMS text or multi-media message sent to a cell phone.
Streaming ads	ads containing streaming video or streaming audio.

Source: Wikipedia[159]

Although revenue sharing remains the rule in advertising, some major platforms have been able to negotiate up-front payments with ad networks. In August 2006, Google

[159] Ibid.

agreed to pay a minimum guarantee of USD 900 million in ad revenue over three and a half years to News Corp. for the right to broker advertising that appears on MySpace and some other sites. Microsoft Corp. also struck a deal to be the exclusive provider of advertising for Facebook.[160]

Alternative business models

Content and technology licensing model
As user-generated content gets increasingly popular, some players of other media platforms have started looking for content which they could license for their programming. Hence, some free of charge video sharing platforms have started licensing their hosted content to third parties. For instance, Youtube struck a deal with US mobile operator Verizon to create a mobile VoD service named Youtubemobile, which enables users to watch Youtube's content on their mobiles.
Finally, video sharing platforms often have commercial agreements with third parties to attract users for their technology. For instance, DailyMotion is a technology provider for French ISP Neuf Telecom[161].

Voluntary donations model
Content is accessible for free and hosting and maintenance costs are covered by voluntary donations from the users. This model usually used by video sharing sites not big enough to attract enough advertisers is common within non-commercial sites.

Pay-per-item model
In this model, users pay for each piece of content they want to watch. Payment is made via micropayment either to the platform or directly to the content creator.

Subscription model
There are different approaches to this model. One is to offer basic accounts free of charge that provide a limited number of services and a premium account for which users pay a subscription but are entitled to more features and support as well as additional or unlimited hosting space.
The other option is a normal subscription fee to access the services provided by the site and users uploading content get remunerated depending on the popularity of their content.

Calgary-based iSTockphoto offers videos on a per-item or on a subscription basis. A major disadvantage of this model is that users can get UGC for free on other sites.

Industry stakeholders

There are four main industry stakeholders (see Figure 8 page 123):
- Video sharing website publishers
- Advertising networks
- Advertisers
- Content creators

Video sharing websites publishers
Established media companies are the main actors in this industry as they buy established communities and finance promising start-ups. For example Google and News Corp own

[160] Participative Web: User-created content, OECD, Paris, 2007
[161] Participative Web: User-created content, OECD, Paris, 2007

respectively the two world market leaders: YouTube with an estimates market share of 42,94 % in 2006 and MySpace Videos with 24,22 %[162].

Most video sharing websites publishers started out as SMEs and some of them still are. This is the case for example of European based communities such as Dailymotion, Netlog, Sevenload and MyVideo. Therefore, the impact of SMEs on the industry is very high and the industry remains very competitive in spite of the recent acquisitions of the leading video sharing sites by large companies. New companies are continuously entering the market with technological innovations, new marketing concepts or a better understanding of the potential of content sharing. The relatively small investments needed to launch and to run a video sharing site combined with the strong interest of private equity players and media conglomerates for social networking in general, contribute to nurture a very high level of start-up creations in the industry. On a global scale, it is estimated that venture capitalists invested over US$ 262 million in the sector in the first half of 2006 alone.[163]

Advertising networks

Advertising networks connect websites that want to host advertisements with advertisers. To do so, they provide software to websites and advertisers to serve ads, count them, choose the most profitable ads for the website or the advertiser, and monitor the progress of different advertising campaigns.

The sector is highly concentrated. Google is the uncontested market leader, even more so following the acquisition of DoubleClick in March 2008 (see Table 21).

Table 21: Ad server market share across 68 million domains in January, 2008

Ad Server	Monthly Unique Users	Market Share	Unique Domains	Market Share
Google	1.107.489.739	35,87%	91.462	78,17%
DoubleClick	1.079.203.140	34,95%	6.748	5,77%
Yahoo	362.201.931	11,73%	5.147	4,40%
MSN	309.290.121	10,02%	8.099	6,92%
AOL	156.109.326	5,06%	1.976	1,69%
Adbrite	73.446.676	2,38%	3.575	3,06%

Source: Attributor[164]

Advertisers

The development of the monitoring of social networking websites has made it clear for many companies that online advertising has great potential, being quite targeted and able to offer good value for advertising money compared to classic advertising (mainly on TV). Nowadays, almost all companies buy online advertising.

Content creators

There are two groups of content creators: established companies producing video content mainly for TV but, increasingly, exclusively for the internet, and non professional individuals who take advantage of the potential of the digital media for the creation and dissemination of audiovisual works – usually referred to as user generated content (UGC) or user created content (UCC).

[162] www.hitwise.com
[163] Participative Web: User-created content, OECD, Paris, 2007
[164] Get your fair share of the ad network pie, Attributor, Redwood City, 2008

Trends, Challenges and opportunities

Trends

With the increasing popularity of web-based social networking (video sharing being only one aspect of this global cultural phenomenon which appeared with the development of Web 2.0) and the appearance of new media platforms next to the traditional television set, advertisers are consistently reallocating some of the budgets which used to be invested mainly in TV advertising. Another strong driver of this trend is technological innovation which makes it possible for a constantly improving contextualisation of advertising. Finally, the tremendous potential of interaction lying in new media platforms opens new ways for advertisers to reach their target groups with even more focussed messages.

This has led many global players to invest large amounts into video sharing. The fear of losing revenue due to decreasing interest in traditional media forms has served as important motivation for these investments (see Table 22). Some fear that the increasing sums being paid for video sharing communities and the amount of venture capital flowing into this area may lead to a new internet bubble, even though it cannot be contested that the environment for such companies has improved with better online advertising, increase of broadband penetration and evolving usage habits of consumers.

Table 22: List of major web 2.0 acquisitions

Date	Acquirer	Acquired	Type	Price in mUS$
Sept. 2005	News Corp.	MySpace	Social Network	580
Oct. 2005	Viacom/MTV	iFilm	Video	49
Aug. 2006	Sony	Grouper	Video	65
Aug. 2006	Viacom/MTV	Atom Films	Games, films, animations	200
Sept. 2006	Yahoo	Jumpcut	Video editing	Undisclosed
Oct. 2006	Viacom/MTV	Quizilla.com	Text, quizzes, images	Undisclosed
Oct. 2006	Google	YouTube	Video	1580
Nov. 2006	Google	Jotspot	Wiki	Undisclosed
Mar. 2008	Google	DoubleClick	Ad network	3100

Adapted from OECD[165]

Opportunities

The profitability of the video sharing industry might lie in cross-platform strategies. Indeed, video sharing websites are already looking at other ways to generate revenue than the internet. One will be to find other platforms to distribute their content. In this sense, Youtube started a mobile version of its community called YouTube Mobile which enables users to watch and upload videos with a mobile device.

Another cross-platform strategy is being followed by some established media companies. They acquire content from video sharing platforms or license content to them in order to take a share in the revenue generated on the internet, as well as to exploit cross-promotion opportunities and ways of further capitalising on their on-air programmes and brands through video sharing platforms.

Furthermore, in some recent deals, video-sharing platforms paid considerable amounts up-front to media firms in order to be able to continue to host their content. Under these agreements, video sharing sites offer free and full access to music videos (e.g. Vivendi Universal) or television content (from CBS, NBC Universal) sometimes sharing related advertising revenue with the content owners, sometimes only relying on the promotional effects.

[165]Participative Web: User-created content, OECD, Paris, 2007

Finally, traditional media firms are increasingly using video sharing sites to promote their content audiovisual works, by giving access to trailers, free samples of certain content, etc.

Threats

The impact of the increasing involvement of traditional media or established Internet firms in video sharing sites is still unclear. On the one hand, internet firms provide the necessary backbone for these offerings and the technology needed for the retribution of content owners. On the other hand, users may migrate away from video sharing platforms which have a too centralised control, too many obtrusive advertisements and forms of branding, or which develop into video delivery platforms for commercial content producers while crowding out UCC.[166]

A big threat to the development of this industry is the issue of copyright infringement. Indeed, when video sharing communities will reach a critical mass and generate important revenues, the fact that much of their content is unauthorised will become a real issue. To react to this threat, some communities like Sevenload are developing software detecting copyright infringement and reporting it in order to share the advertising revenue with the copyright holder or to delete the content from the platform. But the question remains whether these players will be more successful at handling issues like copyright clearance, media windowing and territorialisation which the entertainment industry has not been able to solve for years.

[166]Participative Web: User-created content, OECD, Paris, 2007

The European games industry

Value chain, main actors and role of SMEs

In 2007 the European games industry generated around €7.4 billion[167]. This figure includes computer games (often referred to as PC games), console games (often referred to as video games), online games, handheld games and mobile games. Europe is the second market in the world after Asia. This market is expected to grow over the next years and is in fact the fastest growing sector in the home entertainment industry thanks to the introduction of new generation consoles and to the online gaming sector which, apart from mobile gaming, is the fastest growing segment within the industry. Mobile gaming will be dealt with in the next section on audiovisual mobile content.

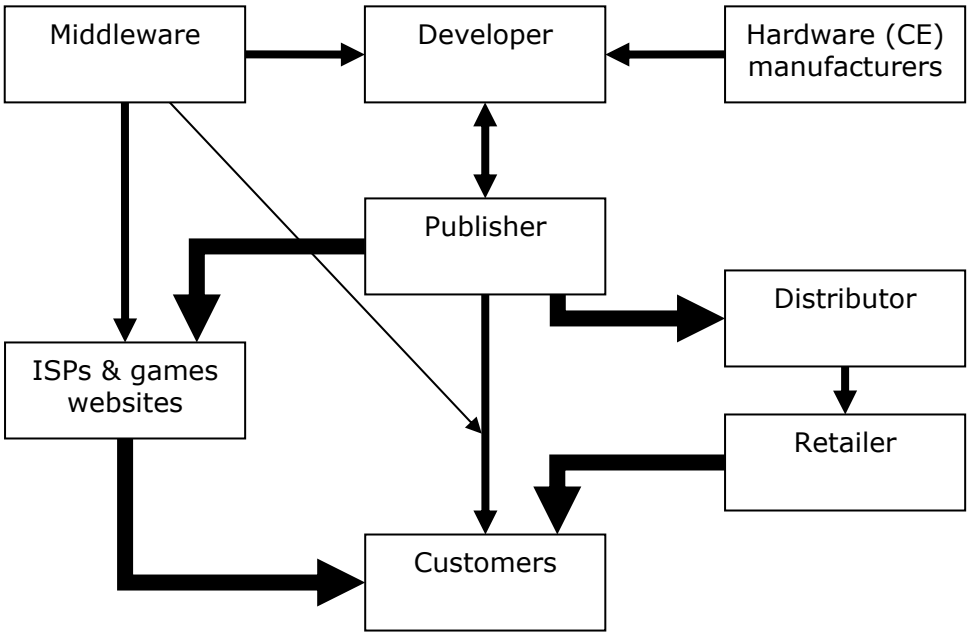
Some of the major video game companies are European, such Vivendi Universal (FR), Infogrames (FR), Ubisoft (FR), SCi/Eidos Interactive (UK) and Codemasters (UK). Apart from these global players there are a number of large, medium and small-sized companies involved in the video game value chain. Games publishing is dominated by a number of big global game publishing companies, including those mentioned above, which invest heavily in development and publishing, whereas distribution is still a place where a number of SMEs have a strong position on their respective domestic markets. It is widely accepted that this lack of bigger players in the distribution market is mainly due to the relatively low level of margins it generates.

The games industry is mainly structured according to the various existing markets:
- Console games
- PC games
- Single player online games (primarily casual games)
- Multiplayer online games (primarily massively multiplayer online role-playing games)
- Mobile games

However, the traditional value chain is changing in the face of evolving factors, and certain players might soon be cut out (see Figure 9):
- Possibility to sell games directly to the consumer over internet portals, cutting distributors and retailers out of the value chain;
- Internet Service Providers (ISP) and game websites are on their way to entering the value chain as content aggregators;
- Network operators are trying to position themselves not only as ISPs but as content aggregators to take a higher share of the generated revenues;
- Hardware devices like new consoles and mobile phones are becoming technically more complex, thus causing development costs to rise.

[167] Key Facts: The profile of the European Videogamer, ISFE, Brussles,2008

Figure 9: Value Chain PC and Console Games (Digital Distribution)



Source: OECD[168]

In the changing value chain, the publisher (marketing, funding and distribution of the content), the developer (creation of the content) and the hardware manufacturers (transmission/ deliverance to the end consumer) remain the key players. The same main actors are found in every segment of the value chain.

Hardware manufacturers

PC and console manufacturers are referred to as hardware manufacturers, but as console games are still the largest segment and their role is far more important than that of PC manufacturers, it is useful to focus on these.

The console market is very costly: it may cost up to $2 billion to develop a competitive console and return of investment may take several years.[169]

This market is dominated by three manufacturers: Sony (Playstation), Microsoft (Xbox), and Nintendo (Wii).

It is understood that there is very little room for other manufacturers and it is therefore very unlikely that other companies will attempt to establish themselves in this field.

This is a highly competitive market and manufacturers are under pressure to reduce hardware prices and consoles which are then often sold below production costs. Therefore, the manufacturers' objective is to develop attractive titles for their platforms and receive a royalty fee for each game sold on their console. For this purpose console manufacturers provide software tools which enable the developers to reduce costs while developing new games. While Sony and Nintendo collect standard royalties and have no extra conditions for their online content providers, Microsoft also provides development tools but demands/forces developers and publishers to follow Microsoft's technical specifications for Xbox live and offer online gameplay/services only on authorised Microsoft sites.

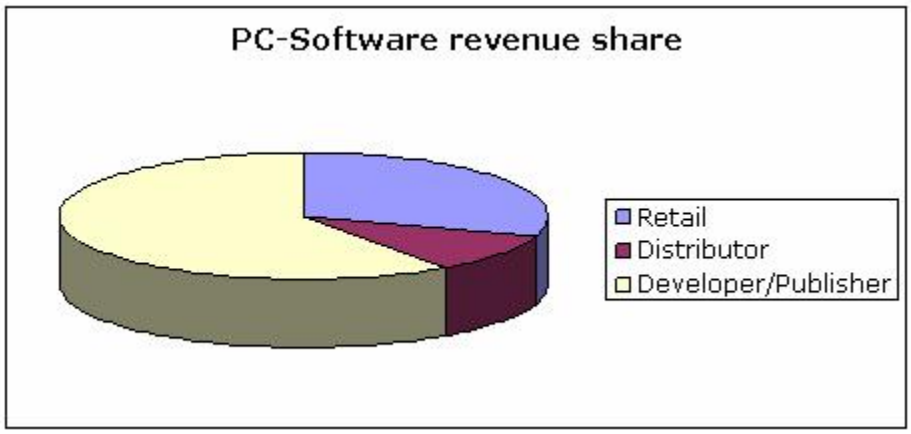
Furthermore, hardware manufacturers publish games themselves to boost their consoles. This is not applicable to (Windows) PC games as they can be played on all (Windows) PCs. Indeed, Mac versus PC remains a small (but again growing) issue, particularly in the

[168] Digital Broadband Content: The online computer and video game industry, OECD, Paris, 2005

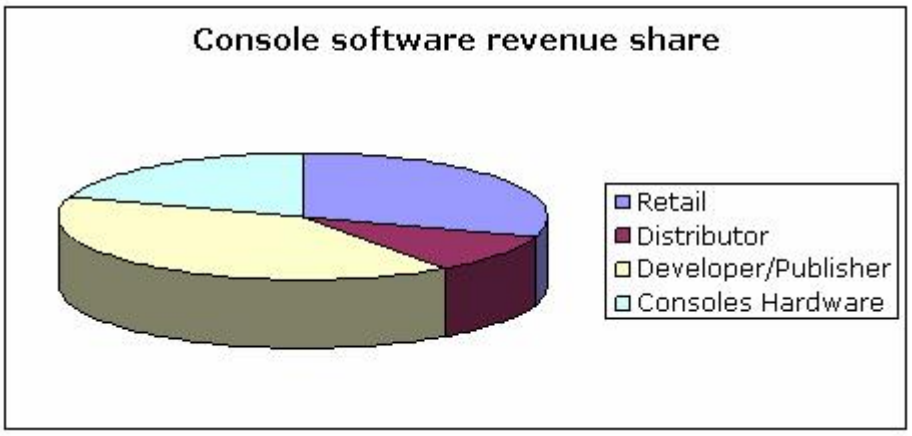
[169] Digital Broadband Content: The online computer and video game industry, OECD, Paris, 2005

Home Entertainment market (with the increase of Mac sales, Apple TV, iPod and iPhone ecosystems).

Chart 4: PC and console software revenue share



Source: OECD[170]



Source: OECD[171]

Middleware

Middleware is software that runs the graphics for game development, including game optimised high-speed code compilers, software libraries, game engines and platforms. Middleware companies are usually small to medium-sized firms with highly skilled staff (programmers, mathematicians) focussing on new technology development and licensing their software to game developers.

The middleware market is growing, especially the market for MMORPGs[172] with companies such as Zona, Butterfly, Quazal, Open Skies, Extent and Rebel Arts specialised in providing technologies to developers/publishers. As large publishers like Electronic Arts and Microsoft are able to fund internal development of middleware and dominate the market it becomes difficult for small companies to remain independent and avoid being taken over or pushed out of the market.

[170] Digital Broadband Content: The online computer and video game industry, OECD, Paris, 2005

[171] Digital Broadband Content: The online computer and video game industry, OECD, Paris, 2005

[172] Massively Multiplayer Online Role-playing Games

Developers

Developers are the content producers of the industry. They create new games with the latest technological tools. Games are developed either in-house, licensed from middleware companies or provided by console manufacturers. Developers get the largest revenue share in the value chain.

Apart from the big developers, development studios are small and medium-sized companies and therefore carry great financial risks if their title fails to be published. To minimise risks publishers and developers are often linked. Publishers tend to have their own in-house development studios or the titles are developed by smaller development studios and marketed in cooperation with publishers.

Publishers

The publisher's main task is to identify titles and market these to retailers, distributors or directly to the consumer via digital distribution. The direct selling to the consumer gives the publisher an even bigger share of the revenue as it covers the distribution and retail as well. Publishers often finance the development of a game and acquire property rights for new games. Publishers are large companies (i.e. Electronic Arts) which may have an in-house development studio but whose main activity consists in marketing products. Additionally, they provide product management, funding, pricing and inventory.

Publishers act worldwide, either on their own or in cooperation with local partners. Publishers like to spread the mix of titles and publish them cross-platform (XBox, Playstation, Wii, PC and mobile) to reduce risks by targeting a wider range of buyer segments. The cross-platform strategy often collides with console manufacturers who want strong titles to be available exclusively on their hardware.

Publishers are focussing as well on the mobile game sector and use their strong brands. Electronic Arts for example are publishing their well known sports games on mobiles. This subject is covered in the next section on mobile content.

Table 23: The Top 10 Publishers in 2007

Name	Headquarter	Bestselling Games	Distribution	Net revenues
Nintendo	Japan	Mario,Pokémon	In-house and outsourced	966,534 million yen
Electronic Arts	USA	FIFA, Madden, The sims	In-house	$ 3.091 Billion
Activison	USA	Call of Duty	Outsourced	$ 1.5 billion
Ubisoft	France	Rayman	In-house	€ 938 million
THQ	USA	SpongeBob,WWE	Outsourced	$ 1,026 Billion
Take-Two Interactive	USA	GTA	In-house	$ 981,8 Million
Sega Sammy Holdings/sega of America	Japan	Sonic	In-house	528,238 Million Yen
Sony Computer Entertainment	Japan		In-house	1,016.8 billion Yen
Microsft Game Studios	USA	Halo	Outsourced	$ 6,132 Million
SCI/Eidos Interactive	United Kingdom	Tomb Raider, Hitman	In-Housec	£m115 Million

Source: Ranked by Game Developer Magazine in order of overall score in six factors (annual turnover, number of releases, average review score, quality of producers, reliability of milestone payments and the quality of staff pay and perks) [173]

[173] Wilson, Trevor, Game Developer (CMP Media LLC) 14 (9): 6-16, October 2007,

Distributors

Distributors are still the connecting link between the publisher and the retailers but as mentioned earlier their market segment is diminishing as other players are taking over their field of expertise or finding new distribution channels. Distributors are usually responsible for printing copies of the game as well as the localisation of the product (translation, packaging, etc). Big publishers might even have their own distribution section or have exclusive contracts with distributors serving a number of European countries.

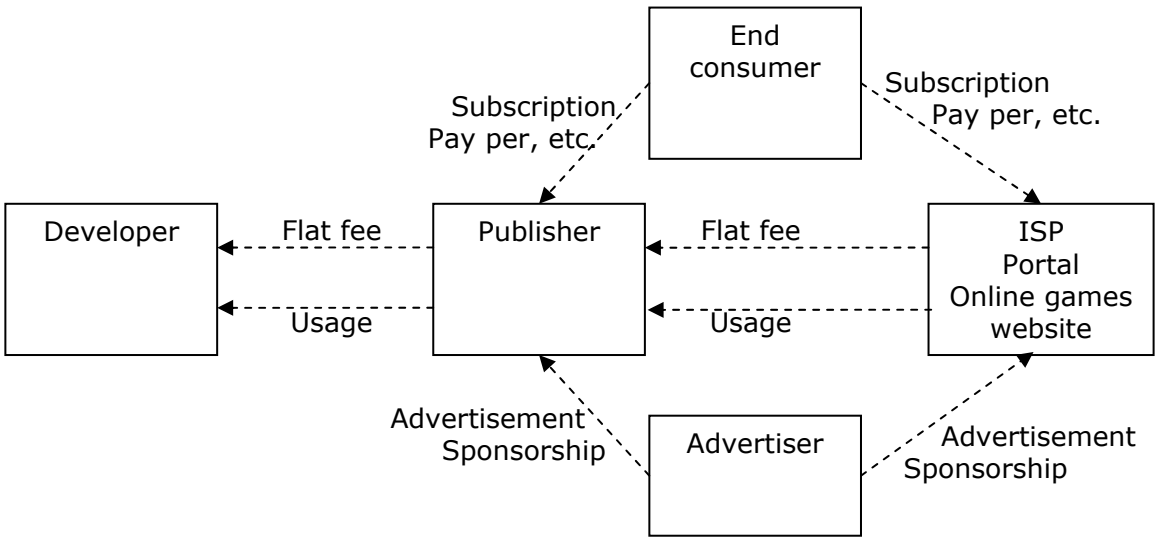
Retailers

Retailers sell the games to the consumer. Retailers can be department stores (i.e El Corte Ingles, kiosks, electronics stores (i.e Mediamarkt, Saturn), supermarkets... Retailers are in charge of pricing, mark-downs, priority and presentation. For a long time, retailers, especially the large ones, were in a very good bargaining position since the only possibility for publishers was to sell through shops. Thanks to online distribution channels, this bargaining power is starting to erode.

Internet Service Providers (ISP) and game websites

They are the newest players in the value chain and are trying to take over the distributors. Internet Service Providers (ISPs such as AOL) are increasingly important in the changing value chain as they become (online) distributors. Due to the uptake of digital distribution, network operators are on their way to redefining their revenue model by not limiting themselves to ISPs but also taking over responsibilities such as distribution, pricing policy, sales priority, billing and product and network management.
While network operators act as the new distributors, game websites (i.e Yahoo) take over the retailers' place. Game portals can benefit from their Internet traffic and their brand name to attract customers.
However, in the future the role of ISPs and portals may not be restricted to the delivery of games to end customers. Simple free online games played on Yahoo Games and MSN Gaming Zone already attract millions of players, and it is likely they will also become involved in database management, customer support and game development.
Figure 10 shows the growing importance of the ISP and gaming sites/portals as online gaming and especially Massively Multi-Player Online Games (MMOGs) and Massively Multiplayer Online Role-playing Games (MMORPGs), which may be distributed online by the publisher himself (i.e. Travian), become more popular.

Figure 10: Revenue Stream online games



Source: IGDA, Online Games Committee, 2003

Business models

Business model of console manufacturers

The traditional business model is to sell console, in-house developed software and as manufacturers they have exclusive control on titles for their hardware and therefore collect royalties for every game published/sold on their console. The new online characteristics of the new consoles bring new sources of revenue to the manufacturers. They offer gaming and non-gaming content (i.e. movie trailers) to download or play online. While Microsoft Xbox Live users need a subscription (€59.99 per year) to download additional content, Sony and Nintendo operate a per-item online shop. Furthermore, Microsoft imposes technical specifications to developers on Xbox Live and offers game play/services only on authorised Microsoft sites.
The PC game market is different. As most games work on every system, there are no restrictions to entering the PC game market. As online gaming is becoming more and more popular, developers focus on providing online game play as well.

Business Model for online gaming

New revenue models

The traditional revenue business model in the computer games industry has been to sell hard-box games. However, with the diffusion of broadband Internet access there are now competing models that can be used alone or in combination. In this section, the main online-enabled revenue models will be analysed: retail purchase, subscription fees, pay-per-play, advertising, and premium and customer services.[174]

Retail purchase – play online for free

In this model all revenues come from the one-time sale of the boxed game software.
Online game play is provided for free by the publisher and uses the online section as a marketing tool for new releases and updates for games sold at retail stores.
Publishers tend to use this model to support retail sales by advertising their games.
This is a very costly model for companies as they need to programme the server, support the hardware, provide bandwidth for the service and long-term maintenance as online games now tend to be endless.
These disadvantages are leading to a combination between this model and the subscription model described below.

Subscription – paying a monthly fee

Players have unlimited access to online game play for a monthly fee, ranging between 10 and 20 Euros. The game itself can be bought (boxed or downloaded) or distributed for a fee.
The subscription model has four major advantages. It is simple; it is predictable for people considering signing up; it is well suited to most online games, which tend to be endless; revenues are generated throughout the whole year and are not dependient on seasons.

[174] Digital Broadband Content: The online computer and video game industry, OECD, Paris, 2005

Providing a cost-effective online environment is the key to profitability in this model. If traffic can be managed efficiently, 10 000 players generate USD 1.2 million annually[175].

Pay-per-play – prepaid and micro-payment

Players pay small fees to play either by buying pre-paid cards or by paying via micro payment over the internet. The idea is similar to arcade games where consumers pay to play a certain amount of time or matches. Even though gamers are less likely to withdraw in the middle of game that has already been paid for, and costs are controllable, this model is not suited for today's online gaming market as games tend to be endless.
The charges for micro-payments by credit card companies remain a barrier as well.

Advertising

Advertising is a very common model with casual game websites/portals like Yahoo or pogo.com, as revenue is generated through advertising which depends on the websites' popularity. Product placement is also a suitable business model for large online games. McDonalds and Intel bought product placements within the Electronic Arts bestseller The Sims online.
The advertising market in games is growing and sometimes games are used as advertisement. For example, the US military spent over USD 7 million to produce America's Army, a PC multiplayer game that was free for download. The purpose of the game was to serve as a marketing and recruitment tool.

Premium services – pay for components and/or services

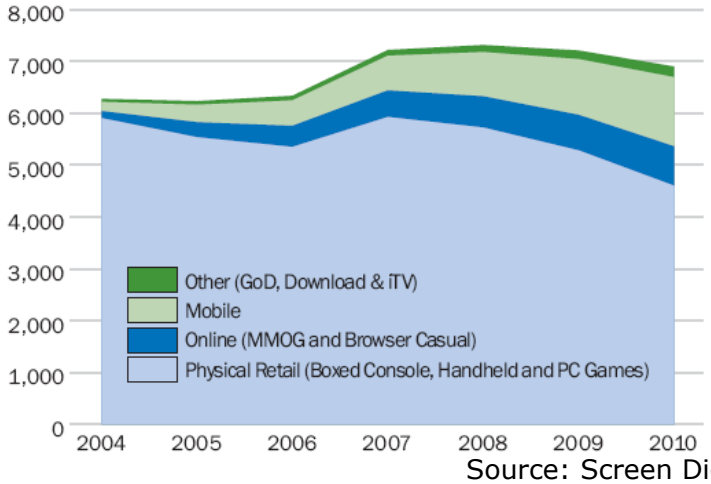
Game play is most often available for free. Companies then offer premium accounts for a monthly charge which entitle the user to extra game options and better game support.
Another model is to sell extra items for game play on a pay per item basis.

[175] Digital Broadband Content: The online computer and video game industry, OECD, Paris, 2005

Trends, Challenges and Opportunities

The emergence of the Internet promised to eliminate barriers to entry for distribution – in games software it opened up the possibility of setting up a website and selling games online. However, the challenges of reaching large numbers of customers, and the added costs of marketing, transactions, and providing customer support for the new distribution channel led to the understanding that there is not a simple one-for-one substitution among channels. The Internet distribution model is still less profitable and reliable than traditional distribution channels, although the gap between the two is shrinking,[176] as shown in the figure below.

Chart 5: Total Europe games market – retail plus online and mobile (in €m)



Source: Screen Digest

There are two recent trends:

- established publishers are buying small developers, and
- new players are acquiring companies for network-based technology and titles.

In general, large players prefer endogenous growth, although Infogrames has been a major acquirer. One reason is that with technology stabilisation and rising costs it has become more difficult for independent developers to make the breakthrough that makes them attractive acquisitions. However, the growing wireless and online markets may start a wave of industry consolidation.

A major trend in the online game industry is companies looking for partnerships with other players in the value chain (i.e. publishers teaming up with distributors/ aggregators, publishers partnering with developers, etc.). Although developers are open for think tanks with other developers, this might change when the market gets tighter.

The development costs for computer games and especially online and console games have increased rapidly. Technological advances create higher requirements for games and require therefore more creative input. The transition from the PS2 to the PS3, for example, led to an increase in console game development costs. Large publishers such as Vivendi or Electronics Arts are developing expensive technology to be used throughout their company. Competing primarily on technology may become more difficult for independent publishers; combined with rising costs and the independent content developer's weak position in the value chain, this may result in a less competitive environment for large publishers. In addition, the growing importance of brand names and game titles combined with vertical integration suggests that market leaders may use

[176] Digital Broadband Content: The online computer and video game industry, OECD, Paris, 2005

bundling or cross-platform subsidy strategies to pre-empt competition. Furthermore, online games have high running costs like maintenance and customer support. According to the OECD, the average development costs for a top online game are at least $5 million and can easily reach twice that amount[177]. Games adapted from movies are emerging and profit from stronger public attention and more advertisement. This results in higher sales, which are more likely to cover development costs than independently developed games even though licensing costs may be higher. A good example is the King Kong games based on Peter Jackson's movie, published by Ubisoft, and which sold 4,5 million copies by the end of 2006[178].

The major challenge for this relatively young and fast-expanding industry is the lack of skilled personnel. According to the OECD, there might be a shortage of designers and programmers specialising in particular areas of game design and development.[179] This shortage is due to rapid growth in demand for such skills and a shortage of training (courses and training within the industry) and restrictions on immigration of skilled personnel. This could lead to delays in development of new software and applications which are extremely important as the life cycles of games shorten and the complexity of games increases. This lack of personnel may result in the outsourcing of competences. Even though universities offer more courses than some years ago, there are not enough human resources to satisfy the industry's demand.

[177] Digital Broadband Content: The online computer and video game industry, OECD, Paris, 2005
[178] http://www.pcspielemagazin.de/szenenewsmeldung.php?id=48285
[179] Digital Broadband Content: The online computer and video game industry, OECD, Paris, 2005

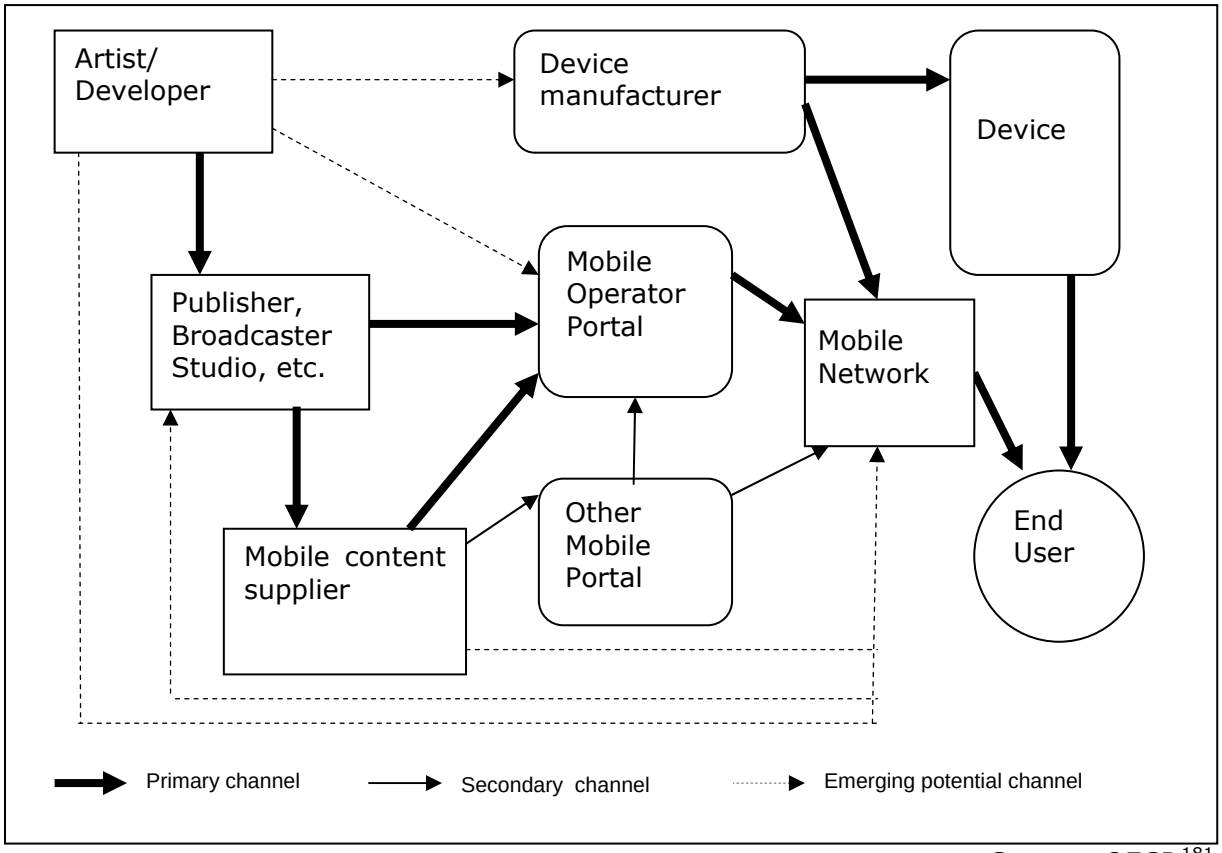
The European mobile content industry

Mobile content, including games, video, TV and music, is generally viewed as a major, emerging industry and a driver of growth for the media industry as a whole. However, the predicted explosion of this market has not yet occurred. As The Guardian's Ed Waller noted after attending the World Mobile Congress in Barcelona in February 2008: "Industry executives repeated their mantra - "This year will be the year mobile TV takes off" - but it was a familiar refrain and everyone's getting rather impatient for it to come true."[180]

In this sense, the mobile content industry is still at a very early stage and most players active on this market are rather small. It remains to be seen whether these players will be able to develop together with the market, or like with the evolution of the video sharing industry, traditional players coming either from the telecommunications industry or from the media industry will invest this market once its commercial viability is established.

Value chain, main actors and role of SMEs

Figure 11: Basic mobile content value chain – Changing business relationships



Source: OECD[181]

[180] Mobile TV Crank call or market ready to explode?, Ed Waller, The Guardian, London, 2008

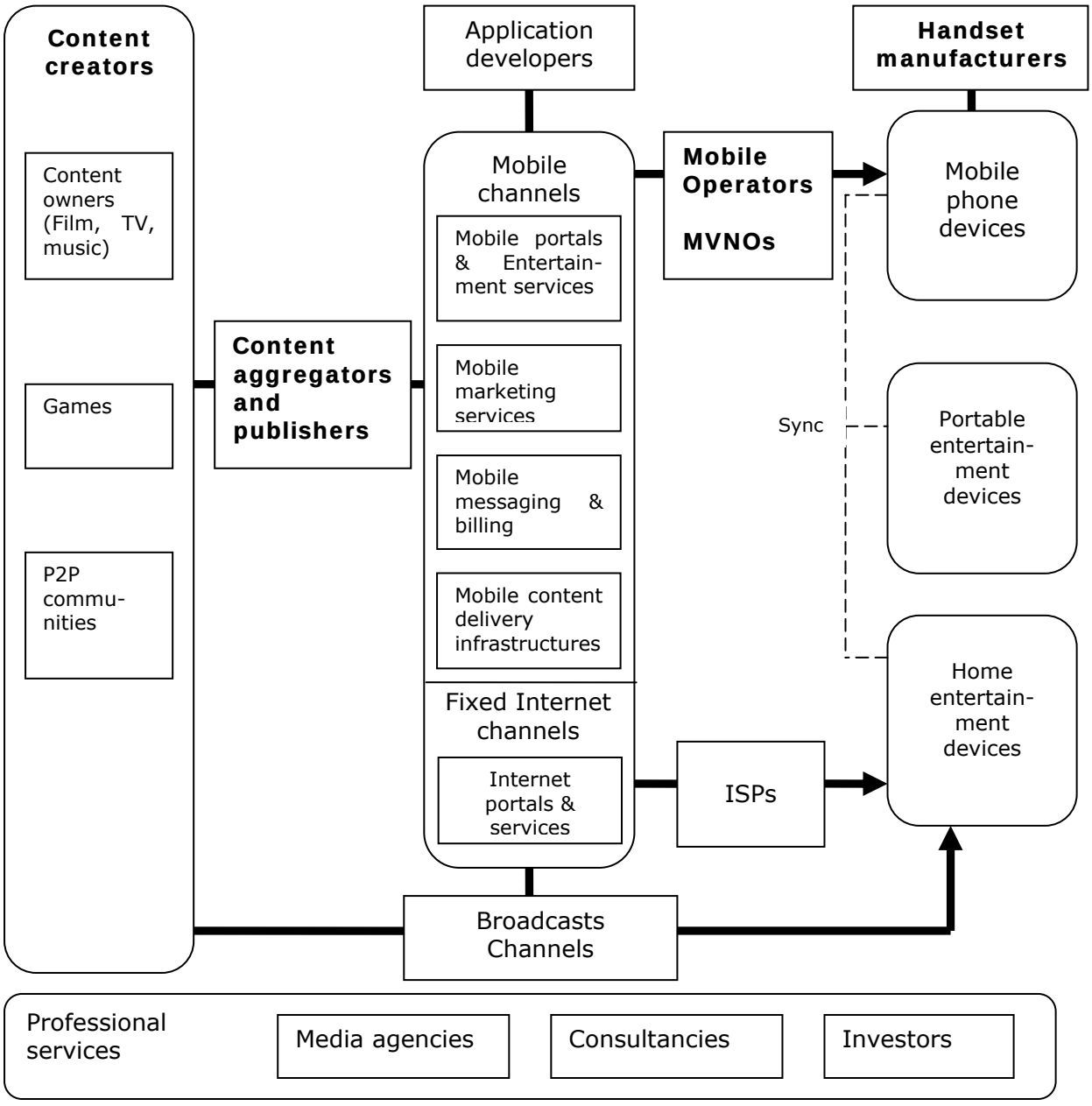
[181] New content for new platforms, Organisation for Economic Co-operation and Development (OECD), Paris, 2005

There are four main groups of players that are involved in the basic value chain of mobile content (see Figure 11):

- Content creators and developers,
- Content aggregators and publishers,
- Telecommunication operators and
- Handset manufacturers.

There are also various other companies which offer enabling technologies, portals or devices. This value chain involves large players as well as small players.

Figure 12: Mobile entertainment industry map



Source: StrategyEye [182]

[182] Mobile Entertainment Forum website

Telecommunication operators

The largest players are the telecommunication operators (commonly referred to as telcos). There are typically three to six telcos in a single country. Larger mobile operators have developed their activities across many countries.
The main mobile telcos active in Europe are (see Table 24):

- Vodafone (UK) which operates in almost every European country.
- France Telecom/Orange (FR) which operates in 12 European countries.
- Telefónica/Movistar/O2 (ES) which operates in 8 European countries.
- T-Mobile (DE) which operates in 11 European countries.
- Telenor (NO) which operates in 9 European countires.
- Telecom Italia Mobile (TIM) which operates only in Italy (26 million subscribers)
- TeliaSonera which operates in all Nordic countries except Iceland.

In the category of mobile operators, there are also many portals and MVNOs, which are smaller and much more fragmented than the incumbent companies. The MVNOs (Mobile Virtual Network Operators) are mobile companies which do not have their own transmission networks and infrastructure. They provide services to customers by using networks from mobile network operators. For example, Virgin Mobile in the UK, and Tchibo and Aldi in Germany are Mobile Virtual Network operators. They have wholesale agreements with traditional mobile operators and can offer competitive prices by reducing their distribution costs.

There are also a very large number of mobile content portals, including large companies such as Buongiorno Vitaminic (IT) or Jamba (DE) which provide services in different countries. Nevertheless, most content portals are rather domestic-based SMEs which provide services in a single country.

Table 24: World's largest mobile operators in terms of lines subscribed

Rang	Company	HQ	Proportionate customers (proportionally including participations in other mobile operators) (in millions)
1	China Mobile	China	380 (Feb 2008)
2	Vodafone	UK	260 (Mar 2008)
3	France Telecom/ Orange	FR	170 (Dec 2007)
4	China Unicom	China	168 (Apr 2008)
5	Telefónica/ Movistar/ O2	ES	171 (May 2008)
6	América Móvil	Mexico	153,4 (Dec 2007)
7	T-Mobile	DE	123,1 (Mar 2008)
8	Telenor	NO	90 (Dec 2007)
9	MTS	Russia	81,97 (Dec 2007)
10	AT&T Mobility	USA	71,4 (Apr 2008)
-	Telecom Italia Mobile (TIM)	IT	54 (Dec 2007)
-	TeliaSonera	SE	14,5 (Dec 2007)

Source: peacefulfish/MCG

Content creators

The content creators' link in the value chain is dominated by a large number of very small SMEs specialised in mobile content production. Most of the SMEs in the mobile industry are playing in this category and serve only mobile content industry. Mobile games creation is the most established mobile content category, with numerous small content creators. In general, content creators work with well-established players such as

broadcasters, game publishers or movie studios, which will publish and commercialise their content.
There are also a large number of companies providing various services to mobile operators, portals, MVNOs and content creators and aggregators. This includes for example mobile application service providers (Bango, End2End), or billing partners, which provide the billing technologies, such as Netsize, MBlox and First Hop.[183]

Handset manufacturers

In Europe, Motorola (US) and Nokia (FI) are the two dominant players of the equipment manufacture industry, with Sony Ericsson (JP/SE) coming in third position (this company was overtaken by South Korean LG Electronics in Q1 2008).

Level of market concentration

If a small number of large mobile operators dominate mobile content distribution in their respective countries and, for some, on a European level as well, the mobile content industry is not very concentrated on the production and aggregation side. In 2005 and 2006, in the majority of European countries, the market share of smaller players increased. However, it is expected that most large players such as media conglomerates will heavily invest in the mobile content business, probably through acquisitions of smaller players.

According to the OECD's 2005 report "New content for new platforms", new strategic agreements, alliances, partnerships and consolidations are inevitable. For instance, US Internet giant Verisign acquired German mobile portal Jamba!, US wireless entertainment company Hands-On Mobile (formerly Mforma) acquired MobileGame of Korea, US games publisher THQ Wireless took a controlling stake in Minick in Switzerland, and US online greetings market leader AG Interactive acquired US ringtones specialist MIDIRingTones[184].

There are still numerous small players and start-ups in the mobile content industry, especially in the field of content production, but as the mobile content market is currently seen as a huge potential of new revenue streams and a driver of growth for audiovisual content industries, it is expected that most large players such as media conglomerates will invest heavily in the mobile content business, and not only through acquisitions of smaller players. For instance, games giant Electronic Arts (US) created its mobile gaming entity with the acquisition of Jamdat Mobile (US) and Time Warner invested in leading creator and global publisher of mobile entertainment Glu Mobile (US). Major companies which are currently acquiring smaller players to enter the market typically come from the four following sectors: wireless, telecommunications, media/entertainment and device/computing.

[183] Interactive content and convergence, European commission, Brussels, 2006
[184] New content for new platforms, Organisation for Economic Co-operation and Development (OECD), Paris, 2005

Business models

Business models within the mobile content industry vary widely as the industry is still experimenting with different models. In the highly competitive mobile market, companies are constantly revising their business models.

Pay-per-item vs. subscription

Currently, the most prevalent business model is one in which the user pays a fee to access the mobile network and a separate fee to access content. Some content can be purchased on a one-time fee basis, such as music or screensavers (below 5 € per item). Content may also be provided on a subscription basis. In this case, the user pays a fee for a specific amount of pieces of content to be accessed within a specific time frame. Some operators are testing a mix of these two models, often using the subscription model for premium content.

Walled garden vs. open access

Traditional mobile operators favour a "walled garden" approach where users can only access content through the mobile operator's portal. This enables the mobile operator to control the links which are placed on this portal and to receive a portion of revenue from content providers that are included in the portal.
Opposite the "walled garden" approach, open access allows the user to obtain content from any content provider that provides content to be accessed on an independent portal.
Some operators have experimented with a mixed approach of walled garden and open access, such as Japanese NTT DoCoMo and its iMode portal. It allows users to access the official sites of the mobile operator's portal, as well as other selected content. This model is named "semi-walled garden".
Some portals have started to challenge the walled garden approach, offering their services directly to the consumer. For example, Monstermob (UK) is a direct to consumer portal. iPhone had agreements with mobile operators, enabling them to supply iPhone content independently, but went back on this policy and decided to distribute its content directly to the consumer instead. The walled garden approach is not dominant in Europe anymore. The only operator to keep this business model was 3 (UK, IE, IT, SE, DK, AT), but the company then signed an agreement with Yahoo! in 2006. [185]

Mobile advertising and UGC

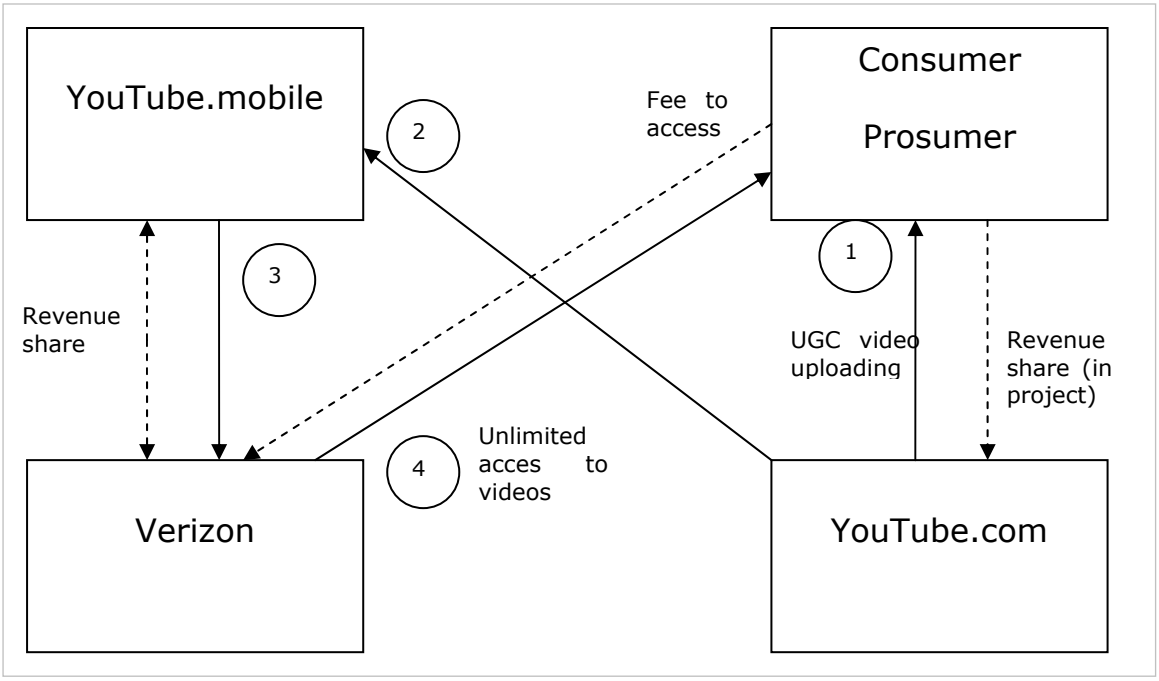
Mobile technology creates a positive context for advertising. The user's hobbies can be targeted and advertising banners or spots can be better profiled.
Mobile content companies specialising in user-generated content use a business model based on subscription or advertising or a mixed model. YouTube.mobile has elaborated a system of subscription while YourVids.mobi's uses a pay-per-view system and advertising banners (see Figure 12). Unfortunately, tracking and ratings for mobile remains poor. Except in direct sale models (DTO) there is no common or pan-operator audience appraising system (unlike the traditional but limited television rating system, or the superior Internet tracking one). Mobile seems to offer some of the best and most of the worst of both worlds...

Given the high level of competition within the mobile content market, mobile operators are looking for differentiation and added-value content. They have also to define clearly their business models. The adoption by the players of a free-to-air advertising business model may be one of the main evolutions in the future but at the moment, the

[185] Interactive content and convergence, European commission, Brussels, 2006

subscription-based business model is still dominant. Most TV broadcasters that recently launched a mobile TV service have adopted a subscription-based model but this could evolve rapidly.

Figure 13: YouTube.mobile's business model



Source: RTR/FH Salzburg[186]

Trends, Challenges and opportunities

Future players: Mobile operators and TV broadcasters

Mobile operators are in a good position to provide services to consumers because of their transmission networks. It is widely accepted that the mobile content industry is still emerging, and its business models and value chains are complex and varied. Each category of player is trying to control its segment of the value chain and to find a central position. The well-established and larger players, such as mobile operators, have to negotiate with less-established and smaller players, such as independent portals, billing providers, artists or game developers. It is possible that in the future, content producers and telecommunication operators will work directly together, which would marginalise the role of content aggregators. The larger mobile operators generally source and manage content across the entire group but T-Mobile is an exception to the rule, with its partnership with QPass (US), a content provider that manages T-Mobile's content portfolio.

Mobile operators are in a good position to provide services to consumers because of their transmission networks. Indeed, broadcasters or content producers that decide to launch a mobile TV service have to deal with network operators. Mobile operators have further competitive advantages such as their access to a large customer database and a sophisticated payment system. [187]

Public service broadcasters will become a key player in the mobile TV industry, according to the Digital Terrestrial Action Group (DigiTag)[188]. For example, the BBC

[186] Mobile TV Studie, RTR/FH Fachhochschule Salzburg, Salzburg, 2007
[187] Interactive content and convergence, European commission, Brussels, 2006
[188] Mobile Broadcast Television in Europe, European Broadcasting Union, Geneva, 2008

launched a range of three channels (BBC 1, BBC News and BBC Three) to the 3G networks of 3 Group, Vodafone and Orange. Broadcasters and public broadcasters have experience in creating and aggregating content and their brands are recognised by customers, thus they have a key role in delivering content to a handheld device. Nevertheless, it is also possible that mobile operators or other players bypass the broadcasters in the delivery of TV services to a handheld device.

Lack of standardisation

As a result of the great variety of mobile device manufacturers and mobile operators, the supply structure of mobile content is highly fragmented with no widely accepted standards. Therefore, for instance, in order to release a game for mobile the developer has to adapt it to over a hundred different mobile devices and take into account the variety of subscription models – this particularly has an impact with mobile games using a lot of interaction.

To respond to this barrier for the development of mobile content, mobile operators are trying to increase their influence on equipment manufacturers which often do not want to give up their demands. Consequently, mobile operators have started to form alliances to increase their influence on the handset market:

- In October 2003, the seven operators Amena (ES), One (AT), SONOFON (DK), Pannon GSM (HU), mmO2 (DE, UK, IE), Telenor Mobile (NO) and Wind (IT) formed the Starmap Mobile Alliance.
- In March 2004, Orange (FR), T-Mobile (DE), Telefonica Moviles (ES) and Telecom Italia (IT) formed a joint venture under the name Freemove, to jointly purchase 6 millions handsets from Nokia at 10% discount.
- In June 2004, NTT DoCoMo (Japan), mm02 (UK), Orange (FR), TIM (UK), Telefonica Moviles (ES), T-Mobile (DE), Vodafone (UK) and Smart Communications (Philippines) launched the Open Mobile Terminal Platform (OMTP) which aims at creating a common organisation to work together with handsets manufacturers to adopt phone standards and homogenize user's interfaces. [189]

Mobile TV

One of the main challenges of the mobile content industry is the issue of pan-European mobile TV. Regarding the technology, the European Commission supports the development of the DVD-H standard (Digital Video Broadcasting to a Handheld) in order to drive and unify the growth of mobile television across Europe. However, this proposition was not accepted by all players in the mobile industry. According to some of them, including the European Broadcasting Union, the EU should let the market define the business models and standards which will best satisfy consumer expectations. This issue makes it hard to predict how the industry will evolve in the next five years and which business models will emerge.

The issue of device compatibility with some mobile content also constitutes an important challenge for the short term development of the mobile content industry. For example, BT stopped its mobile TV channel BT Movio after only one year, because of the lack of compatible handsets. One single handset was compatible (the Virgin Lobster phone)[190].

Copyright issues

Copyright issues also affect the development of the industry, especially for sports channels and US programming, and copyright clearance and licensing are central to the mobile content industry. One solution for TV broadcasters could be to increase in-house

[189] New content for new platforms, Organisation for Economic Co-operation and Development (OECD), Paris, 2005

[190] Mobile TV Crank call or market ready to explode?, Ed Waller, The Guardian, London, 2008

production, in order to own the rights to their programmes and exploit them. That is what ITV recently did in the UK, increasing in-house production by 75%.

European Home Entertainment Industry: Country focuses

General situation of the home entertainment industry on a national level

The industry map of home entertainment sector follows some constant trends in each European country, independent from the size of the country or its level of infrastructural and technological development.
In each country within the scope of our study, there are always big national television operators (broadcaster and cable or satellite operators), big national telecommunication operators, big national retailers, big global players such as American majors or pan-European telcos, and a myriad of small and middle-sized players in each segment of the value chains.
These five categories of players are involved in each platform that we have previously analysed: linear television, home video, VoD, games and mobile content. Big national broadcasters have launched their own VoD or catch-up TV services on IPTV or over the Internet: TF1 in France, ORF in Austria, the BBC in the UK, RTL in the Netherlands or Telewizja Interaktywna in Poland… Big national telecommunication operators tend to lead the home entertainment sector by providing Internet, television (VoD and IPTV) and telephony through their multiple-play offers: Belgacom in Belgium, Telekom Austria, Swisscom, Cyta in Cyprus… Big national retailers, such as Fnac or Virgin have also launched VoD services…

Some global players seek to provide their online services to more than one single country, such as the German In2Movie (Germany, Austria, Switzerland) or the Swedish Live Networks and SF Anytime (Denmark, Finland, Norway). The telecommunication operators Orange (France), T-Mobile (Germany) and Vodafone (UK) are also becoming global European players, by providing their services to several European countries. This constitutes an important current trend that could redefine the industry landscape and the level of market concentration.

American major studios are also heavily involved in the European home entertainment industry, especially within the segment of content creation. Majors such as Vivendi Universal, Sony Pictures, Buena Vista, or Twentieth Century Fox have the power to impose their conditions on the marketing of their audiovisual content.

Behind these major national or global players involved in the home entertainment value chain, there is also a myriad of small players, SMEs or start-ups – the largest group being content production companies. The current evolutions of the home entertainment sector being characterised by the presence of trans-national conglomerates active in all segments of the value chain (from content production to mobile network operation), it might thus be challenging for most European SMEs to get a piece of the mass-media home entertainment market. To stay competitive, most companies will probably have to position themselves on very specialised niche segments, mostly on a national level.

Table 25: List of major national broadcasters, cable/satellite operators, telecommunication operators and retailers in European countries

	Major national broadcasters	Major national cable/sat operators	Major national telco operators	Major national retailers
Austria	ORF, ATVplus, Premiere	UPC Telekabel	Telekom Austria	
Belgium	VRT, RTBF, TVI, Vlaamse Media Maatschappij SBS Belgium	Telenet TV Vlaanderen	Belgacom	Carrefour, Delhaize, Free Record Shop, Sonica, Super GB, Media Markt, Cora, Fnac
Bulgaria	Bolkan Nyuz, Korporeushan, BNT, Nova, Televizia Parvi, Chasten Kanal, Bulsatkom, Evrokom	Bulsatkom, ITV Partner	BTC	
Cyprus	Cyprus Broadcasting, Corporation, Sigma	Athina Sat, Multichoice Cyprus	Cyta Prime Tel	
Czech Republic	CET 21, CT-Ceska Televizie, FTV Prima,	UPC Direct, Digi TV	Czech Telecomelefonica 02 Czech Republic	
Denmark	DR1, DR2, TV2	TDC Kabel TV Tella Sofa Canal Digital Viasat	FastTV.net TDC A/S Dansk Bredband	
Estonia	Eesti Television, TV3, Kanal2	Starman, STV	Elion, Elisa, Starman	
Finland	Alma Media, C More Group, YLE, MTV3	Canal Digital Finland	Elisa, DNA	
France	TF1, France Televisions, M6, Canal +	Noos Numericable	Orange, SFR, Neuf Cegetel, Alice, Free, Tele2	Fnac, Virgin
Germany	ARD, ZDF, RTL Group, ProSiebenSat. 1, Premiere	Kabel Deuschland, Unity Media, Orion Cable, Kabel BW	Deutsche Telekom, Arcor, HanseNet Telekommunikation (Telecom Italia), EweTel, United Internet	Media Markt, Amazon, Saturn, Karstadt, Weltbild, Müller
Greece	ERT, Teletypos, Antenna TV	Multichoice Hellas	OTE	
Hungary	Antenna Hungaria Rt., MTV-1, RTL Klub, TV2	Telekabel UPC, T-Kabel Magyarorszag	Magyar Telekom, Invitel, Hungarotel, Tele2, Monortel, Emitel	
Iceland	RUV-TV, Stod2, Skjar1	Stöd 2, Sýn	Iceland Telecom	
Ireland	RTE1, RTE2, TG4, TV3	BSkyB, Magnet Networks, UPC Ireland	Eircom, BT Ireland, UPC, Magnet Networks, Digiweb	

	Major national broadcasters	Major national cable / sat operators	Major national telecos operators	Major national retailers
Italy	RAI, RTI	Sky Italia	Telecom Italia, Fastweb, Tiscali, Eutelia, Wind Telecommunicazioni	Mediaworld, La feltrinelli, Ricordi, Mondadori Multicenter, Fnac, Saturn, Messagerie Musicali
Latvia	LTV, LNT, TV3	Baltkom TV, Izzi Com SIA, Multicom AS	Lattelecom	
Lithuania	LTV, UAB Baltic Media, Achemos Grupe	Viasat, UAB Balticum TV	No national player	
Luxem-bourg	CLT-UFA, RTL Lëtzebuerg	No major operator	P&T Luxembourg	
Malta	PBS	Melitacable	No national player	
Nether-lands	NOS RTV, SBS Broadcasting, RTL Nederland	UPC Nederland, Essent, Casema, Canal Digital	KPN, tiscali Nederland, Versatel, Tele2, Lijbrandt, Zeelandnet	
Norway	NRK1, TVNorge	Canal Digital, Viasat	Telenor, Ivisjon, Salten Bredband	CDON AB, Free Record Shop, Platekompaniet, Elkjop, Home Entertainment, Scott Norge, Bonver, Coop Norge, Mix Scene 1
Poland	Telewizja Polska, Polsat, TVN, TV4	Aster City, Multimedia Polska, UPC, Vectra, Cyfra +, Cyfrowy Polsat, "N"	Telekomunikacja Polska, Telefonia Dialog	
Portugal	RTP, SIC, TVI	TV Cabo, Cabovisao, Bragatel	Portugal Telecom, Electricidade De Portugal	
Romania	TVR, Media Pro Internaional, TV Antena	HBO Romania	Romtelecom, Oger Telecom	
Slovakia	STV1, STV2, TV Marzika, TV JOJ, TA3	UPC, Satro, Digi TV	Slovak Telekom (controlled by Deutsche Telekom)	
Slovenia	RTV Slovenjia, Pop TV, Kanal A	UPC Telemach, Oiv	SIOL, T-2	
Spain	RTVE, Antena 3, Telecinco	Ono Digital +	Telefonica	ECI-Grandes Almacenes, carrefour, Fnac, Media Markt, Alcampo, Eroski

	Major national broadcasters	Major national cable / sat operators	Major national telco operators	Major national retailers
Sweden	Sveriges Television AB and Sveriges Utbildningsradio, TV4	UPC Sweden, Viasat, Kabelvision, Canal Digital	TeliaSonera, BoStream	CDON AB
Switzer-land	SRG SSR, SF, RTL, Sat.1, TSR, TSI 1	No major national operator	Swisscom, Cablecom	
United Kingdom	BBC1, ITV1, Channel 4	BSkyB, Virgin Media	BT, Virgin Media, Video Networks, Orange, Tiscali, Be Unlimited	

Sources: peacefulfish/MCG, NPA Conseil [191], IVF Yearbook 2007 [192]

Development of new content platforms

According to NPA Conseil[193], there were 142 VoD services in Europe in 2007. Four countries represent 50% of this supply: the Netherlands, France, Germany and the UK. Two countries do not have any VoD service: Luxembourg and Slovenia.

The development of video-on-demand follows different paths in the various European countries, depending on the development of the infrastructure and networks. Table 26 shows the different levels of technological development in Europe. Bulgaria, Cyprus, Czech Republic, Greece, Hungary, Latvia, Lithuania, Poland, Romania and Slovakia have under 20% broadband penetration. Most of other countries have between 20 and 50% broadband penetration. Eastern European networks are developing less rapidly than in Western or Nordic European countries and the development of competitive industrial players developing VoD or IPTV services is subsequently slower. That is why it is hard to develop an in-depth analysis of the industry in these countries at this moment in time, because the level of broadband access is the most important discriminating factor for the development of innovative video platforms. Digital distribution of content can only develop on a large scale, if there is sufficient penetration of devices as well as a mass market access to broadband and digital networks[194].

Moreover, there is a lack of information on Eastern European countries for specific topics such as the deployment of 3G services or the DVD penetration. Given the available facts and data, we will focus on some representative countries and try to analyse the country specifics, trends and business models characterising their industry.

France, Germany and the UK are the three leading countries for development of IPTV, VoD services and mobile television. The following part of the report will also focus on the Nordic countries (Denmark, Finland, Norway and Sweden) which present some common characteristics. The same players are involved in the market of the four Scandinavian countries, developing international business models.

[191] La vidéo à la demande en Europe, NPA conseil, Paris, 2007
[192] European Video Yearbook, International Video Federation (IVF), Brussels, 2007
[193] La vidéo à la demande en Europe, NPA conseil, Paris, 2007
[194] Interactive content and convergence, European commisson, Brussels, 2006

Table 26: Broadband, DVD, console penetration per households and 2.5/3G penetration per mobile lines in Europe

YEAR 2006	Rate of households with broadband connection	Rate of households with DVD player	Percentage of households with a console	Percentage 2.5/3G lines among all mobile lines
AT	36,4%	58,3%	18,0%	77,4%
BE	43,4%	62,4%	15,0%	77,0%
BG	5,0%	na	2,0%	na
CH	52,8%	73,9%	na	74,4%
CY	19,9%	na	24,0%	na
CZ	10,0%	29,9%	2,0%	na
DE	29,8%	70,3%	16,0%	74,8%
DK	56,7%	79,9%	26,0%	79,7%
EE	32,0%	na	4,0%	na
ES	33,7%	67,6%	na	75,0%
FI	50,7%	41,7%	26,0%	76,1%
FR	39,9%	64,3%	na	73,6%
GR	20,7%	40,8%	13,0%	69,8%
HU	11,0%	41,9%	7,0%	na
IE	26,5%	62,5%	33,0%	80,7%
IS	74,6%	84,7%	38,0%	na
IT	28,2%	73,6%	19,0%	77,7%
LI	na	na	na	na
LT	9,0%	na	3,0%	na
LU	29,2%	na	36,0%	na
LV	13,0%	na	3,0%	na
MT	79,8%	na	27,0%	na
NL	85,5%	79,2%	25,0%	76,4%
NO	50,0%	83,5%	29,0%	77,1%
PL	6,9%	26,0%	6,0%	na
PT	32,0%	63,4%	18,0%	73,7%
RO	28,6%	na	2,0%	na
SE	48,4%	67,6%	24,0%	78,6%
SI	44,0%	na	7,0%	na
SK	6,8%	na	8,0%	na
UK	44,3%	76,7%	36,0%	77,2%
MEDIA average	**35,0%**	**62,3%**	**17,3%**	**na**
EU15 average	**40,4%**	**64,7%**	**23,5%**	**76,3%**
EU27 average	**31,3%**	**48,7%**	**15,7%**	**na**

Sources: Eurostat, International Video Federation (IVF), European Audiovisual Observatory (OBS) and Mobile Entertainment Forum

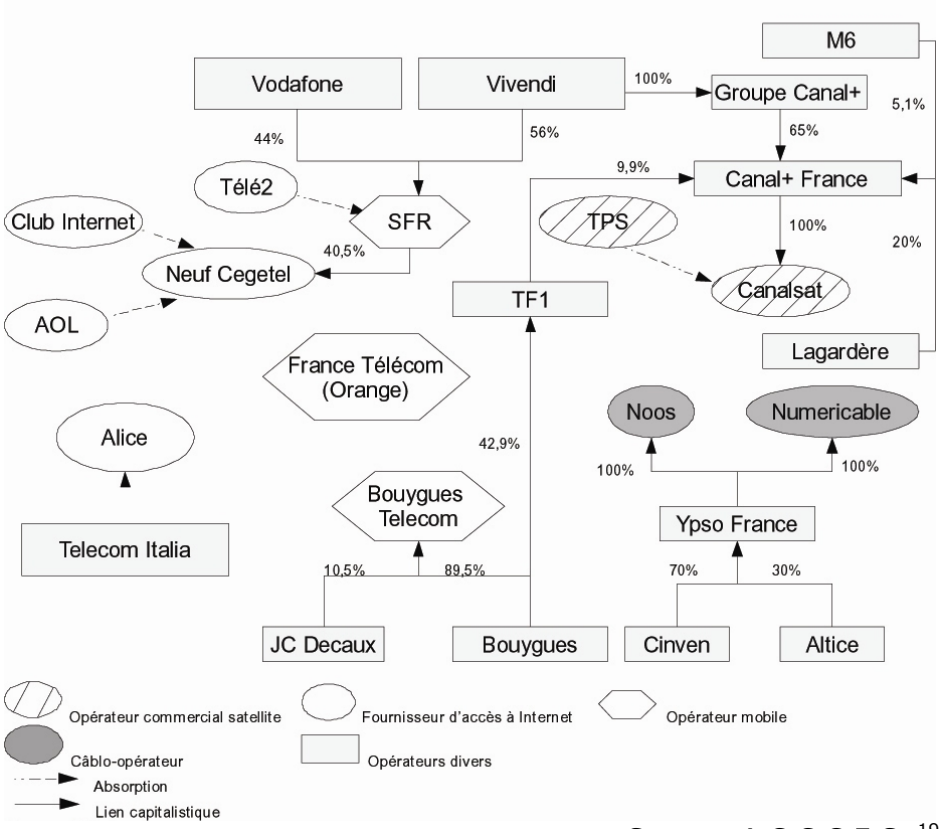
The Home Entertainment Industry in France

France is among the leaders in Europe in terms of the number of IPTV services. Before recent consolidations, there were 8 IPTV operators in France: TPS (France Telecom, Neuf Telecom, Alice), Canal Plus Le Bouquet (France Telecom, Free, Neuf), Free box (Free), Neuf TV (Neuf Telecom), Alice Box (Alice), MaLigne TV (France Telecom), Club Internet / T-Online France (Club Internet) and Cegetel. AOL France and Club Internet were acquired by Neuf Telecom. The French audiovisual landscape is characterised by the entrance of telecommunication operators on the television market, which tends to change the established business models. The French market has been driven by Free, which employed aggressive marketing strategies: In order to launch its IPTV service, Free upgraded France Telecom's line to ADSL 2 + and invested heavily in equipment, such as digital subscriber line (DSL) access multiplexers and video cards. In 2006, Free announced its plans to invest EUR 1 billion on a nationwide FITH rollout.

In this highly competitive market, especially with numerous multiple-play services, the various IPTV providers have to find the way to differentiate their offer from traditional pay-TV services. Thus, the three major IPTV operators, Free, France Telecom and Neuf Cegetel have introduced various value-added services (HD broadcast channels, Personal Video Recorder, digital terrestrial TV tuners, media centre capabilities…) to create a strong differentiation. This strategy seems to have been successful, compared with the relatively straightforward triple-play service offered by the cable operator Numéricable. For example, Free provides a "TV to PC" service, that is to say a media centre that allows transferring content from PC to TV or from TV to PC. Free was also the first to launch an HD IPTV service in 2006. Neuf Telecom provides a triple-play service and has upgraded its set-top box in 2006 to include digital recording and time-shift viewing, programme guide, voicemail… MaLigne TV, provided by the unified communication operator Orange, offers more than 200 channels, including premium channels as well as Video-on-Demand. The three first Internet providers offering IPTV services concentrate more than 90 % of the market share (Orange: 49%; Neuf Cegetel: 22%; Free: 20%).

Regarding pay-TV, 2007 saw a strong concentration process with the fusion of CanalSat and TPS to create the largest single pay-TV provider in France, CanalSatellite. In January 2008, the French newspaper Les Echos announced that France Telecom could launch its own satellite television service, by offering generalist channels, TNT channels and sports and movie channels created by Orange. This new service could rebuild a concurrent situation within the French pay-TV market. The cable sector also knew a concentration movement in 2007. France Telecom Cable, NC Numericable, UPC and Noos became one single brand, Numericable, controlled by Ypsos Holding. There is now a single cable platform and a single satellite platform in France (see Figure 14).

Figure 14: French media landscape



Source: A.C.C.C.E.S. [195]

France is also among the leading European countries by the number of platforms providing Video-on-Demand services. There are various kinds of player categories providing VoD services, including content producers (Universciné), broadcasters (TF1 Vision, Canal Play), content aggregators (Glowria, Vodeo TV), telecommunication operators (Alice, Club Internet, Free, Orange…) and cable operators (Noos Numericable). Broadcasters benefit from their favourable position on the rights market and supply VoD services including movies, series, documentary and catch-up TV services. Some broadcasters even created special platforms dedicated to their catch-up TV service, such as Arte, which launched the online platform Arte 7 +. Some platforms offer various types of content while other platforms have decided to specialise in certain types of content, such as Vodéo.tv (documentaries), Cinézime (independent movies) or Gong (animation).

The business models of various operators providing Internet access, telephony and IPTV services, are relatively similar. Their multiple-play offer usually costs 30 Euros month, including broadband Internet, unlimited telephone and a basic television offer with at least 40 channels. They also provide a certain number of innovative audiovisual functions, such as Personal Video Recorder, media centre software or VoD services. Traditional media companies are trying to diversify their activities to avoid the consumer's migration to digital. They have reinforced their digital services (e-TF1 and M6 Mobile), which currently represent more than 50 % of their revenues[196]. These new revenue sources allow them to reinvest in their core businesses, which are content production and distribution.

[195] Guide des chaînes numériques, A.C.C.C.e.S., Paris, Mars 2008
[196] Audiences et Stratégies des acteurs en ligne face aux acteurs traditionnels du marché de la diffusion des contenus, ineum consulting, Paris, 2006

Contrary to IPTV business models, VoD services use various economical models, from advertising-supported free VoD to subscription VoD.
Universciné, a VoD platform launched in 2007 by an association of independent French producers to promote independent movies, offers 300 films for a single price (4,99 €), and the possibility to buy movie "packs" (several movies at a time at a flatrate).
The broadcaster TF1 provides three methods of purchase/access to its 2 000 titles: rental VoD (1,99 € to 3,99 €), download-to-own without the possibility to burn the content (9,99 to 19,99 €) and the "universal pack", for 9,99 to 19,99 €, which enables downloading the movie and receiving the DVD in the mail.
Vodéo.tv, a VoD provider specialised in niche content, proposes both streaming rental for 1,99 € and download-to-own for 8,99 €. Like TF1, Vodéo will also send the DVD for 6 € more.

Within the Internet provider category, users can watch a new movie for 4,99 € with Alice's VoD service, other movies for 3,99 € and short programmes for 0,99 €. Free has a more developed catalogue and a wider offer, with 7 VoD services on its portal.
The cable operator Numericable proposes TF1's catalogues for exactly the same prices.
Endemol.fr proposes free video-on-demand of Endemol's programmes on its portal.

Table 27: VoD services in France

VoD service	Network	Catalogue	Content provider	Business model
Content aggregators, cultural products retailers, producers associations				
Cinézime	Internet	61 titles	Small independent producers	Rental Vod (4 €) Download-to-own VoD (16 €) Packs (5, 10, 20, 50 €)
Fnac VoD	Internet	Glowria's catalogue	Glowria	Rental VoD (0,99 to 4,99 €) Download-to-own VoD (8,99 to 12,99 €)
Glowria VoD	Internet & IPTV	1 000 titles	Family Films, Fip, Gaumont, La Fabrique de films, M6 Vidéo, Ocean Films, Pathé, Canal J, Studio Canal…	Rental VoD (2,99 to 4,99 €) Download-to-own VoD (6,99 to 15,99 €)
Imineo	Internet	2 100 titles	France Television	Download-to-own VoD (3,99 to 12,99 €)
Universcine.com	Internet	300 titles	French independent producers	Rental VoD (4,99 €) Packs (18,99 € / 4 films, 49,99 € / 11 films)
VirginMega Video	Internet & IPTV	1 200 titles	Studio Canal, Pathé, TF1, France Television, UGC, Arte, Wild Side…	Rental VoD (3,99 to 4,99 €) Download-to-own VoD (10 to 18 €)
Vodeo.tv	Internet	2 800 titles	Producers and TV broadcasters	Rental VoD (1 to 3,99 €) Download-to-own Vod (1,99 to 8,99 €) SVoD Packs FoD
Vidéo à la demande des éditions Montparnasse	Internet	79 titles	RKO	Rental VoD (5 €)
Archives pour tous (INA)	Internet		INA's archives	Rental, download-to-own VoD and FoD

VoD service	Network	Catalogue	Content provider	Business model
Telecommunication operators				
Mes vidéos à la carte (Alice)	IPTV	500 titles	VirginMega.fr	Rental VoD (0,99 to 4,99 €)
Club Video (Club Internet)	IPTV	1 000 titles	Studio Canal, TF1, France Télévision, Gaumont, Cartoon Network, Canal J…	Rental VoD (2,99 to 4,99 €) SVoD (4,99 €)
Free VoD	IPTV	943 titles	Canal Play	Rental VoD (2,99 to 4,99 €) Packs SVoD iConcert (5,99 €)
Neuf VoD	IPTV	1 000 titles	Glowria and TF1 Vision	Rental VoD (2,99 to 4,99 €)
24/24 (Orange)	IPTV	800 titles	TF1, France Télévisions, Arte, Zooloo Kids, Warner Bros, 20th Century Fox…	Rental VoD (0,99 to 3,99 €) SVoD (4,99 €)
Broadcasters				
TF1 Vision	Internet & IPTV	2 000 titles		Rental VoD (1,99 to 3,99 €) Download-to-own and download-to-burn VoD ((3,99 to 19,99 €) FoD
France tvod (France Télévision)	Internet	950 titles		Rental VoD (3,99 €) Download-to-own (9,99 to 12,99 €) Packs FoD
CanalPlay (Canal +)	Internet & IPTV	2 000 titles		Rental VoD (1,49 to 4,99 €)
ArteVoD	Internet	600 titles		Rental VoD (0,99 to 3,99 €) FoD
M6 Vidéo	Internet & IPTV	350 titles		Rental VoD (0,99 to 4,49 €) FoD

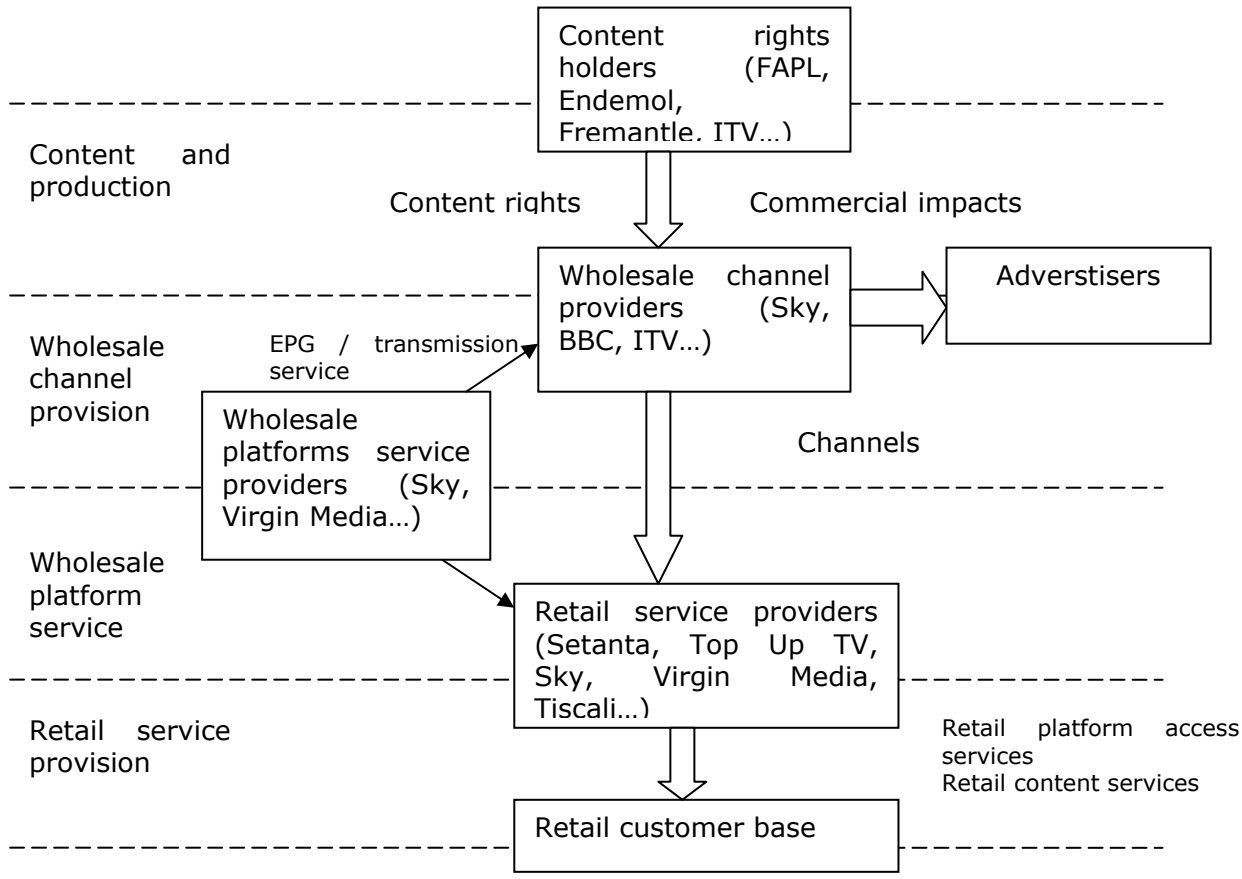
Source: NPA Conseil[197]

[197] La vidéo à la demande en Europe, NPA conseil, Paris, 2007

The Home Entertainment Industry in the UK

The supply chain of UK's broadcasting industry can be broken down into four main layers (see Figure 15): content and production companies that sell content to channel providers, wholesale channel providers that buy rights and aggregate content into channels, retail service providers that buy channels from wholesale channel providers, and wholesale platform service providers.

Figure 15: UK's broadcasting supply chain



Source: Ofcom [198]

In practice, a large number of companies in the broadcasting industry are vertically integrated. For example, Setanta is involved in both wholesale channels and retail services, Sky is vertically integrated between content generation, wholesale channels, wholesale platform services and retail services.

There are five IPTV services in the UK, provided by the companies Videonetworks, Kingston Communications, BT, Orange and Tiscali. Tiscali's strategy has been analysed by the Ofcom[199]: in 2004, Tiscali launched the first major digital offer after building strategic relationships with service providers, such as LoveFilm and CinemaNow. Tiscali has also been seeking to buy content to create its own download-to-PC service (Tiscali Cinema Club), based on independent, specialised, and short movies as VoD content, rather than studio titles. In July 2005, Tiscali offered the UK independent film Dogwood for £ 2,99, as a part of a simultaneous theatrical exhibition and DVD launch. Tiscali was the first in the UK to provide a download-to-own service on a digital retail model with

[198] Pay-TV market investigation, Ofcom, London, 2007
[199] Pay-TV market investigation, Ofcom, London, 2007

"The road to Guantanamo" in 2006. According to the Ofcom, Tiscali pioneered a new business model. Finally, the main part of Tiscali's revenues doesn't come from independent movies but from business or travel content: "Tiscali does not believe that film VoD is a viable business model on its own, but only as a supplementary offering."[200]

The recent dispute between Sky and Virgin highlighted the link between content and platform. Until February 2007, Sky provided six basic-tier channels (Sky One, Sky two, Sky News, Sky Travel, Sky travel extra and Sky Sports News) to Virgin Media on a wholesale basis until Sky stopped supplying these channels. Virgin Media's customer losses were an estimated 40 000 and Sky's impact on operating profits was estimated at £ 15 millions per quarter[201].

The VoD services sector is characterised by a multiplicity of different sized players, coming from various sectors. HomeChoice and FilmFlex lead the market. FilmFlex is a content producer and has an exclusive partnership with Virgin Media in the UK. It seeks to extend its VoD service to other European countries. LoveFilm's core business was content aggregation and online DVD rental. This company is owned by four "venture enterprises", Arts Alliance Media, Benchmark Capital, Esprit Capital Partners and Index Ventures. LoveFilm recently decided to experiment a new strategy by launching a VoD service sponsored by Volkswagen. The offer consists in independent productions, financed by advertising messages.
With respect to broadcaster VoD services, there is much anticipation in the media industry regarding the joint venture between Channel 4, BBC and ITV, which could launch a single VoD platform under the name "Kangaroo" [202].
Telecommunication and cable operators are also present within the VoD industry. Video Networks and Tiscali launched HomeChoice, AOL launched AOL Film Download and historical telecommunication operator BT launched BT Vision, using pay-per-view and subscription systems.

iTunes has just launched its iTunes Movie Store in the UK, confirming a rumor often heard in recent months. iTunes offers more than 700 feature films for rental or purchase. iTunes has signed aggrements with 20th Century Fox, Disney, MGM, Sony Paramount, Warner Bros. and Lionsgate UK. New releases cost $21,40 for download-to-own and $6,80 to rent. Older films cost $13,60 to buy and $4,85 to rent. Content will be available for PC, Mac, iPod, iPhone and Apple TV.

[200] Pay-TV market investigation, Ofcom, London, 2007
[201] Pay-TV market investigation, Ofcom, London, 2007
[202] Digital Entertainment Survey 2008, Entertainment Media Research, Wiggin, London, 2008

Table 28: VoD services in the UK

VoD service	Network	Catalogue	Content provider	Business model
Sky Anytime (BskyB)	Internet & satellite	1 400 titles	American Majors	Rental Vod Download-to-own VoD Packs, Svod
BT Vision	Internet & IPTV		American Majors, BBC, Viacom…	Rental VoD Download-to-own VoD SVoD
4oD	Internet, IPTV & cable	240 titles on catch TV 40 titles on VoD	Content producers and BT Vision	Rental VoD Download-to-own VoD fVoD catch-up TV SVoD
Fivedownload (Channel 5)	Internet	series		Rental VoD
HomeChoice (Tiscali)	IPTV	1 000 titles	Tiscali, American majors, dreamworks	Rental VoD SVoD fVoD
VoD service	**Network**	**Catalogue**	**Content provider**	**Business model**
World Cinema Online	Internet	40 titles		Rental VoD Download-to-own VoD
LoveFilm	Internet	500 titles	Blue Dolphin, Celluloid Dreams, Momentum, Warner Bross, Contender Films, Tartan Video, Icon…)	Rental VoD Download-to-own Vod
Top Up TV Anytime		100 titles	Universal, TCM, UK TV Gold, Discovery, Comdey, MTV…	SVoD
FilmFlex	Cable	600 titles	American majors, Pathé, Icon	Rental VoD
Virgin TV on Demand	Cable			

Source: NPA Conseil[203]

[203] La vidéo à la demande en Europe, NPA conseil, Paris, 2007

The Home Entertainment Industry in Germany

There are 90 cable operators, 2 satellite packagers, 3 IPTV packagers and 446 channels (47 public, 399 private) in Germany. The main television companies are ProSiebenSat.1 Group, ZDF, RTL Television GmbH, WDR (Westdeutscher Rundfunk), Premiere AG Konzern, SWR (Südwest Rundfunk), NDR (Norddeutscher Rundfunk) and BR (Bayerischer Rundfunk). There are no SMEs in the leading linear television companies. [204]
The top-level German TV production companies are Colonia Media, Bavaria Film, Constantin Entertainment, Endemol Deustchland, MME (Me, Myself & Eye) Plazamedia & Film Production, Grundy UFA TV Production, Studio Hamburg Production and Neue deutsche Filmgesellschaft. There are numerous SMEs involved in the content production industry, coming after these eight leading companies, whose operating revenues are over 50 000 €, including Brainpool TV, Innova Film, Raab TV Production, Spiegel TV, or Ziegler Film. [205]
We cannot consider that the linear TV market is concentrated as the five market leaders' turnover is under 50%.

Six large companies lead the online DVD rental market: Amazon, Netleih, Verleih-shop, Vividi and Dirigent.

Competition between cable operators and telecommunication operators has increased dramatically. Consumers have to choose between cable or phone access. Cable operators were the first to drive IPTV's development in 2005, through Kabel Deutschland's offer. Telecommunication operators reacted in 2006 by launching their own IPTV services. There were two IPTV services in 2006, both provided by telecommunication operators Deutsche Telecom (T-Home) and HanseNet, Telecom Italia's subsidiary (AliceHome TV). Alicehome TV is delivered via ADSL 2 + and offers 100 channels and more than 600 on-demand programmes. Deutsche Telecom's triple-play was launched in October 2006, offering 100 free and pay channels, VoD, Digital Video Recording and live HDTV through a set-top box.

The broadband sector has gotten more concentrated in Europe in general, but not in Germany, where the first three broadband providers has experienced a fall in subscribers since 2004. The largest player, Deutsche Telecom, has seen a significant erosion of its market share. However, Deutsche Telekom is still by far the largest DSL provider in Germany. The main cable operators are Kabel Deutschland, Kabel Baden Württemberg and The Ish and Lesy Companies, which belong to Unity Media. They have heavily invested in upgrading their networks to provide triple-play services to their customers. This offer makes them tough competition for DSL providers. The pay-TV landscape has recently undergone dramatic changes in Germany, when Bundesliga's rights for TV transmission were acquired by Deutsche Telekom Arena, cable conglomerate Unity Media's subsidiary. For the first time, traditional broadcasters such as Premiere didn't control football rights anymore, which were rather controlled by network providers with strong economical and financial power. [206]

There are 12 main VoD services, one provided by a content producer (Warner/Arvato), three by broadcasters (ProSiebenSat.1 Group, RTL, Premiere und ZDF), three by content aggregators (CLA, 4Firends, Sat, Absolut Medien) and five by telecommunication operators (T-Online, Arcor, Alcie, EweTel and United Internet / 1 & 1).

[204] Yearbook 2007 Vol. 1, André Lange, European Audiovisual Observatory (OBS), Strasbourg, 2007
[205] Yearbook 2007 Vol. 1, André Lange, European Audiovisual Observatory (OBS), Strasbourg, 2007
[206] Factbook 2007, Association of Commercial Television in Europe (ACT), Brussels, 2007

Five key players lead the mobile television sector: Alphatel, debitel, Mobilcom, Simply and Victorvox. They are content aggregators and tend to provide B2B services. One of the companies driving the mobile TV industry is the independent start-up MFD (Mobiles Fernsehen Deutschland). In 2006, MFD launched its mobile TV service nationwide under the name Watcha, providing 6 national and international channels: ARD, ZDF, N24, Pro7, Sat1 mobile, MTV Music and BigFM2SEE. MFD's distribution partners are debitel, Mobilcom and Die Simply Communication[207].

The leading business model used by VoD providers is rental/pay VoD. In2Movies, a VoD service provided by the joint venture Warner / Arvato offers a download-to-own system, from 6 to 14,99 €. ProSiebenSat.1's VoD service Maxdome offers a choice between three business models: pay-per-view (0,99 to 3,99 €), subscription VoD (movie packet for 9,99 €, a comedy packet for 4,99 €, Desperate Housewives Season Pass for 24,99 €…) and free VoD, which allows advertisers to choose between the Sponsoring Premium Content Package and the Sponsoring Movie Flat Package.
T-Online supplies its VoD service over the Internet and over IPTV for 1,99 to 3,99 €. Arcor, the first company to launch a VoD service, made its service available to all users, even customers from other DSL providers.

Table 29: VoD services in Germany

VoD service	Network	Catalogue	Content provider	Business model
Services providers				
In2Movies	Internet	1 020 titles	Warner	Download-to-own VoD
Medionbox	Internet	61 titles	Warner	Download-to-own VoD
Broadcasters				
Maxdome (ProSiebenSat.1)	Internet & IPTV	445 titles		
RTL Now	Internet	Series		
Premiere Direkt +	Satellite	30 films		
Premiere Internet TV	Internet	One4Movie's catalogue + Champions League	RKO	
One4Movie	Internet	625 titles		
MyVoD	Internet	27 films		
absolut on demand	Internet	25 titles		
Telecommunication operators				
T-Online Vision (Deutsche Telekom)	Internet & IPTV	1329 titles	Fow, Universal, Dreamworks, MGM, Paramount, Warner Bross, CLA	Rental VoD FoD
Maxdome (1&1 Internet)	IPTV	445 titles		Rental VoD SVoD fVoD
Alice Home TV Movies	IPTV	600 films		Rental VoD
Arcor VoD	Internet	459 titles		Rental VoD

Source: NPA Conseil[208]

[207] Factbook 2007, Association of Commercial Television in Europe (ACT), Brussels, 2007
[208] La vidéo à la demande en Europe, NPA conseil, Paris, 2007

Spain

There are five IPTV services in Spain. The incumbent telecommunication operator Telefonica, provides an IPTV service (Imagenio) through its own DSL network via a set-top box. Wanadoo and Jazztel, an alternative telecommunication operator, also offer IPTV services. Jazztel uses ADSL 2+ and offers 30 channels. Two other players offer IPTV services: Auna and Superbanda.net. Jazztel and Telefonica also offer VoD services. Telefonica's VoD service, Imagenio Videoclub, is available through IPTV or over the Internet. Imagenio Videoclub uses three different business models from subscription VoD to free VoD, and offers 610 titles. The content aggregator MXP Digital offers 6 000 titles to own or rent through its VoD service Mediaxpress. MXP digital's core business is online DVD rental. The cable operator ONO also provides a VoD service, using free, pay-per-view and subscription business models.

Table 30: VoD services in Spain

VoD service	Network	Catalogue	Business model
Imagenio-Videoclub (Telefonica)	IPTV	610 titles	Rental VoD SVoD fVoD
Orange Videoclub (France Telecom de Espana)	IPTV	119 titles	Rental VoD fVoD
Jazztellia Videoclub (Jazz Telecom)	IPTV	320 titles	Rental VoD SVoD fVoD
MXP Digital	Internet	164 titles	Rental VoD Download-to-Own VoD
Accine	Internet	320 titles	Rental VoD

Source: NPA Conseil[209]

[209] La vidéo à la demande en Europe, NPA conseil, Paris, 2007

The Home Entertainment Industry in Italy

There are three IPTV services in Italy: FastWeb TV, Alice Home TV and Tiscali. The pioneer Fastweb has started to provide triple-play services including IPTV in 2001. The IPTV offer includes free-to-air and satellite channels, as well as more than 5 000 VoD titles. Telecom Italia also offers triple-play services, but only since 2006. The two telecommunication operators, Fastweb and Telecom Italia, also lead the Italian VoD market.

The public broadcaster, RAI, launched in association with FastWeb a free catch-up TV service, Rai Click. More than 1 500 titles coming from RaiUno, RaiDue and RaiTre are available for free without advertising.

Alice provides two VoD services, one over the Internet (Rosso Alice) and one on IPTV (Alice Home TV). The movies are available for 1,99 to 2,99 € through a pay-per-view or a prepaid card system. This system enables the user to give credit to someone else, as a gift for example.

Tiscalicineclub proposes free and pay programmes, available in streaming, rental or download-to-own systems.

Wind Telcommunicazioni launched a VoD platform with free user-generated content.

Table 31: VoD services in Italy

VoD service	Network	Catalogue	Content provider	Business model
Rai Click	Internet & IPTV	120 films 1 500 television programmes	Rai Cinema, RaiUno, RaiDue, RaiTre	Rental VoD SVoD fVoD
Film is Now (Eutelia)	Internet	100 films	Warner Home Video	Download-to-own VoD
Rosso Alice (Telecom Italia)	Internet	200 films	Sky, Paramount Pictures, Warner Bross	Rental VoD SVoD fVoD Packs
Alice Home TV (Telecom Italia)	IPTV	315 films	Sky, Paramount Pictures, Warner Bross	Rental VoD SVoD
OnTV & Rai Click (FastWeb)	IPTV	2 000 titles	Universal, Dreamworks, Sony, Mikado, Fox et Medusa, Rai Cinema, RaiUno, RaiDue, Raitre	Rental VoD fVoD SVoD
Libero Film	Internet	UGC	UGC	Rental VoD fVoD
Tiscali CineClub	Internet	75 films	Mikado, Bim, Universal, Warner, BBC, Canale Live	Rental VoD Download-to-own VoD fVoD without advertising

Source: NPA Conseil[210]

[210] La vidéo à la demande en Europe, NPA conseil, Paris, 2007

The Home Entertainment Industry in the Nordic countries

The home entertainment industry in Denmark, Finland, Norway and Sweden, can be analysed as a single subtopic, because they have a lot of common characteristics. This region can also be seen as a pioneer in experimenting with the concept of an international video business. Some players, the majority coming from Sweden, have decided to launch services in all four countries, one after the other, to create economies of scale and a larger market to exploit their content and their services. That is the case, for example, of the leading VoD provider SF Anytime.

The VoD market is relatively developed in Sweden, led by SF Anytime, which is present on the entire Nordic market. SF Anytime is a subsidiary of the communication conglomerate Bonnier. Sf Anytime was launched in Sweden in 2002, in Norway in 2003, in Denmark in 2004 and in Finland in 2005. Its services are available over the Internet and on IPTV via the set-top boxes provided by the various telecommunication partners of SF Anytime. SF Anytime buys content rights for the four countries and provides subtitles in all four languages. In Sweden, SF Anytime titles are available for 0,99 to 5 €, for 1,20 to 5,20 € in Denmark, for 1 to 4,5 € in Finland and for 1,1 to 6,6 € in Norway. Most of the VoD services launched in Sweden by telecommunication operators, such as Fast TV AB, Bredbandsbolaget or TeliaSonera, have signed a deal with SF Anytime, which shares its catalogue with them. It is interesting to note here the fact that Nordic audiences are comfortable with original version content with subtitles, which allows content owners and operators an economy of scale across this multiregion. Dubbing is more costly.

Film2Home is the second leading VoD player within the Nordic market. Its VoD services were launched in Sweden in 2004, in Norway in 2005, in Finland in 2006 and in Denmark in 2007. 800 titles are available for rental VoD (between 1,66 and 4,32 €) and 400 are available for download-to-own VoD (between 8,7 and 15,4 €).

The content aggregator Live Networks, partly controlled by the financial Sovereign Group, also provides VoD services in the four countries.

Denmark

The broadcaster TV2, in association with Nordisk Film, launched Sputnik, which is a rental VoD service and offers the possibility to stream movies. The telecommunication operator FastTV.net launched FastTV Biograph on IPTV and the cable operator TDC Kabel TV provides a VoD service under the name Selectro Cinema.

Table 32: VoD services in Denmark

VoD service	Network	Catalogue	Content provider	Business model
SF Anytime (Bonnier Entrtainment)	Internet & IPTV	850 titles	American majors (Warner Bross, 20th Century Fox, Regency) and local producers (Svensk, Filmindustri, Scanbox, Sandrew, Nonstop)	Rental VoD
Live Networks	Internet			Rental VoD
Sputnik Film (TV2)	Internet	200 titles	Nordisk Film, Sputnik Archive	Rental VoD SVoD for television programmes
Fast TV Biograf	IPTV	SF Anytime		Rental VoD

VoD service	Network	Catalogue	Content provider	Business model
CDON.com	Internet	325 titles	Scanbox, Sonet, Pan Vision, Maxs, Nobeo Entertainment	Rental VoD
TDC Film	IPTV		Sputnik Film, C More	Rental VoD
Selector Cinema (TDC Kabel)	Cable		Sputnik Film, C More	Rental VoD

Source: NPA Conseil[211]

Finland

There are four IPTV services in Finland: Maxinetti TV (Maxistat), Aland TV (Alands Datakommunikations), Canal Digital IP-TV (Canal Digital) and Dann TV.

The VoD market is mostly controlled by broadcasters and DSL providers. The content aggregator Film2Home AB launched its services with rental and download-to-own options. The telecommunication operators Sonera Finland and Elisa Finland both provide SF Anytime services.

Table 33: VoD services in Finland

VoD service	Network	Catalogue	Content provider	Business model
SF Anytime (Bonnier Entrtainment)	Internet & IPTV	850 titles	American majors (Warner Bross, 20th Century Fox, Regency) and local producers (Svensk, Filmindustri, Scanbox, Sandrew, Nonstop)	Rental VoD
Live Networks	Internet			Rental VoD
Film2Home	Internet	800 titles	Warner and Universal + local producers	Rental VoD Download-to-own VoD
Viihdekaista - Tilausvideot (SF Anytime)	Internet & IPTV	SF Anytime		Rental VoD
MTV3 Anytime	Internet	SF Anytime, MTV3		Rental VoD
Sonera Oy (SF Anytime)	Internet	SF Anytime		Rental VoD

Source: NPA Conseil[212]

Norway

The non linear television market is also dominated by two Swedish content aggregators, Sf Anytime and Live Networks, both reselling their services to Internet providers. Many VoD offers are developed in Norway. Norgedfilm and Norwegian Film Institute offer a VoD service, FilmArkivet, with 900 titles, 500 movies and 400 coming from Norwegian producers. Content is available in streaming or download, for 5,53 €. This service is developing open source software to make VoD content available to Mac and Linux users. FilmArkivet is in the process of developing partnerships, especially in Denmark where the service will soon be available with films from the Danish film archive.

[211] La vidéo à la demande en Europe, NPA conseil, Paris, 2007
[212] La vidéo à la demande en Europe, NPA conseil, Paris, 2007

Table 34: VoD services in Norway

VoD service	Network	Catalogue	Content provider	Business model
SF Anytime (Bonnier Entrtainment)	Internet & IPTV	850 titles	American majors (Warner Bross, 20th Century Fox, Regency) and local producers (Svensk, Filmindustri, Scanbox, Sandrew, Nonstop)	Rental VoD
Live Networks	Internet			Rental VoD
Bredbandsfilm (CDON)	Internet	325 titles	Scanbox, Sonet, Pan Vision, Maxs, Nobeo Entertainment	Rental VoD
Film Arkivet	Internet	900 titles	Norsk FilmInstitutt's archive	Rental VoD
Film2Home	Internet		Warner and Universal + local producers	Rental VoD Download-to-own VoD
Filmleie	IPTV	SF Anytime		Rental VoD
iCanal Film (Telenor)	Internet	SF Anytime and FilmArkivet		Rental VoD
Filmoversikt	IPTV		SF Anytime and SandrewMetronome	Rental VoD

Source: NPA Conseil[213]

Sweden

Theree are three main multiple-play providers in Sweden: Bredbandsbolaget offersover 44 live TV channels and VoD services, the incumbent TeliaSonera offers a multiple-play service including video, voice (fixed and mobile) and data, and FastTV offers Internet access and broadband television services including 50 digital channels and VoD.

The six leading IPTV providers are Sollentuna TV, Viasat (B2), Telia Digital TV (TeliaSonera), FastTV, Varberg Digital TV and Canal Digital. Canal Digital already leads the satellite and cable market, and has been quick to recognise the potential of IPTV in providing every individual a personalised TV offering. [214]

Table 35: VoD services in Sweden

VoD service	Network	Catalogue	Content provider	Business model
SF Anytime (Bonnier Entrtainment)	Internet & IPTV	850 titles	American majors (Warner Bross, 20th Century Fox, Regency) and local producers (Svensk, Filmindustri, Scanbox, Sandrew, Nonstop)	Rental VoD
Live Networks	Internet			Rental VoD
Cinema One	Internet	80 films		Rental VoD
CDON.com	Internet	325 titles	Scanbox, Sonet, Pan Vision, Maxs, Nobeo Entertainment	Rental VoD
Film2Home	Internet & IPTV		Warner and Universal + local producers	Rental VoD
Home TV	Internet		Warner Bross and local producers	Rental VoD

Source: NPA Conseil[215]

[213] La vidéo à la demande en Europe, NPA conseil, Paris, 2007
[214] IPTV: Market developments and regulatory treatment, Organisation for Economic Co-operation and Development (OECD), Paris, 2007
[215] La vidéo à la demande en Europe, NPA conseil, Paris, 2007

D. Forms of media usage of home entertainment in Europe

This section aims to quantify media usage in Europe, by studying population segments based on age, sex, nationality, within the different sectors of the home entertainment industry. By doing so, the consultant hopes to provide a snapshot of who European media consumers are, what they want to consume, and how.

Preliminary note

The field of home entertainment usage is the object of a rich but heterogeneous literature. A multitude of articles are regularly published in the general and specialised press, approaching the subject from very different standpoints (sociological, psychological – above all when it comes to games – economical, etc.). Surveys are also common but usually focus on one specific sector (games / TV / Web 2.0, etc.) and/or one specific country – media access being one of the rare subjects on which Europe-wide surveys are available. Studies are less abundant and rarely have a European dimension. Different chronological boundaries used for the various available surveys represent a further obstacle for comparison.
For these reasons, in this section of our study dedicated to the forms of media usage, not all sectors and countries within the scope of our study will be treated with same breadth and depth of analysis.

Access to media

Key findings

- Almost all European households have a television, of which an overwhelming majority a standard television (92%) while only 1 out of 5 have a wide screen
- Terrestrial television remains the main means of transmission (47%), 35% of EU27 households use cable television networks and 21% receive satellite TV. Digital terrestrial television is used by 7% of EU27 households (2006).
- In 2007, 54% of European households (EU 27) were equipped with Internet access[216] and 1 out of 2 Europeans regularly uses the Internet[217] (once a week)
- 8 out of 10 Europeans have a mobile phone and the penetration rate of mobile telephony seems to be directly proportional to the households and the city size and prepaid cards is the most frequent agreement

Access to television (cable, satellite, digital terrestrial)

Nearly all European households have a television (EU 27/EU 25: 97%)[218]. An overwhelming majority of households still has a standard television (92%). The share of households owning a wide-screen television remains stable (21%), although significant increases are observed mainly in older member states (+6 in Finland and Italy, +5 in the Netherlands, Denmark, Austria and Spain).

On average, terrestrial remains the main means of reception but we can observe a decrease in its use (EU27: 45%, EU25: 47% -3 points). 35% of the EU27 households use cable television networks and 21% a satellite TV. Digital terrestrial television is used by 7% of EU27 households.

[216] Eurostat 2006 and 2007.
[217] Ibidem.
[218] Eurobarometer, *E-Communications Household survey*, The European commission, April 2007.

However, an analysis by country reveals that the way European households receive television differs strongly between countries: at the extremes one can observe that 99% of Greek households receive television via an aerial, more than 90% of Dutch and Belgian households via cable and 42% of German households via satellite.

Internet access equipment

In 2007, 54% of European households (EU 27) were equipped with Internet access[219]. Bulgaria accounts for the lowest percentage rate (19%) whereas Iceland accounts for the highest (84%). In the five big countries, Germany stands at the highest position with 71% of households equipped with Internet access, followed by the United Kingdom (67%), France (49%), Spain (45%) and Italy (43%). Among the low production capacity countries, Northern Europe is the best equipped: Finland, Denmark, Sweden and Norway are equipped at a rate between 69% and 79%. Belgium, Luxembourg and the Netherlands have a strong percentage of Internet access as well. On the contrary, most Central and Eastern European countries have less than 40% of equipped households, with the only exceptions being Slovakia (46%) and Slovenia (58%). The Baltic countries' equipment rate goes from 44% (Lithuania) to 53% (Estonia).

Use of the Internet

In the same year, 51% of Europeans regularly used the Internet[220] (that is to say, that 51% of Europeans use the Internet once a week on average). Iceland keeps the highest usage rate (86%) and the Nordic countries globally show a remarkable rate of Internet use. Among the "big five", Germany (64%) and the United Kingdom (65%) are the countries where the Internet is used by more than 60% of the population, whereas 57% of French citizens, 44% of Spanish and 34% of Italian citizens have regular access to the Net.

Broadband access

When considering broadband access[221], the panorama changes: two of the five big countries, Italy and Spain, can be included in the countries with lower broadband penetration rates. The Northern European countries show the best rates along with Belgium, Luxembourg, Slovakia, Greece, and Hungary.

Computer skills

Northern European countries (Finland, Denmark, Norway and Iceland in particular) are also the countries where computer skills are the most developed[222], along with Luxembourg, Austria and the Netherlands. In these countries, between 32% and 39% of the population has well-developed computer skills. In Europe (EU 27) 23% of the population on average have equal skill levels.

Mobile telephony usage can be apprehended using the number of mobile phones per person and the annual subscriptions to mobile providers per country.

Number of mobile phones

In Europe (EU 27) 81% of the population have at least one mobile phone[223] while at the same time more and more households are giving up landlines. Consequently, the share of 'mobile-only' households is rising (EU 27: 22%, EU 25: 22%, +4 points since winter

[219] Eurostat 2006 and 2007.
[220] Ibidem.
[221] Ibidem.
[222] Ibidem.
[223] Eurobarometer, *E-Communications Household survey*, The European commission, April 2007.

2006) while the share of households having at least one landline decreases (EU 27: 72%, EU 25: 73%, -5 points).

However, the type of phone access varies significantly from country to country: Sweden, Malta and the Netherlands have the highest numbers of households with dual-access; the majority of households in Finland and the Czech Republic rely only on mobile telephony while relatively high shares of households in Bulgaria (28%) and Germany benefit only from fixed telephony.

In Finland, the Netherlands and Sweden the mobile penetration rate exceeds 90% while in the newest member states, Bulgaria and Romania, the rate remains relatively low at 57% and 63% respectively. This corresponds to the division between the new and old member states: while the mobile penetration rate is 82% within the EU15, it is 73% within the new member states[224].

The penetration rate of mobile telephony seems to be directly correlated to the households and city size: the bigger the household and/or the city, the higher the penetration rate[225].

Number of subscriptions to mobile providers

The majority of European households uses mobile phones via a pre-paid arrangement (37%), followed by 30% having a contract and 15% having both.

The top five countries in terms of percentage of the population with at least one mobile telephone subscription are: the UK (84,1%), Austria (83,7%), Sweden (82%), the Netherlands (79,9%) and Finland (79,3%), while lagging behind are Switzerland (76,9%), Belgium (76,5%), Portugal (75,2%), Spain (74,1%) and France, with a surprising 66,9%, the lowest penetration rate in Europe (according to available data).

[224] Ibidem.
[225] Eurobarometer, *E-Communications Household survey*, The European Commission, April 2007.

TV, DVD, VoD and video community networks: new forms of video consumption

The European video content market is evolving due to the increasing number of ways in which to access audiovisual content. Consumption is becoming more and more interactive: viewers can choose what, when, how, and for how long they want to consume. Viewers, who as recently as fifteen years ago, had a choice between three or four television channels, can now choose between many hundreds of conventional television services as well as a range of new ways of accessing content – whether via broadband, in high definition TV, on a mobile device, or on individual demand.

Key findings

- In 2006, television is still the central place for home entertainment consumption. People spend between two and three times longer watching TV than they spend on the Internet. Today, 95% of video content viewing in Europe is traditional "linear" television. However, this is set to change, as more and more non-linear options are becoming available.
- After TV, watching movies is the second most popular activity (cinemas, DVD, pay-per-view services).
- Over the last 4 years, the European DVD market has strongly declined as consuming video content online quickly became a mainstream activity, and more homes gained broadband access and larger bandwidth.
- Free access to audiovisual content is also one of the most attractive features of video social networks and explains the success of catch-up TV.
- Multi-platform distribution and the emerging concept of the "digital home"[226], built around the demand for content portability and interconnecting devices, are also changing video usage.

Forms of video consumption: the digital home

A survey realised by Qualiquanti for the CNC in 2007[227] analysed the new forms of video consumption. The following were identified:

- *A broadening of the offer through new platforms*: when they don't like the prime time film, spectators prefer surfing the Internet and watching clips and user-generated content, passing from one website to another;
- *The evolution of consumption modes from "offer-driven TV" to "demand-driven TV"* (imposed rhythm *versus* consumption "à la carte"). The catch-up TV system for instance makes it possible to choose the moment of viewing even for traditional scheduled TV offerings;
- *The utilisation of the Internet as a source of audiovisual content* (the Web as a big hard drive)

Not only can users choose between different media but they have also developed the habit of connecting different tools together, therefore creating a multi-platform distribution environment enhancing the advantages of each medium. The concept of the "digital home"[228] is emerging, built around the demand for content portability and

[226] IDATE Foundation (under the direction of Hélène Ollivier and Didier Pouillot), *DigiWorld 2007, The digital world's challenges*, 2007, p. 112.
[227] Qualiquanti for the Centre National de la Cinématographie (CNC), *Les nouvelles formes de consommation des images : TNT, TVIP, VOD, sites de partage, piraterie…* , 2007.
[228] IDATE Foundation (under the direction of Hélène Ollivier and Didier Pouillot), *DigiWorld 2007, The digital world's challenges*, 2007, p. 112.

interconnecting devices. Digitised and electronically distributed content, the growing number of content storage solutions, the personalisation of content consumption and content portability are the factors that shape this concept. The "user-centric digital home" is a user-built, homemade environment, where consumers have to undertake complex procedures to manage their content, by developing a base of personal multimedia terminals.

Lasting prominence of television

Television is still the central place for home entertainment consumption[229]. During the MIP TV conferences in 2008, David Brennan (Thinkbox) drew attention to the fact that despite forecasts that people would desert TV for the Internet, people spend between two and three times longer watching TV than they spend on the Internet[230].

A study conducted by Bain & Company in 2007 also seems to confirm the lasting power of television in Europe[231]. This study affirms that today, 95% of video content viewing in Europe is made on traditional "linear" television. On average, European consumers view more than 1,200 hours of television per year, which represents an increase of 1% a year from 2001 to 2005. After TV, watching movies is the second most popular activity (cinemas, DVD, pay-per-view services).
Other emerging video content viewing options (UGC and mobile video) are among the fastest growing options but the number of users is still small[232].

Within Europe, viewing habits are extremely varied: watchers in the UK and France are logging about 24 hours per week; in countries like Austria and Switzerland, viewers consume closer to 19 hours per week. However, Europeans still watch much less TV than their US counterparts, who average 32 hours of viewing weekly. Furthermore, while TV viewing across Europe is still increasing, there are exceptions: In the UK TV viewing slightly is declining from 3.7 hours per day 2000 to 3.6 hours per day 2006[233]. This suggests that the UK, as one of the most mature markets in Europe, has peaked in terms of TV viewing, whereas countries where channels are still being added, TV viewing will continue to increase until a point of maturation. Hence, although TV remains the dominant content viewing option, it will probably decline as the TV market matures and Internet-based solutions are developed and fine-tuned.

Decline of traditional video and DVD rental

According to the International Video Federation[234], total spending on rental video in Europe declined by over a tenth in 2006. It signals the fourth consecutive year of decline for the European rental market, and is the most severe decrease since the launch of DVD. This is due largely to the fact that consumer spending on DVD rental fell for the first time in 2006. In recent years, the downturn in video rental has been a result of the rapid decline in VHS rental, with growth in DVD rental not strong enough to compensate.

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[229] Qualiquanti for the Centre National de la Cinématographie (CNC), *Les nouvelles formes de consommation des images : TNT, TVIP, VOD, sites de partage, piraterie…* , 2007. Furthermore, a French survey conducted by the TNS Sofres Institute at the end of 2007 showed that television is still the medium that people would regret if it had to disappear (41% of the answers), the medium able to gather the family (71%), the medium which is used to watch the most important events (70%). Cf. TNS Sofres, *L'attachement des Français aux médias*, January 2008.
[230] The Mip Review, « New Rules of the Games» (Conference Report of "New Rules of Engagement For The Digital Consumer", 2008.
[231] Bain & Company, *The Digital Video Consumer*, 2007.
[232] Ibidem, p. 16.
[233] Ibidem, p. 39.
[234] International Video Federation, *European Video Yearbook*, 2007.

Consumer spending on DVD rental in Europe fell by 8 per cent in 2006 whereas the online DVD rental sector continued to grow steadily, but could not counteract the decline in traditional DVD rental.

New platforms

Consuming video content online is quickly becoming a mainstream activity, as more homes gain broadband access and larger bandwidth improves the speed and quality of Internet video streaming and downloads. Almost 60% of Western European users report watching video on the Internet at least monthly[235]. These high penetration rates are comparable to the US, where each month more than 60% of Internet users view video online. However, less than 10% of users in most countries currently say they use the Internet on a daily basis to view videos[236].

As far as the video-on-demand (VoD) offer is concerned, a survey conducted for the French CNC[237] shows that in a context where everything is (or seems to be) free, the question of price remains an important barrier to VoD usage. A survey on UK consumers[238] also showed that even though they are strongly interested in online entertainment and in films in particular, 70% of them would like on-demand content to be free even if that means interruption by advertisements.

The opportunity to watch audiovisual content for free is also one of the most attractive features of video social networks. Internet social networks such as YouTube or Dailymotion are also supported by word of mouth. Easy access has made these two websites free VOD platforms for TV series, sketches, music videos, etc. Furthermore, users tend to consume audiovisual works and films more and more via streaming rather than via downloading. Only films which people care for are being bought as DVD.

Catch-up TV

Catch-up TV is a VoD service offered by a linear television broadcaster allowing consumers to catch up on a selection of programmes which were already broadcasted. It is among the most developed new forms of video consumption. In the United Kingdom, iPlayer, the service launched in December 2007 by the BBC, realised 17 million consultations in the first seven weeks. ITV also announced that the Formula One "Grand Prix" would be available soon on the online services. In France, ARTE launched in October 2007 its catch-up service "ARTE +7" and users seem to react positively: from 400 000 consultations in October 2007 to 750 000 consultations in March 2008[239]. In France, several broadcasters implemented catch-up TV services in the last months: Canal Plus, M6, TF1 but also France Télévisions.
Free access seems to be one of the main reasons of the rapid growth of catch-up TV. This could change the distribution of video content among the different available platforms (catch-up TV, VOD services, video social networks, etc.)[240].

[235] Ibidem.
[236] Ibidem, p. 46.
[237] Qualiquanti for the Centre National de la Cinématographie (CNC), *Les nouvelles formes de consommation des images : TNT, TVIP, VOD, sites de partage, piraterie…* , 2007.
[238] Entertainment Media Research, *2008 Digital Entertainment Survey*, London 2008.
[239] « La catch up TV sur le Net va remplacer le magnétoscope », *La Tribune*, March 17 2008.
[240] *Le film français*, October 19 2007.

Content choices

As far as the choice of medium is concerned, information available for France[241] shows that:

- 66% of viewers watch video content on their PC;
- 41% watch video content using another interface (portable DVD readers…);
- 21% connect their PC to the television in order to watch videos on a TV screen;
- 6% watch video content on their mobile phone.

PC is the universal interface whereas other types of screens are chosen according to the type of content: mobile phones, for instance, are mainly used to watch short films. Video consumption online concerns mostly short formats such as music clips, trailers or UGC.

The type of content most viewed changes according to the age segment: movie trailers, humour videos and video clips are the most viewed among users under 35; over 35 year-olds prefer presentations of products and services instead; people over 50 watch in particular videos concerning travel.

As far as gender preferences are concerned, men prefer content regarding news, politics, sport and humour videos; women would rather watch video clips and video content about celebrities[242].

As far as VOD is concerned, at the moment, French spectators tend to find their way through the catalogue by scanning the various film visuals and checking the lists of films most viewed by other users. According to a study by NPA and Médiametrie, VOD users make different choices depending on the VOD service they use: when using a VOD service via TV they prefer watching films and animation, whereas when they choose VOD via PC, it is above all TV archives, news, mangas and documentaries that attract their attention.

[241] Harris Interactive, *Les nouveaux usages vidéo des internautes français*, January 2008.
[242] Ibidem.

Internet usage

Information on Internet usage could only be found on countries with high production capacities (France, Germany, Italy, Spain, United Kingdom) as specific information for countries with low production capacities is not available or insufficient to provide a good overview of the national situation.

Key findings

- The use of pay-per-view or paying VOD services to access media content online is still marginal in Europe.
- 15 to 34-year-olds mostly use media for entertainment, whereas those over 35 use media above all for information.
- Internet is used as a communication tool.
- Web 2.0 offers a new set of software tools for using the Web, and is particularly appreciated by young people as a free product which makes sharing information possible.

Information and entertainment: Media usage[243]

European's media usage varies greatly according to age.
Young Internet users (15 to 34-year-olds) have three major characteristics:

1. They are tech-savvy. They have grown up with technology, and they are much more willing to adopt innovations, especially as applications and devices become more user-friendly.
2. They also consume more on-demand and interactive media than older adults. They play more games, use the Internet more, watch less TV and rely less on print media. They are twice as likely as older viewers to watch video content on their computers.
3. They also consume media differently. Young adults multitask much more than adults, making it harder to catch and hold their attention. They also communicate and socialise more online.

The 15 to 34-year-olds mostly use media for entertainment, whereas those over 35 years use media above all for information. The choice of the medium can also be different. Press, radio and the Internet are the main media in order to access information. TV, cinema and the Internet are the preferred media for entertainment.

Radio has a role of information more than entertainment for over 35-year-olds; for the younger demographic segments, it is the contrary.
The same difference can be identified concerning the value attributed to the Internet.
Young people also use mobile phones for entertainment and information.

15 – 34-year-olds

	Spain	France	Italy	Germany	UK
Internet	Information/ entertainment	entertainment	Information	entertainment	Information
Radio	Information	entertainment	entertainment	entertainment	entertainment
TV	information	Information	Information	information	entertainment
Mobile	information	entertainment	entertainment	entertainment	information

[243] Harris Interactive, Survey NetObserver® Europe, March 2008.

Over 35-year-olds

	Spain	France	Italy	Germany	UK
Internet	information	information	information	information	information
Radio	information	information	entertainment	information	entertainment
TV	information	information	information	information	entertainment
Mobile	information	information	information	entertainment	information

As far as the Internet is specifically concerned, young people (15-24 years old) spend more time than their elders on the Internet. In France, more than 27% of young people (15-24 years old) spend more than 3 hours on the Net whereas only 18% of people of more than 25 years old spend the same amount of time on the Net. In Italy, the gap amounts to 10%: 36% of young people versus 26% of over 25. In Spain, the percentages are 26% and 21% respectively for the 15-24-year-olds segment and the over 25 segment. In Germany 46% versus 37% and finally in the United Kingdom the percentages are 32% and 20%.

Internet is used as a communication tool (instant messaging, telephony by Internet – skype, messenger – discussion forums, etc.) but also as an entertainment tool. The main usages are:

- reading and/or developing blogs
- using social networks
- playing games online
- listening to the radio
- podcasting audio and video content

The feminisation of the Internet is particular to young people. In the 15 to 24-year old segment, women are as numerous as men (Italy, Spain) or more than men (France, Germany, United Kingdom). On the contrary, men are better represented in the segment over 25, in particular in Italy, Spain and Germany.

Social networks

Social networks are web-based platforms that allow users to get in touch with other people, produce and share data, discuss and exchange information. Social networks are the basis of Web 2.0. Even though in the framework of this study, only games communities and video social networks are concerned, a few general elements not directly linked with these networks can be useful to understand the challenges of such practices.

Key findings

- Web-based social networks are not related to any "community ideal"; rather, they exploit the strengths of weak cooperation. People discover cooperative opportunities only by making public their individual production.
- The expression of the self becomes a way of forging relations and making public one's relationships via a blog, a characteristic feature of many social networks.
- The rise of user-created content (UCC), or user-generated content (UGC) is one of the main features of the "participative web".
- One of the main features of online gaming is social interaction (group interaction, chatting, role-playing).

The strengths of weak cooperation

According to Christophe Aguiton and Dominique Cardon's article "The Strengths of Weak Cooperation: An Attempt to Understand the Meaning of Web 2.0"[244], web-based social networks (like Facebook, MySpace, Twitter, Wikipedia, Flickr, blogs, etc.) are not related to any "community ideal" but they rather exploit the strengths of weak cooperation, which arises from the fact that it is not necessary for individuals to have an *ex ante* cooperative action plan or altruistic intention. People discover cooperative opportunities only by making *public* their individual production. Users of social media services have very individualistic motivations and goals when they begin their Internet practice: bloggers want to publish their own production, Flickr or YouTube users want to store their pictures or videos, Wikipedians write articles about their personal concern, etc.

Publishing personal thoughts and pictures appears to be a new form of identity-building. Even though the initial motivation is individualistic, the process of identity-building develops through the continuous search for recognition in the eyes of others. Indeed, bloggers produce specific content in order to start a conversation with other people. Evidence has been found that when a blog has no comments, the blogger often stops producing new content on a regular basis. Therefore, expression of the self becomes a way of forging relations.

Making public one's relationships is characteristic of many social networks. Contacts listed are often called "friends" but, in fact, not all these friends are real ones. For example, on Facebook or Skyblogs, participants publish small networks of contacts composed for the most part by people they already know in real life. On the other hand, in networks such as MySpace or Flickr, participants have very long lists of contacts that turn out to be only digital relations.

Social networks are based on the sharing of practices and activities. In the framework of weak cooperation communities, people entering these networks can participate to various

[244] C. Aguiton, D. Cardon, "The Strengths of Weak Cooperation: An Attempt to Understand the Meaning of Web 2.0", *Communications&Strategies*, n. 65, 1st quarter 2007. See also: D. Cardon, M. Crepel, B. Hatt, N. Pissard, C. Prieur, "10 propriétés de la force des coopérations faible", *www.internetactu.net*, 8/02/2008.

extents. Usually, there is a minority of very active participants, a significant part of regular users and a great mass of people whose participation is weak. It is a characteristic of these networks to be tolerant towards these less active users[245].

Blogs and User-Generated Content

Blogs are one of the most widespread social networks. In a survey late in 2005, 13% of Europeans were "regularly contributing to blogs"[246].

Blogs are often used at the expense of other media: time shift from traditional media is accelerating in the general Internet population. An American survey on "women bloggers" shows that 24% of women surveyed watch less television because of blogging, 25% of them read fewer magazines and 22% of them read fewer newspapers for the same reasons.

A report on Ken radio's website[247] states that social networking sites are expected to represent 230 million active members by the end of 2008 and to keep attracting new users until at least 2009. Nevertheless, the growth in the membership of social networking sites varies significantly by region: Asia will account for 35% of global social networking users by the end of 2008, followed by Europe, the Middle East and Africa with 28%, North America with 25% and the Carribean and Latin America with 12%.

In Europe, 42% of Internet users communicate via social networking sites at least once a month[248]. European Internet users also enjoy sharing information online: the number of people contributing to rating and reviewing sites has seen a growth of 42% since 2006 and over a quarter (26%) now share their thoughts on forums.

The rise of user-created content (UCC), or user-generated content (UGC) is one of the main features of the "participative web". It comprises various forms of media and creative works (written, audio, visual, and combined) created by Internet and technology users. The participative web blurs the frontier between user and producer[249].

According to France Telecom Group's CEO Didier Lombard, 2007 was the year where user-generated content came of age. "Everyone can now express themselves by creating and posting content over the Internet and each one of us is, in effect, part of the media," he said[250].

In Europe, men between 15 and 34 years old[251] are leaders in content production and exchange of opinions on the Net.

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[245] « It's an emerging rule of thumb » - states the *Guardian Online* - «that suggests that if you get a group of 100 people online then one will create content, 10 will "interact" with it (commenting or offering improvements) and the other 89 will just view it. It's a meme that emerges strongly in statistics from YouTube, which in just 18 months has gone from zero to 60% of all online video viewing ». *Guardian Online July 20, 2006.*

[246] Screen Digest Ltd, CMS Hasche Sigle, Goldmedia Gmbh, Rightscom Ltd for the European Commission, *Interactive content and convergence: implications for the information society*, October 2006.

[247] www.kenradio.com

[248] EIAA-Mediascope, *Shifting traditions: Internet rivalling TV in media consumption stakes*, November 2007. This study covers the high production countries (United Kingdom, France, Italy, Germany, Spain), Belgium, the Netherlands and the Northern European countries.

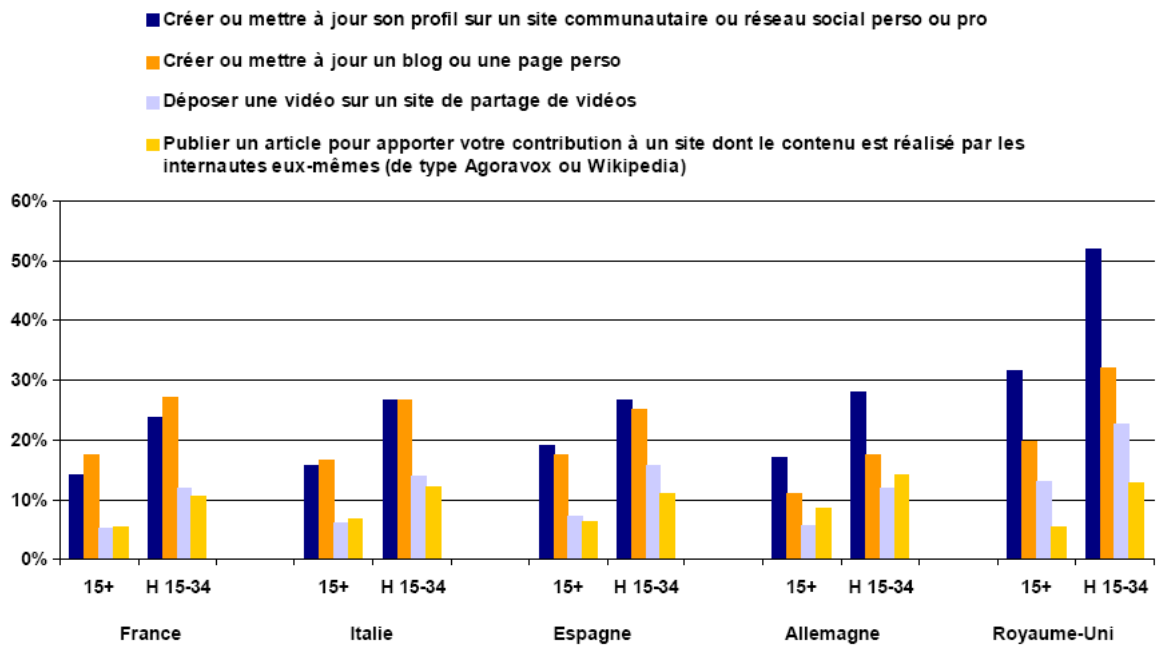
[249] Organisation for Economic co-operation and development (OECD), Participative Web and User-created Content: Web 2.0, Wikis and Social networking, 2007.

[250] Didier Lombard, "Inventing a New Media TV Experience", keynote speech to the Telco-Media Convergence, MIPTV, Cannes 2008.

[251] Harris Interactive, Survey NetObserver® Europe, March 2008.

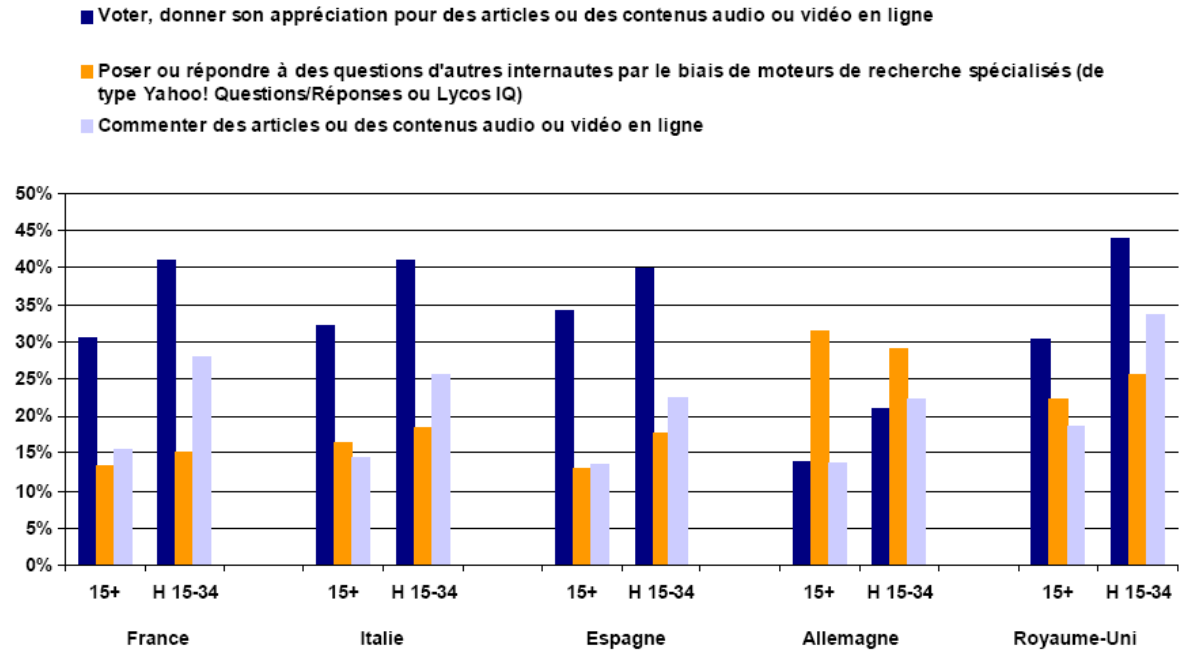
Except for Germany, where Internet users' interest for blogs is less developed, in the other big production countries (France, Italy, Spain, and United Kingdom), more than 17% of Internet users have created or updated a blog or a personal page in the past 12 months and more than 12% of 15 to 34 year-olds have uploaded a video on a community website. More than 10% of them have published an article on a website similar to Wikipedia.

Content production online in the past 12 months[252]



Source: Harris Interactive

Expressing oneself and exchanging opinions online in the past 12 months[253]

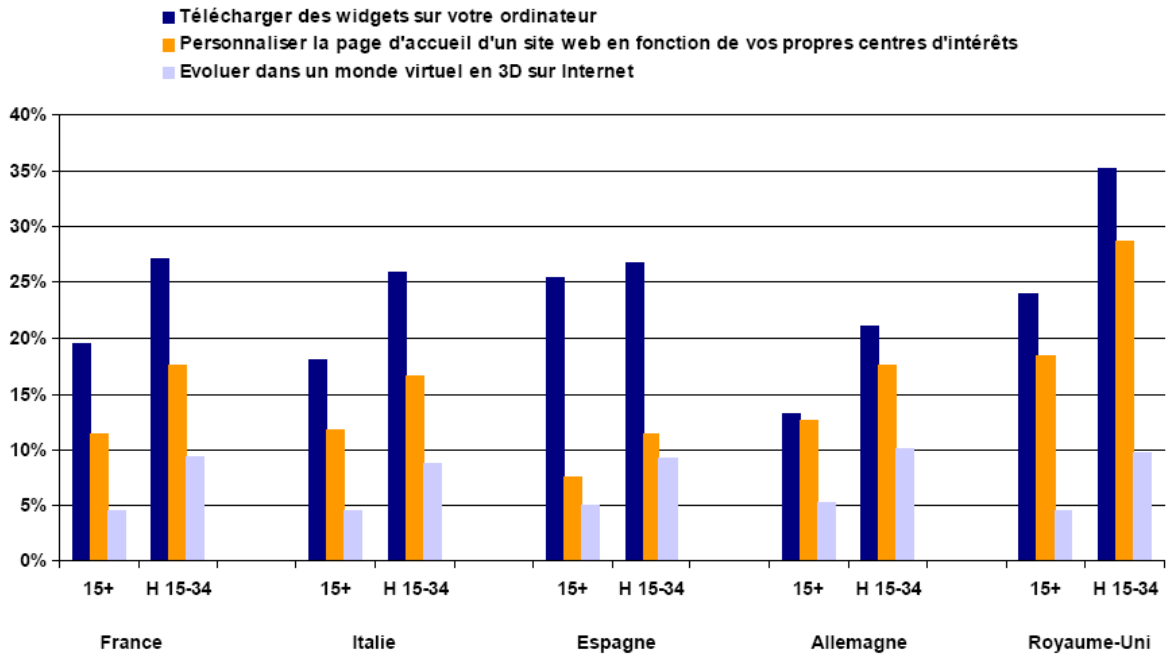


[252] Ibidem.
[253] Ibidem.

Source: Harris Interactive

Men aged between 15 and 34 are also « early adopters », that is to say, they adopt new services before everyone else and test them. They are also called "beta testers". Hence, their opinion becomes essential to the success or the failure of new online services.

Usage of new services in the past 12 months[254]



Source: Harris Interactive

Social networking aspects of online gaming

According to an American study[255], there are three main types of social virtual gaming over the Internet: "stand alone games", "Local and Wide Network (LAWN) Games", "MMORP" (Massively Multiplayer Online Role-playing Games).

Stand alone games

Single player orientated games for the PC with the option to go online to seek a human opponent. Player communication is possible but the depth of the social immersion in the game is restrained by the lack of a clear game narrative.

Local and Wide Network (LAWN) Games

These games arose from the desire to link gamers together in support of tournaments. The main style of play involved in these games is tactical combat. "LAWN parties" are occasions during which hundreds to thousands of individuals meet and link up their PCs to compete over a weekend.

MMORPG (Massively Multiplayer Online Role-playing Games)

A gaming experience represented by sophisticated and evolving worlds based on different narrative environments (like *World of Warcraft, EverQuest)*. The player has the possibility to explore a virtual world through his/her own "player character" (avatar) therefore

[254] Ibidem.

255 M. Griffiths, M. Davies, D. Chappell, "Breaking the Stereotype: The Case of Online Gaming", *CyberPsychology & Behavior*, Vol. 6 No. 1, 2003.

meeting thousands of players. The main difference with other types of games is that MMORPG create evolving worlds rather than having fixed narratives through which a player has to navigate.

The research conducted on the game *EverQuest* showed that for 41% of the gamers' population one of the favourite aspects of the game concerns social interaction (group interaction, chatting, role-playing). Three different categories of players can be identified: those who group to play (34%), those who play to group (55%), and those who do not group (12%).

The study on Spanish gamers[256] also shows that one of the preferred online games' features is the possibility to play with other people (the option "multiplayer") and to play with strangers, in particular. The least attractive aspects of online games concern technical problems that can arise as well as system crashes.

Concerning the usages, in Spain a clear difference seems to exist between console and online game players: 89% of console players do not play online either because they don't have Internet or an adaptor, or because they don't like it. Furthermore, 21% of exclusive PC players have difficulties with network games.

[256] GFK Emer Ad Hoc Research & ADeSe, *Study on Video Gaming Usage and Attitude 2006*, July 2006.

Games

Games are one of Europeans' favourite hobbies, regardless of social category and age. A study conducted in 2007 by Nielsen Interactive Entertainment[257] for the Interactive Software Federation of Europe (ISFE) gives an interesting overview of the contemporary situation in 10 European countries: UK, France, Germany, Italy, Spain, Sweden, Norway, Czech Republic, Poland and Latvia.

Key findings

- Games are one of Europeans' favourite hobbies: The majority of European gamers buy between 1 and 6 games per year.
- While video game demos and music downloads are largely sourced from official websites, complete video games and full-length movies are much more likely to come from unofficial sources.
- Different consumption trends coexist in the games sector with nomadism, casual gaming and online gaming being the dominant ones.
- The success of casual games can be ascribed to the development of broadband access (primarily over DSL), to the spread of laptops and to the infatuation for mobile phones that encourage the development of new usages.

Games platforms

Personal computers are the most prevalent platform among European gamers (72%), followed by the Play Station 2 (50%).
UK gamers are leading in the adoption of the newest consoles and handhelds (particularly the Play Station Portable, Xbox 360, and Nintendo Wii).
Latvian gamers demonstrate the most commitment (half play for more than ten hours per week).
The majority of European gamers (71%) buy between 1 and 6 games per year.
UK gamers are the most prolific buyers. Owners of pirate games purchase relatively few video games, which, when coupled with the reported size of their collections, indicates that this group chooses to obtain a good proportion of their games through illegal channels.
The average number of games owned by Europeans has more than doubled since 2005 to reach 49: Latvian gamers claim to own an impressive 150 games on average, with further analysis suggesting that the majority of these have been obtained illegally, in many cases through downloading.

Internet download and the issue of piracy

Specialist online game stores are the largest reported source of video games (62%).
However, potentially illegal sources of games are also quite well known among users, particularly Internet downloads (1 in 5), peer-to-peer sites (1 in 6) and street markets (1 in 10). Piracy appears to be relatively endemic among European gamers, with 4 in 10 admitting to owning a counterfeit game.
Piracy is widespread in Latvia (three quarters own a pirate game), followed by the Czech Republic (56%), Spain (54%) and Sweden (51%), while UK and German gamers are the most law-abiding of the countries surveyed (17% and 25%, respectively).
In terms of platform, piracy on PCs is particularly rife (three quarters), perhaps reflecting the ease of downloading games directly to the PC. The primary source for pirate games is peers and relatives (50%). Peer-to-peer sites (25%) have superseded street markets (two in ten) as a source of illegal games, when compared to 2004 (10% and 31%,

[257] Nielsen Interactive Entertainment for ISFE, *Videogamers in Europe – 2007*

respectively), with use of these sites peaking in France (64%) and the Czech Republic (67%).
Among gamers, music is the most popular media downloaded (7 in 10), while nearly half have downloaded video game demos. Downloading complete video games is less widespread, although still standing at three in ten.
While video game demos and music downloads are largely sourced from official websites, complete video games and full-length movies are much more likely to come from unofficial sources.
European gamers primarily download games because they feel the authentic versions are too expensive[258]. Beyond price, respondents cite the ease of downloading and the convenience as drivers, along with the fact that they mainly play games on their computers anyway. Additionally, there is a sense that downloaded versions are of as good quality as authentic games.
The primary reason for not currently downloading video games is that gamers enjoy owning and collecting the actual product. At slightly lower levels, downloading is perceived to be a more laborious process, which takes both time and effort, while there is also some doubt over whether it is legal.

Games and leisure activities

European gamers lead active and varied social lives, participating in a wide range of entertainment and leisure options (group activities such as going to the movies, shopping or going out to eat or drink).
While traditional educational attitudes oppose digital games and sports, more recent studies affirm the positive correlation between the two. A study realised for the French Ministry for culture and communication[259] demonstrates that 7 out of 10 teenagers regularly practising a sport also play digital games with the same regularity: a correlation seems to exist between sports and games practice. Furthermore, sports and games appear complementary since sports of uncertainty seem to be related to digital games of physical action.
In terms of media consumption, European gamers spend the most time surfing the Internet (4 in 10 claim to spend more than 14 hours per week on the web): playing video games (15% claim to play for more than 14 hours per week) falls slightly behind listening to music (21%), and watching TV (21%), while gamers dedicate much less time to reading (3%) or watching DVDs (5%)[260].

Usages (Casual games)

The Games Convention held in 2007 in Leipzig showed that different consumption trends coexist in the games sector and that nomadism, casual gaming and online gaming are the dominant ones. Whereas online games will be treated in the chapter dedicated to social networks, this part will mainly focus on trends in casual gaming.

As far as the concept of nomadism is concerned, it applies to several media forms and not only to games. Nomadism designates the "portability" as the main feature of a medium. Therefore, nomadic games include games for handhelds as well as mobile games. Casual games are very simple games, easily accessible, that can be played

[258] Indeed, a study conducted in Spain in 2006 also found out that price is what gamers like least about their hobby. Cf. GFK Emer Ad Hoc Research & ADeSe, *Study on Video Gameing Usage and Attitude 2006*, July 2006.
[259] Christophe Peter, « Goût pour les jeux vidéo, goût pour le sport : deux activités liées chez les adolescents » , *Culture prospective*, n.2, 2007.
[260] A British research commissioned by the BBC in 2005 found out that gamers aged between 6 and 15 are those placing the most importance on gaming as entertainment. Going up through life stages other entertainment media – particularly television – tends to overshadow gaming. See BBC, *Gamers in the UK*, 2005.

everywhere. They generally involve less complicated game controls and overall simplicity in terms of gameplay (such as puzzle games or card games). They come from the first nomadic games platforms, which appeared on the market at the end of the 80s[261]. The «Game Boy», launched by Nintendo in 1985, gave the possibility to play games usually available in arcades (coin-operated entertainment machine widely used in the 1980's) while retaining mobility. The release in 2005 of the console Nintendo DS made it possible to make faithful customers out of casual game players.

A report published by the International Games Developers Association in 2006[262] states that the casual games industry is in development stage. Numerous players continue to enter the market, business models are constantly changing, and new customers are found every day. In Europe, the success of casual games can be ascribed not only to the release of more effective consoles, but also to the development of broadband access (primarily over DSL), to the spread of laptops and to the infatuation for mobile phones that encourage the development of new usages. In some way, it is a return to the basics, as Gaël de Robien, Marketing Manager Casual Gaming, Orange, explains[263]: "The casual gaming market will go from 700 million $ to 2,6 billion $ in 2011. Whatever the platform is (PC, mobile phone or console), casual games are bound to be successful."

Indeed, casual games reach virtually all demographic sectors. The ease of online distribution has made casual games accessible to non-traditional gaming audiences, particularly women who may have never considered themselves as 'gamers'. Even hard-core game players take a break every now and then to play free online poker games (note that poker is a very popular casual game, not to be confused with online gambling poker offerings which involve payments). This is the reason why the typical casual gamer is hard to define. According to the IGDA White Paper[264], from a demographic point of view, casual game players tend to be aged over 35, and are for the most part women, even though the gender breakdown can vary from genre to genre and even from game to game[265]. Gradually, the number of men playing casual games is increasing but as for today's usages, women are the core casual gamer group.

Whilst they have often been criticised, games seem to be a relevant social tool. Children and teenagers share their tricks to improve their performance, play on a network, organise contests[266], etc. Websites proposing casual games also offer the possibility to meet other gamers via forums or chats. Casual games combine competition and social interaction. Indeed, different types of gamers exist: those who surf websites to explore and discover new games; those who want to realise their best score in their favourite game; and finally, those who want to meet other users and discuss. For the latter, games are a pretext rather than a finality.

[261] Tetris (1985) was the first casual game in the videogames history

[262] IGDA (International Games Developers Association), *2006 Casual Games White Paper*, www.igda.org/casual

[263] Gaël de Robien, "Du jeu vidéo au Casual Gaming: Etude sur les nouveaux usages", http://www.afjv.com/press0711/071120_etude_jeux_video_casual_gaming.htm, November 2007.

[264] IGDA being based in the USA, the considerations concerning the casual gamers profile are not necessarily valuable for European gamers as well. They are therefore provided as a complement to the study.

[265] See hereafter, "Target group approach".

[266] Games tournaments are quite usual among gamers between 17 and 25 year-old. Cf. Cyberleagues France, « Qui sont les joueurs de jeu vidéo qui participent à des tournois ?» November 2006, in http://www.afjv.com/press0611/061106_profil_hardcore_gamers.htm

Preferences

What do European gamers like most about games? What do they like least?
A Spanish survey mentioned above[267] provides some elements to answer these questions. Its results show that young and adult gamers like the "distraction" provided by games more than children, who first mention "fun" and secondly the "characters", among the reasons of pleasure given by games. Dual players (who use both PC and consoles) and medium users enjoy the graphics. Lower-middle and lower social classes value entertainment more than others.
Young and adult gamers consider games to be too expensive. The addictive effect of games on some gamers is also an issue of concern to many: female players, young adults and the upper class are worried about the possible addiction generated by games. Women also mention concerns about violence in games. Children and the middle classes do not like the competitive aspect of some games.
When choosing a game, the following selection criteria appear to be the most relevant:

- Number of game levels
- Story and plot
- Price of the game
- Characters / main character
- Possibility to play with several players
- Recommendations by friends and family

Target groups: men / women

Even though men are the traditional target of the gaming market, recent studies referring to the North American market underline the increasing importance of women in the games field.
A study conducted by the Consumer Electronics Association of the U.S.A. in 2006 stated that women between 25 and 34 years constitute the majority among gamers. In the same year, a study by Nielsen Entertainment revealed that 64% of North American online gamers are women. In September of the same year, another report published by Parks Associates, emphasised that women represent 59% of American consumers who play on mobile phones[268].
The growing importance of women in the field of digital leisure through digital games is shown by the creation of organizations like Women In Games International (WIGI), promoting the inclusion of women in the games industry. In Europe, the same trend has been identified. A recent study on European games users[269] offers an overview of the ongoing changes in different target groups. The gamers target is larger and larger, including women and seniors. Although men still remain the main users of games played on PC, women's participation is in fast increase and passes from 25 % to 30 % players between 2006 and 2007. The games industry is taking these evolutions into account and developing games adapted to women's interests.
A French study[270] focusing on the 7-14 year-olds segment also states that boys and girls favour different types of content. The majority of girls dislike violent aspects in games[271], as well as competition, which constitute a major element in many games. They also have

[267] GFK Emer Ad Hoc Research & ADeSe, *Study on Video Gaming Usage and Attitude 2006*, July 2006. In the second phase of the study, we will use qualitative interviews to analyse whether these results can apply all European gamers.
[268] Cf. Universidad Europea de Madrid, Observatorio del Videojuego y de la animación, *Women and video games. Habits and preferences of the video gamers*, December 2006.
[269] "Non aux idées reçues sur les jeux vidéo", a research realized by Metaboli, a downloading platform for videogames in Europe, in September 2007.
in http://www.afjv.com/press0709/070927_etude_joueurs_jeux_video.htm
[270] "Les filles aussi aiment les jeux vidéo", a research realized by Ubisoft in September 2007. Cf. http://www.afjv.com/press0709/070904_filles_jeux_video.htm
[271] The study conducted by GFK Emer Ad Hoc Research & AdeSe, mentioned above, also states that violence is one of the video games aspect less appreciated by women.

difficulties using joysticks and functions. Furthermore, communication campaigns and merchandising, which accompany game launches, are often male-oriented. The French games industry tries to take into account these specificities by developing female-oriented content by developing more intuitive control systems and by conceiving different promotional campaigns.
A Spanish study[272] shows that the most appreciated games among women are arcade games, graphical adventures and simulators (the "SIMS" being one of their favourite games). The study states that girls are introduced to games by their parents. As far as sociability is concerned, nearly half of Spanish women (47,93%) usually play against the machine, but 1 out of 3 (37,52%) play with friends or relatives.

Target groups: young / seniors

Traditionally a teenagers-only activity, games today interest different segments of the population:

- In France, nowadays more than 80% of Metaboli gamers are over 25, 51% over 35 and 11% over 50 (Metaboli is one of the most important games platforms in Europe).
- In Spain, nearly half of the 8,8 million players (42%) are over 18[273].
- In the United Kingdom, 26,5 million people are gamers. They constitute 59% of 6 to 65-year-olds, while 100% of 6 to 10-year-olds consider themselves to be gamers. The average age of UK gamers is approximately 28[274].

The BBC study on UK gamers[275] provides interesting information as far as the target groups' habits are concerned. The youngest British gamers (6-10 year-olds) are the most dedicated to their gaming. They play across all platforms but the PC is the most popular, very closely followed by consoles. Handhelds penetration is high and handheld gaming usually takes place in bedrooms.

11-15 year-olds prefer consoles to PCs and mobile gaming comes as the third choice. The main part of this group plays games on consoles in their bedrooms. 16-24 year-olds play on PCs and consoles. 81% of this age group are heavy gamers playing at least once a week.

British people aged between 25 and 35 prefer PCs to consoles. They rank video gaming fairly low on their entertainment preference list when compared to the previous groups. Gaming comes in at 5th place with TV, Internet, books and speaking with friends on the phone above it. The 36-50 year-old group definitely prefers PCs. In the BBC survey, this group is the one giving the highest support for the statement: "I think games could be used for education as well as for entertainment." One reason for this may be that they are more likely to be the parents of young gamers and are therefore more aware of the educational games currently available.

In the 51-65 year-old group, it is interesting to note that the gender split is almost even, at 52% male and 48% female, exactly the same as the 6-10 age group. Like the 36-50s, this group is also primarily made up of single-platform gamers, with 84% preferring it to be a PC.

[272] Universidad Europea de Madrid, Observatorio del Videojuego y de la animación, *Women and video games. Habits and preferences of the video gamers*, December 2006.
[273] See *Women and video games* mentioned above.
[274] BBC, *Gamers in the UK*, 2005.
[275] Idem.

Mobile

Mobile is the ultimate lifestyle accessory – synonymous with personalisation, entertainment and reflective of young people's ever-changing tastes.

Mobile networks offer three primary types of data services:
- Communications-based data services, primarily involving one-on-one communication such as messaging (SMS and MMS) and email;
- Transactional data services, including financial transaction services;
- Content-based data services, including music, entertainment-based educational content ("edutainment"), games, video, news, transport information, adult entertainment, ringtones.

Until a few years ago, the mobile phone was primarily used for communication by voice or text. Nowadays, it is also known as the "third screen"[276] (after television and PC) and gives access to TV, video and gaming content. In France, games are the top revenue segment in the field of mobile entertainment[277].

Key findings

- Mobile phones give access to TV, video and gaming content.
- Accessing the Internet via mobile is increasing.
- Video content for mobile devices is developing more and more.

Mobile Games

Many of the earliest mobile games[278] were based on Short Message Service (SMS). Players were charged per message and the revenue was shared between the operator and the game provider. SMS was commonly used for answer/response games, such as quizzes and for lottery and puzzle games. SMS is not ideal for game play because users must enter text. Moreover, it can be expensive for the user if the game has any depth because users are charged for each message.

Multimedia Message Service (MMS), which incorporates pictures, sound and video clips, may have some possibilities, but essentially suffers from the same economic constraints (albeit imposed by operators) as SMS.

Browser-based games are played by going to the game provider URL, usually through the mobile operator's portal, downloading or viewing pages, making a menu selection or entering text, submitting that data to the server and then viewing more pages.

Multiplayer games are some of the most successful games in the non-mobile Internet market. They are successful because they allow social interaction with other players. Mobile devices are ideally suited to multiplayer games because they can always be connected. Nevertheless, technical limitations exist in the mobile multiplayer game environment which explain why this type of game has not been offered on mobiles so far, with operator-imposed costs likely being prohibitive.

[276] In fact, for some demographic segments, such as young people, mobile is not the third screen but the first one. For this age segment, mobile is the preferred mode of transaction.
[277] GFK, « Les contenus multimédia pour téléphones mobiles ont le vent en poupe », in http://www.afjv.com/press0805/080506_etude_telechargement_mobiles.htm 2008.
[278] The main source for this historical review is the study realized by the OCDE in 2005, *Mobile Content: New Content for New Platforms.*

As far as gaming habits and preferences are concerned, in 2005 already the International Game Developers' Association noted that this information is hard to collect since carriers are reluctant to share research results for competitive reasons[279].
It seems that people still learn about games primarily through word-of-mouth – not realising how much information is available on the web - from their carriers and gaming publications. In France, games consumption is strictly linked to the extent of the games visibility in the operators' portals.

The most used mobile games include: sports, simulation games, society games, and adaptations from cinema. Casual games represent a specific field for mobile gaming since they are very simple games that can be played rapidly and in several situations of everyday life (as "time killers": while waiting for an appointment, in the bus, etc.). "Tetris" is one of the most widespread in Europe.

In the 5 high-capacity production countries, active mobile users (users who use downloading and browsing services regularly) account for 21.8%; consumers only using the browsing option account for 12.4% whereas consumers only using the downloading option account for 14.8%[280]. In these same countries, 23.7% of the projected subscribers played a game, 3.1% downloaded a game and 1.7% purchased a game.

Mobile video content

Video content for mobile devices is developing more and more. In the UK, the video content of the third screen is dominated by broadcasting giants such as BBC and Sky. BBC 1 is the most viewed channel, followed by Sky Sports and Discovery Channel[281]. Among all UK mobile subscribers there is an even 50/50 gender split.

[279] IGDA, *Mobile Games White Paper*, 2005.
[280] M: Metrics, "Quarterly Market Summary", in www.m-e-f.org, 2007
[281] *Telephia Audience Measurement Report UK*, 2006.

PART II: CHALLENGES AND OPPORTUNITIES OF NEW DISTRIBUTION PLATFORMS FOR EUROPEAN AUDIOVISUAL WORKS AND FOR THE EUROPEAN SMES OF THE HOME ENTERTAINMENT SECTOR

The presentation of the Interim Report in Brussels on July 3rd, 2008 was followed by a discussion between the participants aimed at narrowing the scope of phase 2 and at clearly defining the expectations of the Commission regarding the output of the final report.

As a result of this discussion, the scope of Phase 2 was defined as follows: Having a better understanding of which revenue streams are likely to develop in the future for European audiovisual SMEs in order to make up for the slow progression/ stagnation/ decline of their traditional revenue streams which are cinema, home video and linear television.

According to this general aim, this part of the study focusses on providing a clear understanding of the trends in the two fairly new branches of development of the European audiovisual industry which are:

- Strategies for video content on new digital platforms: Concentrating solely on European audiovisual works distributed through channels which guarantee a fair retribution of the rights' holders, thus excluding user-generated content (UGC) and video-sharing
- Games: Online and offline games to be played on PC, fixed consoles, handheld consoles or mobile devices.

The methodology used was based mainly on qualitative interviews with industry insiders. These interviews were supplemented by secondary research. The Consultant did not aim at including all 31 countries studied in the scope of the Study.

A. Strategies for video content on new digital platforms

This part focuses on analysing which new segments of the European home entertainment market are the most likely to develop as a profitable market and which are the characteristics of European SMEs which will be able to take advantage of these developments. The Consultant focused on European video content (audiovisual works) distributed over new audiovisual platforms (non traditional linear TV, i.e. IPTV, non linear TV excluding video-sharing, mobile entertainment excluding mobile games).
Based on a series of four case studies, the Consultant aimed at providing an analysis of the future of the new digital platforms for the distribution of video content and some hints about what the MEDIA Programme could do in order to help European SMEs make the most of the new opportunities.

The companies studied are the following:

- Case 1: Multiplatform strategy of UFA, a major German TV production company
- Case 2: Opportunities of new distribution platforms for European feature and/or short films based on the example of the French VOD platform UniversCiné – developed by the company Le Meilleur du Cinéma.
- Case 3: Strategy of Schmitz-Katze Filmkollektiv a traditional German film production company which developed a business in the field of VOD, Nowtilus.
- Case 4: The future of the distribution of home entertainment in European based on the example of DailyMedia.TV (developed by the company United Content Distributors), an Dutch independent set top box service.

Case Study 1: UFA

Based on interviews with:
- Jens-Uwe Bornemann, Head of Business Development & Strategy, UFA
- Ingmar Grundmann, Head of UFA Interactive
- Marc Lepetit, Producer at Phoenix Film

The purpose of this case study is to understand what the multiplatform strategy of a major television production company is today, in order to better understand how this market is currently structured and what opportunities lay within it.

The following text is a summary version of the full case study which was included as an undisclosed appendix to the study – only accessible to MEDIA Programme staff.

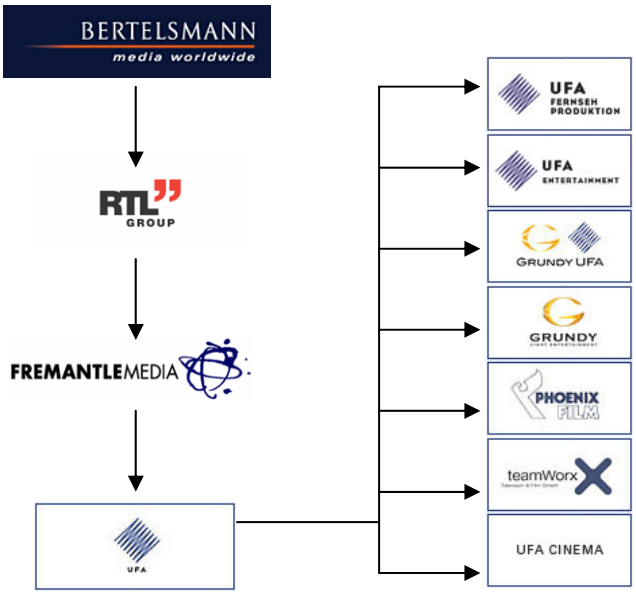
Presentation of UFA

Structure

UFA is one of Germany's oldest entertainment brands, with an artistic heritage of films like 'Metropolis', 'Der blaue Engel' and the German Expressionism films.
Today, UFA consists of a group of production companies. UFA is primarily a service provider for the TV market, designing programmes and producer TV content for national broadcasters, but is also expanding into new platforms and technologies.

Under the UFA umbrella, seven subsidiaries operate independently from one another. These subsidiaries are principally active in production:
- UFA Fernsehproduktion, teamWorx and Phoenix-Film realize fiction productions such as TV movies, mini-series, series and TV events.
- UFA Entertainment realizes documentary television shows, reality programmes and shows.
- Grundy UFA is a supplier of industrially produced serial dramas and telenovelas.
- GRUNDY Light Entertainment produces a wide range of game, quiz, dating, comedy, music, variety and panel shows.
- UFA Cinema produces and distributes feature films.

UFA is part of the international entertainment group FremantleMedia, the content production arm of RTL Group which is in turn part of the Bertelsmann holding. The company produces programmes both for public as for private broadcasters (including RTL).



UFA's New Media Strategy

UFA Interactive was created as a specialized division within UFA in 2006, as part of an overall strategy within the holding to rationalize efforts geared toward the development of new digital media such as Mobile TV, digital TV, IPTV and Interactive TV. The division's core activities are the following:

- consulting on cross-platform and digital projects for other companies, within and outside the group
- managing contacts with external companies and platforms (Electronic Arts, Youtube, Google…) for specific multimedia projects

The division works closely with the production arms of the group, such as Phoenix Film and with Fremantle's licensing department. Before the creation of UFA Interactive, UFA had begun implementing a strategy of producing for new media and formats, but these were often left to the individual companies within the group to devise and finance, leading to one-shot projects which were successful but not reproducible as business models because too specific. Therefore, UFA has sought to implement a new media strategy dubbed "360°", the underlying concept of which is seen as a way to counteract, using new platforms, the loss of TV viewership. We will examine this strategy more in depth below.

The "360°" Production Strategy

How it works

"360°" production strategy refers to the idea of developing content world over all existing media platforms (cinema, TV, Internet, mobile, print, games…), usually with originally developed content for each specific media platform. This is viewed as way to conter the dropping of TV viewership. UFA has begun developing TV formats that work hand in hand with new platforms such as the internet in order to enhance and prolong the viewer's experience of television programming, by offering interactive elements that simple television viewing lacks. These marketing tools can take the form of blogs, online games, quizzes, webisodes, behind the scene footage, etc. and offer a unique platform with which to reach viewers of the show more directly, interact with, and better understand their characteristics… and, ideally, create additional revenue streams. Producers warn against simply adapting content to the Internet, but see real opportunities in offering quality content with true added value which supports and enhances the original TV programming.

The following examples are the expression of the long-term vision pursued by the company, that is, its positioning on the new markets (internet, mobile) which are poised for growth, as the next generation of viewers move gradually away from television as their primary source of home entertainment.

So far, UFA produced 360° production contents for the following programmes (excerpt):

- Unschuldig, ProSieben (MySpace profile, Fake-Websites, behindthe scene Material etc.))
- Unter Uns, RTL (Unter Uns Krimiwoche)
- Alles was zählt, RTL (Aktion Rettet Sandra/Shadow Blog)
- Soko Leipzig, ZDF (Soko Leipzig behind the scene Blog)
- Musical Show Star 2008, ZDF (Mobile Video Blogs)
- Pater Castell, ZDF (Webisodes)

Business Models and Rights

It is essential for a producer looking to license his content to retain at least some of the rights for his productions. Unfortunately for UFA, the balance of power remains in favour

of its clients, i.e. the big German broadcasters, which remain entrenched in long-standing practices.

This means that TV channels don't traditionally consider mobile or Internet rights separately. One strategy would consist of separating television exploitation rights from other licensing rights during negotiation, and offering to develop content not only for television but for other platforms, with both producer and broadcaster sharing the risks.

These types of contracts would take the form of a barter agreement: UFA typically takes part of the risk of covering production costs and gets a share of the revenue generated through the exploitation of the content. To compensate its risk, UFA either retains all copyrights or gets it back from the broadcaster after a short period of time.
However, an obstacle to these is the fact that public German broadcasters cannot by definition generate revenue above and beyond their operating costs. This means that producers can only close barter agreements with private broadcasters – but find themselves in a difficult negotiating position – or else directly with third parties outside the television industry, such as webTV sites.

Exclusive Web Content

StudiVZ.de

The partnership between Grundy UFA and StudiVZ – a social networking site that is very similar in function to Facebook but specifically aimed at students, and is better implanted in Germany than its American competitor – is an example of the kind of content that UFA can develop exclusively for the internet. As a social networking website, StudiVZ originally relies on advertising as its main source of revenue. Created in 2005, the company was fully takenover in January 2007 by Holtzbrinck Networks, its main shareholder.[282] Grundy UFA produces a webisoap, "Pietshow", exclusively for the website. The first 15 webisodes of 4 minutes each are the first series of whach is set to be a longterm partnership between StudiVZ and UFA.

Mobile Content

"Kill Your Darling"

Phoenix Film was commissioned by a mobile operator to produce the first German series developed exclusively for the mobile phone format, as opposed to being an adaptation from a previous television or online format. The series, entitled "Kill Your Darling", featured 30 episodes of 3 minutes each.
The shooting took place in August 2007. The series is planed to be launched with a German TV network in 2009. It will have a big rollout on web and mobile and will lead to a final 90 minute feature on TV in autumn.

Gaming

UFA and Games

As a content producer, UFA's core competency is storytelling, an expertise which the company would like to begin expanding into the area of games. In this context, the company is looking into partnerships with hardware manufacturers, casual online game websites, mobile operators, developers and publishers to pursue new projects.
This is not a completely unheard of step for UFA, as Fremantle, its parent company, is already active in this branch, by means of its gaming division on one hand, and Fremantle Licensing on the other, which seeks to franchise content in different formats,

[282] Jörg Donner, "Millionen für Karteileichen", sueddeutsche.de, 05.01.2007

such as televised game shows being redeveloped for mobile or internet. This strategy was developed a step further with the setup of FremantleMedia Gaming in September 2008. This new division will manage all the group's activities in the field of games. The rationale behind this new direction for UFA is the fact that gaming can be very lucrative, albeit riskier than traditional television programming.

Master of Maya

UFA's first large-scale foray into gaming was with the game "Master of Maya", jointly developed with Nokia Siemens Networks in 2007. Due to the absence of data flatrates in the European markets where is UFA is active, this game was launched exclusively on the Malaysian market. Master of Maya is the world's first trading card game for mobile phones in which the gaming experience is expanded by downloading additional cards over Maxis' mobile network and then directly introduced into the game.
While UFA handled all aspects linked to the creative development of the game (graphics, story development, etc.), Siemens was in charge of the technological implementation, and finding a mobile operator for the distribution, among other things.

Conclusions

As mentioned above, the game was deemed a technical success, and UFA feels that it has the necessary expertise and talent to develop further games. However, the trial also highlighted the fact that for a multiplayer mobile game – or for that matter any sort of high-quality content – to work on mobile, new pricing tariffs need to be offered by mobile operators, as sending data is very costly to the consumer and no flat-rates exist for data transfers. For as long as this remains the case, there is no market for mobile games such as Master of Maya.
UFA is now planning to exploit the game over the internet for the European market using Flash.

Looking Ahead

Developing new business models

Through discussions with members of the industry, new business models for the new technologies – primarily Internet – are tentatively being formulated. The main four foreseeable business models for current and future multiplatform content are:

- Advertising: At the moment, this is the most widespread business model
- Branded Entertainment or AFP (Advertiser Funded Programming)
- VOD
- Premium Content: This is content developed for specific target groups, and is financed through subscriptions; for the time being, UFA only used this model for online previews as pay VOD of its hit TV soap "Gute Zeiten, schlechte Zeiten".

Branded Entertainment or AFP (Advertiser Funded Programming), presents an alternative to the traditional model of television – and web content – funding. AFP is at once a direct and covert form of advertising, going from product placement, to "embedded" advertising, to entire shows being produced or conceived by advertisers – of course, for all these types of programmes, productions companies have to make sure they comply with national regulations regarding advertisement. WebTV sites such as Joox and Hobnox feature various forms of embedded ads, or interactive banners or logo bugs (advertising moving across the screen during programming). Branded Entertainment is another form of advertising produced as content, which is then featured on corporate websites or functions as viral videos on websites such as Youtube or floaded.com.

There is some caution in the industry with regard to using this model, as it is hard to say now which way the legislature will turn when regulating branded entertainment for the new platforms. For now, the modernised "Television without Frontiers" Directive of the European Commission has mostly relaxed regulations concerning advertising, which

remain the pillar of most content production business models. The rules were extended to include new media technologies, such as video on demand, mobile TV, and audiovisual services on digital TV.

Developing new production techniques

The companies of the UFA group are primarily focussed on producing for television, mostly in the form of daily formats such as soap operas, telenovelas, games shows and reality TV programs. For daily television content to be cost-effective in a context where ad revenue on TV is slipping, production costs need to be lowered, while overall quality remains high.

New production means techniques such as machinima are being considered – by Grundy UFA, for example – for the production of soap-style adult cartoons, such as The Simpsons for example. Machinima, a portmanteau of machine cinema, is a collection of associated production techniques whereby computer-generated imagery (CGI) is rendered using real-time, interactive 3D engines instead of professional 3D animation software.

Talent

One of the problems facing producers looking to innovate on new platforms is the lack of experienced talent in this area. UFA has begun to address this problem by providing both finance and content for the Interactive Media programme, hosted by the Baden-Württemberg Film Academy. The school has established an internationally unique program for the training of multimedia authors, concept-developers, producers and designers based on the development of content and formats for interactive entertainment and education as well as real-time visualization. Outside of the games industry, it remains difficult today to find creative staff with the necessary training to develop projects beyond the traditional television platform.

Regulatory Constraints

As a contractor for content production for public and private channels, UFA does not have an extensive rights catalogue, an issue which might partly be addressed in coming years by the revival of the company's feature film production activities in 2008.

However, PayTV and VOD are markets that UFA, and other German content producers, are looking into, as new licensing channels for their content. The PayTV business model currently works and generates revenue. However, Grundmann argues that an enormous potential PayTV market remains unexploited in Germany, due to the fact that the Bundesliga, the German football federation, has given broadcasting rights to the non-pay channels, as opposed to the UK, where PayTV is hugely bolstered by agreements to transmit sports events.

VOD as another pay-per-view solution is undermined by the enormous success of free VOD and catch-up TV, which are already established in the United States and is making its way toward Europe. The broadcaster RTL, for example, registers over 3 million clicks per month on its website, from viewers watching episodes of the hit TV show "Alles was zählt" online. As consumers come to expect that television shows are increasingly available for viewing, usually as soon as the next day after the first TV broadcast, it will become more and more difficult to make them pay for this kind of content.

Case Study 2: Le Meilleur du Cinéma / UniversCiné

Based on interviews with:
Alain Rocca, President 'Le Meilleur du Cinéma' and CEO Lazennec Productions
Jean-Yves Bloch, C.E.O. 'Le Meilleur du Cinéma'
Jean Bréhat, Producer, 3B Productions (LMC's stakeholder)

Introduction

The VOD market has emerged in Europe in recent years. VOD services were first launched in 2001 in Italy and the UK. Since then, the number and the type of VOD services in Europe have increased to reach 142 services in 2007. More than 2 000 feature films were available in Europe in 2006 and in general, movies represent from one month to the other close to 70% of VoD consumption. According to a recent survey[283], in 2007, 32 VOD services were active in France.

While in principle each player is legitimate in the VoD market, de facto 'big players' are privileged due to their authority in the negociation of rights (the main broadcasters) or to the number of subscribers they can count on, as an argument in the negociation (this is the case of the Internet providers and telcos). The crucial point is then the clearance of the rights and because the market is so young, different practices coexist and the value chain is complicated by the fact that the same players can develop different roles

Context and history

'Le Meilleur du Cinéma' (LMC) is a French company made up of 48 French production and distribution companies. 'Le Meilleur du Cinéma' is the editor of a VOD service called 'UniversCiné'. This platform is accessible either direct over the Internet or on IPTV through a dedicated set-top box, supplied within the offers of the telco operators Neuf Telecom and Alice.

The company 'Le Meilleur du Cinéma' was created in 2001 by a group of 12 French independent producers and distributors. 20 other producers joined the group soon afterwards. The idea behind this groupment was to monitor the evolution of the audiovisual market and to take a stake in the home entertainment market, notably after the failure of the home video. It was clear that a new mandate was emerging and the objective of 'Le meilleur du cinéma' was to prevent big studios to include the VOD rights in the home video rights. In order to cope with bigger companies it was primordial for independent producers to join forces. This is why a collective structure was created.

In 2003 LMC began the development of a VOD service for the MAEE (the French Ministry for Foreign and European Affairs). At the beginning, all the technical services were outsourced but after bad results, in 2006 LMC decided to keep them in-house.
The VOD distribution service for the MAEE was created to supply 350 cultural institutions in the world linked to French embassies or cultural bodies such as the 'Alliance française' (schools of French language in the world). The aim is to offer a library of French or French-speaking films to French expatriates throughout the world. Nowadays, about 2000 screenings are organised per year. LMC has implemented a specific VOD platform for the MAEE. The MAEE buys the VOD rights (through the Centre National de la Cinématographie) of these films and LMC shares the revenues among its stakeholders.

In 2006 LMC began the development of the VOD platform 'UniversCiné', with the support of CNC and Procirep and on the basis of its own funds.

[283] NPA conseil : Video on Demand in Europe, Second survey of VoD services as of January 2008.

In April 2007 the platform UniversCiné (www.universcine.com) was launched.
In November of the same year, Universcine was granted 900 000 € worth of support by the MEDIA Programme of the European Commission.

In March 2008 LMC signed an agreement with Neuf Telecom in order to distribute its library via IPTV.
The actual number of stakeholders of LMC is 48, mostly producers. The list is provided in the appendix of this chapter.

The relationship LMC - UniversCiné

LMC proposes two different types of contracts: either a mandate of distribution or a VOD release contract.
In the first case, LMC holds the exclusive rights for the distribution of audiovisual content (feature films, for the most part) to different platforms, among which UniversCiné); in the second case, LMC doesn't have any exclusive rights and the contract only concerns the distribution of a specific film through UniversCiné VOD platform.
The first type of contract relates to about 600 films of UniversCiné's library whereas the second type only affects 150 films.

Each producer of LMC is obliged to give UniversCiné the mandate for at least one feature film per year. Sometimes, the biggest films are constrained by the studios involved in the financing of the film and therefore the VOD rights are not available. In all the other cases, it is the editorial director of LMC who chooses the film /films to distribute through UniversCiné for each stakeholder.

The producer is paid according to the number of downloads per film, according to a revenue sharing formula.

UniversCiné in Figures

Human resources

12 people work for the VOD platform.

Library

The library is composed of about 750 films, most of which already had a theatrical release in France[284].

- 50% of the library is composed of French films
- 30% of the library is composed of European (non French) films
- 20% of the library is composed of films from non-European countries

UniversCiné films are mostly 'auteur' films.

Visits

50 000 visitors per month (the equivalent of ARTE VOD)
7-8,000 regular customers. This number is increasing on average of 500 newcomers per month.

Downloads

At the end of 2008, the number of downloads is expected to reach about 30 000.

Countries

Le Meilleur du Cinéma owns French rights and UniversCiné is accessible from France only.

[284] In the last 3 months LMC began to buy films which didn't have a theatrical release.

The business model

UniversCiné's business model is temporary download (48 hours). Each film costs 4.99 € for a PC download whereas the agreement with Neuf Telecom establishes a price of 3.99 € for each film (IP TV broadcast). At the moment, there are no free subscriptions or offers. According to LMC's responsibles, the VOD market being at its initial stage, it is essential to structure it. When a customer esteems legitimate to pay for a download, the financial deal creates a symbolic value for the video on demand as a new means of film distribution. LMC's managers relate that UniversCiné customers do not complain for the price of the service but they demand instead high quality films and an excellent technical service.

Therefore, while other companies such as Wild Bunch are launching their platform with a S-VOD model from the beginning[285], LMC considers that this model should only be implemented once the market becomes mature.

Through their business model, LMC's managers have the objective to achieve a number of downloads equivalent to half of the admissions (theatrical) of each film.

Promotion and Marketing

In order to promote Universciné, online marketing means are used, such as the purchase of key words on google and msn, the referencing of key words, the affiliation and a few others.
The editorial work done on the platform website is important too. It allows showcasing of some films in particular.

As far as IPTV is concerned, a 'barker channel' (trailers, interviews, shortcuts) specially dedicated to UniversCiné is broadcast through the Neuf Telecom network. The editorial choices of this channel are completely managed by LMC.

Opportunities of new distribution platforms: conclusions

The example of Le Meilleur du Cinema and its platform UniversCiné offers interesting elements for an analysis of video on demand as a new tool of audiovisual content distribution.

Being a groupment of around 50 companies (mostly producers or production companies having a distribution branch as well), Le Meilleur du Cinéma can be considered as an SME regrouping and structuring other SMEs. The single companies are independent from audiovisual groups: alone they could not face big studios and would have little weight on the market. As a group, instead, these companies have a completely different force because they represent 40% of French production.

Even if VOD is "low cost distribution" (due to the end of all kinds of physical copies and the development of digitisation) any single VOD platform has to deal with fragile business models where the number of films offered to consumers, a library of fresh programmes, strong marketing and the direct access to a significant number of consumers (i.e. subscribers to tripleplay services) are the keys to success. A reduced number of films (generally less than 200 in a library) will make it difficult to break even due to technical costs (bandwith, platforms, IPR's payments). A project such as Le Meilleur du Cinéma-Universciné represents the possibility for individual producers to reach the market while sharing the access costs with their partners.

[285] The S-VoD (Subscription Video On Demand) enables the user to watch unlimited content on demand for a subscription fee.

The management of a group of companies demands high attention. The European support programmes (MEDIA 2007 in this case) is essential for this kind of organisation because it makes it possible for management to assure equal rights to each stakeholder, on the one hand, and prevents independent companies from falling prey to big audiovisual groups. Public support is primordial at this stage because the VOD market is not mature. It helps independent audiovisual companies to foster the circulation of their films thourgh the new distribution platforms. Furthermore, in the case of France it fills a gap in the national public policy by the Ministry of Culture, which doesn't seem willing to support networks of small companies.

UniversCiné's offer is an essential factor in the creation of the identity of the platform on the market. Indeed, UniversCiné's library is clearly marked by artistic quality films: this allows the platform to target its ideal users, *cinéphiles*, or film buffs. Addressing such a precise target by means of well-known films or filmmakers creates a relationship of confidence and trust between the platform and its users. This should allow the exploitation of less known films and of films not having benefited from a theatrical release in France, in a long tail process.

Video on demand seems to be the ideal place for the circulation of different kinds of films. In this sense, marketing and promotion are tools capable of creating a brand and therefore the opportunity for films – and for quality films - to circulate. VOD could gradually substitute videoclub shops in their daily work, as an open library and an ever-available collection. If the long tail analysis is right, UniversCiné's members will gain extra revenues from the market thanks to this new opportunity in distribution.

Two problems arise as possible obstacles to the development of VOD: the agressive offer implemented by certain providers and piracy.
In France, the main obstacle to the development of a healthy market seems to be the competition by such providers as Cdiscount who propose free downloads (F-VOD sponsored by advertising) in order to attract visitors on their website. French independent producers do not agree on this kind of offer, which distorts the natural development of the market. Piracy is the second problem that VOD platforms have to contend with. Piracy also means the possibility to download for free, a possibility that takes away consumers from paying platforms.

The geolocalisation of rights is an issue often addressed by right holders. Most VOD services in Europe address their national market. UniversCiné, for instance, holds commercial rights for the French territory only. While some players defend the possible benefits of multiterritory licences, others consider that geofiltering is the most natural option. Indeed, geofiltering follows the same principle of national distribution mandates in other audiovisual fields (theatrical and TV rights, for instance). The debate is still open but in this initial stage of the VoD market, the preliminary step concerns the clearance of rights.

Appendix - List of Le Meilleur du Cinéma's stakeholders

(in alphabetical order)

1. 3BPRODUCTIONS,
2. ADR PRODUCTIONS,
3. ALVA FILMS,
4. AGAT Films,
5. ARCHIPEL 35,
6. CINE NOMINE,
7. DIAPHANA,
8. ELZEVIR FILMS,
9. FIDELITE FILMS,
10. LES FILMS DE LA BOISSIERE,
11. LES FILMS D'ICI,
12. LES FILMS PELLEAS,
13. HAUT ET COURT,
14. GLORIA FILMS,
15. INTERSCOOP,
16. JBA PRODUCTION,
17. JLA, LAZENNEC,
18. LE PETIT BUREAU,
19. MACT PRODUCTIONS,
20. MAGOURIC PRODUCTIONS,
21. MAIA FILMS,
22. LA MOUCHE DU COCHE,
23. MERCURE,
24. PIERRE GRISE PRODUCTIONS ,
25. OF2B PRODUCTIONS,
26. LES PRODUCTIONS BAGHEERA ,
27. PROGRAM 33,
28. REZO FILMS,
29. SUNDAY MORNING PRODUCTIONS,
30. TS PRODUCTIONS,
31. WHY NOT PRODUCTIONS,
32. PYRAMIDE PRODUCTIONS ,
33. MEMENTO FILMS,
34. SOPHIE DULAC PRODUCTIONS,
35. ELIA FILMS,
36. FORUM FILMS,
37. SOMBRERO PRODUCTIONS,
38. KIEN PRODUCTIONS,
39. LES FILMS DE LA CROISADE,
40. LES FILMS DU KIOSQUE,
41. NORD OUEST PRODUCTION,
42. CE QUI ME MEUT,
43. THE COPRODUCTION OFFICE,
44. LES FILMS DU TRESOR,
45. LES FILMS DU POISSON,
46. LES FILMS DU REQUIN,
47. LES PRODUCTIONS BALTHAZAR,
48. SHELLAC

Case Study 3: Schmidtz Katze Filmkollektiv / Nowtilus

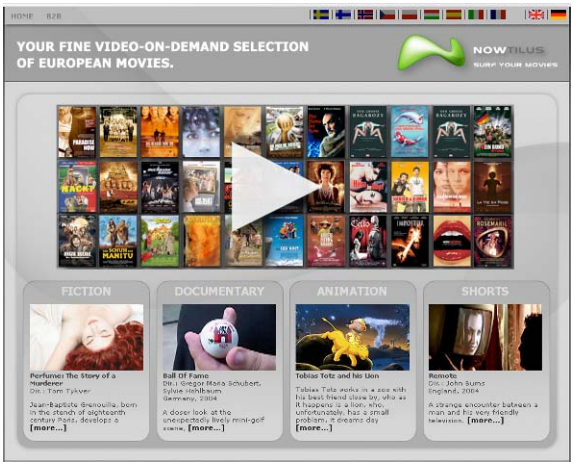
Based on an interview with

- Patrick Knippel, Managing Director of Nowtilus, Managing Director of Schmidtz Katze Filmkollektiv

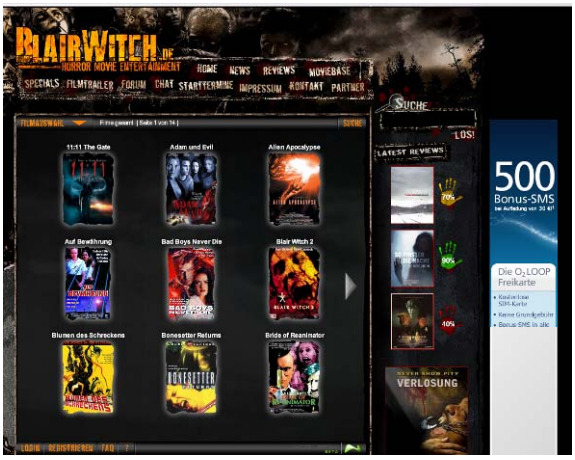
Presentation

Nowtilus

Nowtilus was created in June 2007 as a joint venture between the German production companies Schmidtz Katze Filmkollektiv and K5 Film. It provides white label solutions for video-on-demand (VOD) services via broadband streaming and electronic sell-through (EST, also known as download-to-own) for B2B customers and runs as well a B2C VOD platform with films, animation and documentaries for the general public (see Figure 16). The company has six employees and works on average with four freelancers.



B2C platform
(www.nowtilus.eu)



Example of an enabled website
(www.blairwitch.de)

Figure 16: Screenshots of Nowtilus' B2C portal and of an example of the B2B solution VOD_BOX

Schmidtz Katze Filmkollektiv

Set up in 2003, Schmidtz Katze Filmkollektiv is a film production company based in Berlin and Halle. Its activities include film development, production and marketing. It has a track record of 9 feature films. The exploited genres are family entertainment, genre films (horror, thriller and mystery) and European arthouse films.

K5 Film

Created in 2001, K5 Film is a film production based in Munich, Berlin and Cologne with five independent feature films in its track record. Since 2005, it set up an international distribution and sales company, K5 International, with offices in Munich and London which specialises in the worldwide distribution of commercial, English language feature films.

The business concept of Nowtilus

White label solution

Nowtilus offers a cost-effective and high-grade solution to make audiovisual content available on special interest community platforms. It takes care of the technical and substantive setup as well as the operational performance of VOD portals. A DRM system and a geolocation system are used for copyright territorial restrictions and to ensure a secure and controlled distribution. This is necessary for the retribution of the rights holders of the content.
Nowtilus offers video content to users of community platform websites, IPTV channels or cable networks. The company offers two types of services:

- VOD_BOX basic, an affiliate partner program. It can be integrated anywhere within an online offering by adjusting the design of the VOD_BOX in a way that it looks like an integral part of a website. This service is targeted at online communities and websites.
- VOD_BOX premium, a white label solution enabling a platform to offer its users an interactive movie experience. This service is offered to network operators, DSL providers, TV broadcasters, internet portals and branded goods manufacturers. Its includes:
    - Content aggregation, packaging and licensing for digital distribution
    - Asset encoding and metadata management
    - Streaming through its content delivery network on web, IPTV as well as mobile platforms (by means of XML export)
    - Royalty management to retribute licensors and rights owners
    - Reporting, analysis and statistics of usage and video consumsion on its portals
    - Editorial administration of VOD channels and platforms
    - Planning and management of VOD platforms

Nowtilus' USP is that it offers the entire VOD rental process from one source: this includes administration and distribution of content, technical support, payment and digital rights management. If required by its client, Nowtilus can also take care of selling of advertising spaces included in the VOD_BOX through its cooperation with the online media planer, Mediaroute. Furthermore, its online reporting provides its clients with an effective and constantly updated overview of viewed clips, movie sales and of the clients' commission.

The VOD_BOX includes the following features:

- Title selection with cover flow
- Detail view with information on films provided by the meta database
- Full screen trailer playback
- Full screen VOD playback directly from the VOD_BOX
- Full text search
- Registration, login and customer relationship management system
- Payment system for subscription, prepaid or pay-per-view
- Community features such as rating, recommendation and comments
- Bonus point system for instance to reward customers who promote the service to their contacts

Nowtilus portal

Apart from their white label service, Nowtilus offers a selection of movies, documentaries, animations and shorts on its www.nowtilus.eu portal. More then 500 Films should be available soon, covering various genres and special interest formats. The project, partly financed by the MEDIA Programme, intends to envelop its offering for at least 6 European linguistic zones with www.nowtilus.eu, www.nowtilus.tv and its affiliate partner websites.

The mixed asset media management system allows streaming and downloading for VOD, HTML and WAP services.

Licensed content and clients to date

Licensing

Nowtilus' secures digital rights directly from film distributors or from content aggregators. It licences niche content aimed at special interest audiences. So far, its catalogue of digital licences for the German territory includes:

- Kids & Family Entertainment: 450+ animations and TV series
- Supernatural & Fantasy: 400+ movies
- Extrem & Motorsports: 500+ docus, events and vlips
- Queer: 200+ movies
- Nature & Wildlife: 150+ docus and educational features

Clients

Feature films

- Movie websites (exemples)
    - Digitalvd.de
    - Schmidtzkatze.eu
    - Nowtilus.eu
- Horror and Fantasy websites (exemples)
    - Blairwitch.de
    - Deadline-Magazin
- Queer websites (exemples)
    - Queer.de
    - Cinegay.de
    - Gay-industries.com
    - Gaymaxx.de

Video clips

- Car and motor sports websites (exemples)
    - Adrivo.de
    - Lycos
    - Autosieger.de
    - Kurier.at
    - Autozeitung.de
    - Formel1.de
    - Kfz.de
    - Speed-magazin.de
- Holiday and leisure websites (exemples)
    - Flugangebote.net
    - Kroatien-aktuell.de
    - Spanien-report.de
    - Fliegen.net
    - Kurzurlaub24.net
    - Zoover.de
    - Wochenend-wellness.de
- Sports websites (exemple)
    - SaaleBulls

Financing and business model

Financing

Apart from the investments made by the founding partners, Nowtilus was able to attract Business Angel investment. It was granted 180,000 EUR from the MEDIA programme for its B2C platform after appliying for the Support for Video on Demand and Digital Cinema Distribution scheme.

Online rental and sales

User licenses for rented moves are generally valid for a 24 hour period beginning with the time of purchase. The pricing ranges from 1,99 EUR to 4,99 EUR for feature films and 0,99 EUR to 1,49 EUR for a 30 to 60 minute episodes. All movie sales and advertising revenues are split with Nowtilus' partners after the deduction of fees and technical expenses, the overall net revenue share generally being split 50% for the licensor (owner of the copyright), 25% for the affiliate partner (the website on which the white label is integrated) and 25% for Nowtilus.

Advertising

As user acceptance to pay for video content on the Internet is still quite low, Nowtilus offers a great range of ad-funded free content. To do so short target group specific advertising clips are placed in the surrounding of the video content. Advertising revenues are split between Nowitlus and the affiliate partner.
The VOD_BOX can include the following types of advertising:

- Pre-roll and post-roll spot advertising as well as in film video advertising
- Ad placements within target group specific high-quality content
- Clickable interactive video ads

Further business models

Nowtilus is currently developing two additional business models: a subscription model (SVOD) and an ad-financed Video-on-Demand model (AVOD).

Synergies between Schmidtz Katze Filmkollektiv and Nowtilus

When asked, the founders of Schmidtz Katze Filmkollektiv (SKF) declare that what brought them to set up Nowtilus was a purely entrepreneurial interest. They remain focus at developing SKF as a successful European independent production company, but could see that the scalability of such a business would always remain limited. On the other hand, the potential of scalability of a successful VOD company is very high. Their main interest being the film industry, they wanted to remain in this industry but, rather then starting a DVD distribution company where the competition is already fierce and the market mature, they chose to seize the opportunity offered by media digitalisation and to pioneer on the VOD platform. Germany being one of the major European market, their bet was that, being on a first mover position, they could achieve a significant market penetration within a short period of time before industry heavyweights would start investing massively on VOD platforms.

It is interesting to see that one year after the launch of Nowtilus, the synergies between SFK and the VOD companies are not very strong. Both businesses are completely independent from one another and SFK does not have a library of film rights big enough so that the digital rights licensed to Nowtilus could trun into a significant new revenue stream.

The impact of Nowtilus on SKF is rather on soft aspects. Indeed, to be active in the VOD arena brings a complete new perspective for the managing directors of SKF. As

independent film producers, the first target groups of SKF are film public funding agencies, TV broadcasters, sales agents, film distributors and investors/banks to which the producer has to "sell" its film project in the financing phase and its completed film in the exploitation phase. A film producer hardly ever gets to meet its public except at film festivals and film premieres. The learning effect for SKF to be start interacting with customers and users thanks to its Nowtilus is therefore a huge enrichment both in terms of receiving a feedback on the films they have produced as well as in terms of better understanding the target public of the films they are developing. Similarly, the access to the data monitoring of the films offered by Nowtilus on their various platforms, represent very valuable qualitative information on what works and what does not work in digital distribution. It also helps SKF to better understand how to market a film online, how to optimise a logline to increase the interest of VOD users, etc.

Another advantage which SKF gets from being involved in a VOD platform is that it gives them a very different profile when they approach film distributors and TV broadcasters. Indeed, they do not approach these stakeholders hoping to succeed in convincing them in the value of a specific film or of their slate, but with a business offer to bring them additional revenues for their library of rights by displaying it on the various Nowtilus portals. This helps SKF to be able to discuss at eye level with these stakeholders when they start presenting their film slate.

Case Study 4: United Content Distributors / Daily Media

This case study is based on interviews with the following persons:
- Hennie Meijndert, Managing Director, United Contend Distributors
- Dies de Korte, Marketing Manager, United Contend Distributors
- Marco Mur, Programme Manager Rabo TV, Rabobank Nederland
- Gerry Kaufhold, Principal Analyst, In-Stat (US)

Company Presentation

United Content Distributors (UCD) is a Dutch company based in Wijk en Aalburg. It provides technologies and services enabling the delivery of digital and interactive television. It enables television service providers, media producers and content developers to quickly and cost-effectively create interactive media services and products that deliver value and differentiation at local, national and international levels.
UCD is owned by six private investors which invested their own money in the company. Five of the six shareholders are working in the company itself. Further financing was achieved through debt financing.

Over the last four and a half years, UCD has developed a set-top box (hardware and software) and a network infrastructure which enable a series of services in the field of digital television.

Technical specifications of the set-top box
Processor: 1GHz
RAM: 256 MB
No hard disk
No optical drive
Operating system: Windows CE (adapted)
Digital Tuner (DVB)

Specifications of the network services
UCD offers advanced digital television solutions on disparate networks and on various software platforms, including electronic program guides (EPG), video on demand (VOD), personal video recorders (PVR), interactive shopping, interactive and addressable advertising, games and gaming, a full-featured IPTV solution, and a variety of consumer care and communication applications.
UCD's network is linked to the IP Multimedia Subsystem (IMS) architectural framework, thus enabling the use of a wide range telecommunication services from the TV set such as instant messaging, email, video conferencing, etc.
UCD's network is an open framework that allows operators or system integrators to develop new differentiated applications. Furthermore, is enables application portability and ease of 3rd party integration with open application programming interfaces (API).

UCD's product range
UCD is marketing its set-top box and digital television solution within four distinctive offerings each targeted at a specific target group:
1. Daily Media: Enabling DTT and IPTV consumption for the consumer market.
2. Daily Shop: Enabling the management of content and ads for any type of point of sale.
3. Daily Care: Enabling entertainment as well as specific services for patients at hospital or at home.
4. Daily Leisure: Enabling entertainment and service solutions for leisure infrastructures like hotels.

Daily Media

Daily Media is a combination between the current television perception and the possibilities that the internet has to offer.

It offers a range of services such as the access to all free DTT and radio programmes as well as to free IPTV offerings (in the Netherlands, this makes about 500 radio channels and about 700 television channels).

This case study will focus mainly on Daily Media.

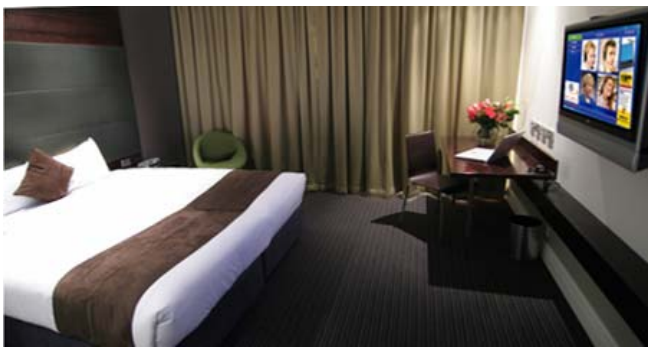
Daily Shop

Daily Shop is targeted at stores, railway stations, stadiums and other public places. Daily Shop enables companies to advertise in store through screens placed in different settings throughout various stores.
All content can be managed centrally for all places or individually. With the possibility to navigate through screens from a distance, managers are able to react on regional, national or international happenings.

Daily Care

Daily Care is a classic first line care applications. For instance, you can contact your family doctor directly from your living room using a safe and clear high quality voice-video connection.
Daily Care is not only available within the regular living space but also in nursing homes, hospitals, care centres and other institutions.
Apart from health care applications, Daily Care offers a range of entertainment services.

Daily Leisure



Daily Leisure is a product developed for the hotel- and recreation branch. Daily Leisure is offering a complete multimedia system, customized to the needs of the hotel management and the customers.
Customers can choose and order entertainment services as well as hotel services using their room's TV, or just contact the reception.
Information about local services and tourist highlights can also be made available using this platform. The customer can easily make reservations for all kind of activities.

Daily Media

The UCD set-top box was primarily developed to enable the combination of regular digital television services with IP services. This is what Daily Media is about: it is a web-based open IPTV platform, developed with the main focus of user friendliness. Daily Media offers rich, interactive, highly graphical and customisable content.
The UCD set-top box for the Daily Media is commercialised under the name "Pitbox".

How it works

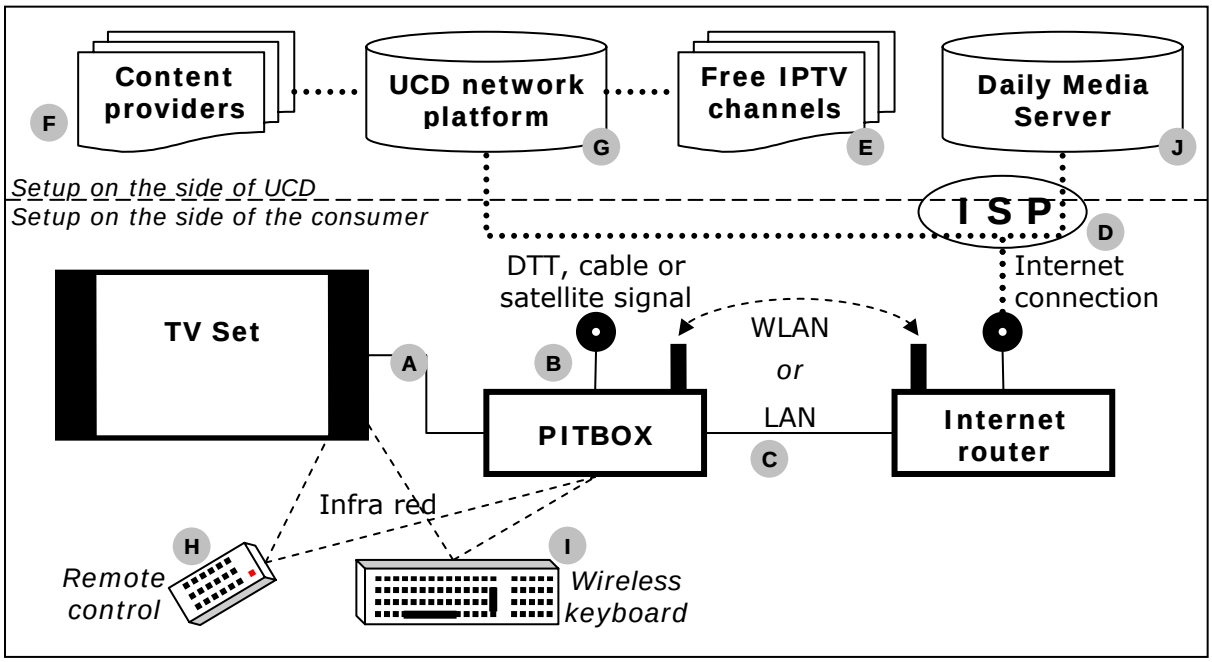


Figure 17: Set up of the Daily Media service

Figure 17 shows how the system is setup on the side of the consumer and on the side of UCD.

(A) The TV set is connected exclusively to the Pitbox. The set-top box is connected both:
- (B) to DTT (DVB-T), cable (DVB-C) or satellite (DVB-S) and,
- (C) to the Internet via an Internet router. The Internet connection can be provided by any Internet Service Provider (D). In case the cable network has also the capacity to provide Internet access, both the Pitbox and the router are connected to cable.

See Figure 18.

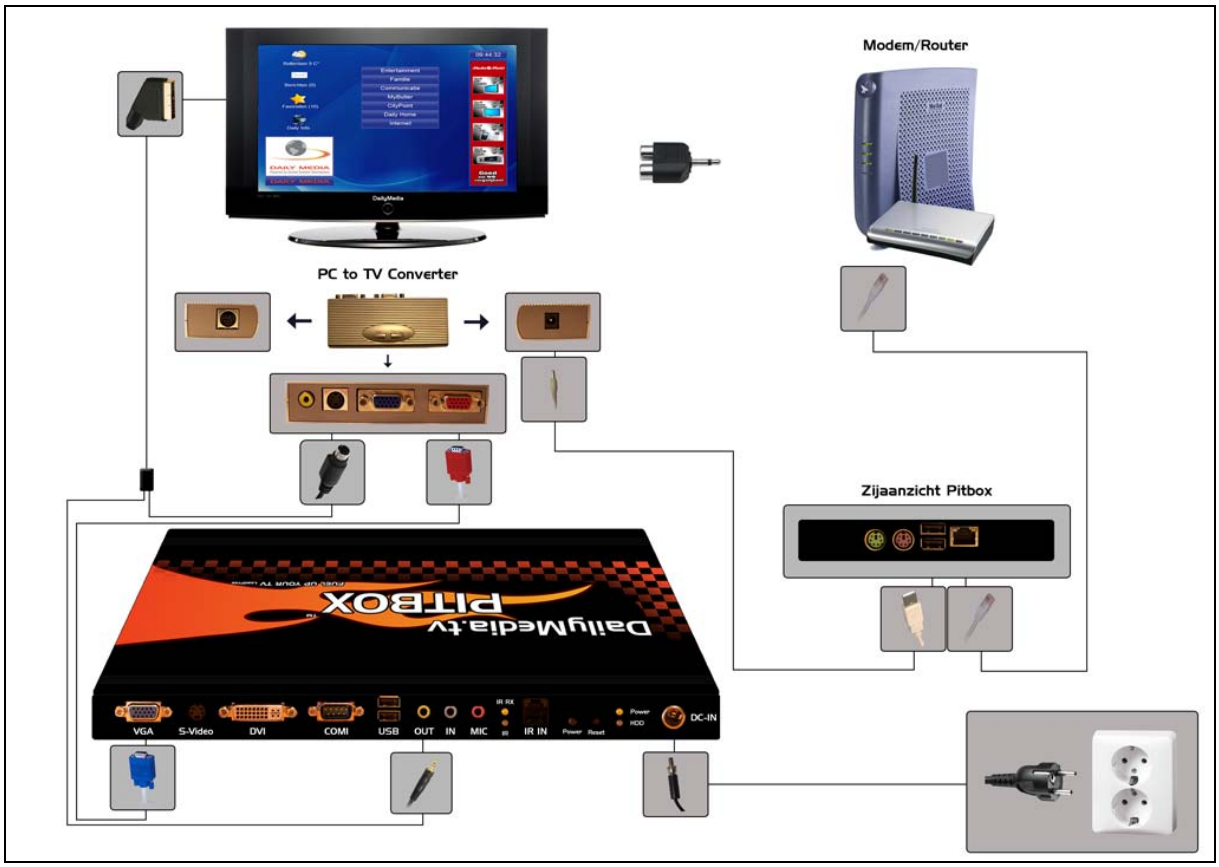


Figure 18: Set up of the Pitbox

The Pitbox can manage all input being delivered to the TV set. The operating system of the Pitbox has been optimised to enable a seamless navigation between digital TV and radio channels and IP services made for TV sets such as IPTV channels available for free (E) as well as any IP service which was adapted for the Pitbox by its content provider (F). The UCD network platform (G) integrates all these various IP services and can therefore guaranty a good quality of service in terms of IP delivery.

The user navigates through the various services and content offerings using the remote control (H) provided with the Pitbox. The user can also access the Internet using the Internet Explorer browser which is included in the operating system of the Pitbox. To do so, he is likely to use the wireless keyboard (I) which is delivered with the Pitbox. He can also use this keyboard to interact with his network since the Pitbox includes an email as well as an instant messaging service. Both the remote control and the wireless keyboard include the generic functions of a TV set such as volume control and on/off via infra red signal.

Apart from these services, the Pitbox also offers the possibility to store photos, music and videos files on the Daily Media server (J). Each user has 2GB of storage space.

Payment service e-Wallet

UCD has implemented an electronic payment service, e-Wallet, which makes it possible to process any kind of payment over the TV set. This has the advantage are greatly simplifying the user experience of e-commerce services. Indeed, once users have activated the e-Wallet, they don't have to enter their credit card details and their address when using an e-commerce service anymore since each Pitbox is registered to a specific address with credit card details of the clients already stored on the UCD server. This makes e-commerce services much more user friendly and intuive: Customers only need the remote control to go through the e-shop's catalogue and place their order. This is especially beneficial for services such as VOD.

e-Wallet makes it possible to have a single transaction system for all payments done through the Pitbox. UCD is only acts as a switch for the processing of the payment; rather than a commission on the payment, UCG receives a transaction fee from the content/service provider after the payment has been processed (see Figure 19).

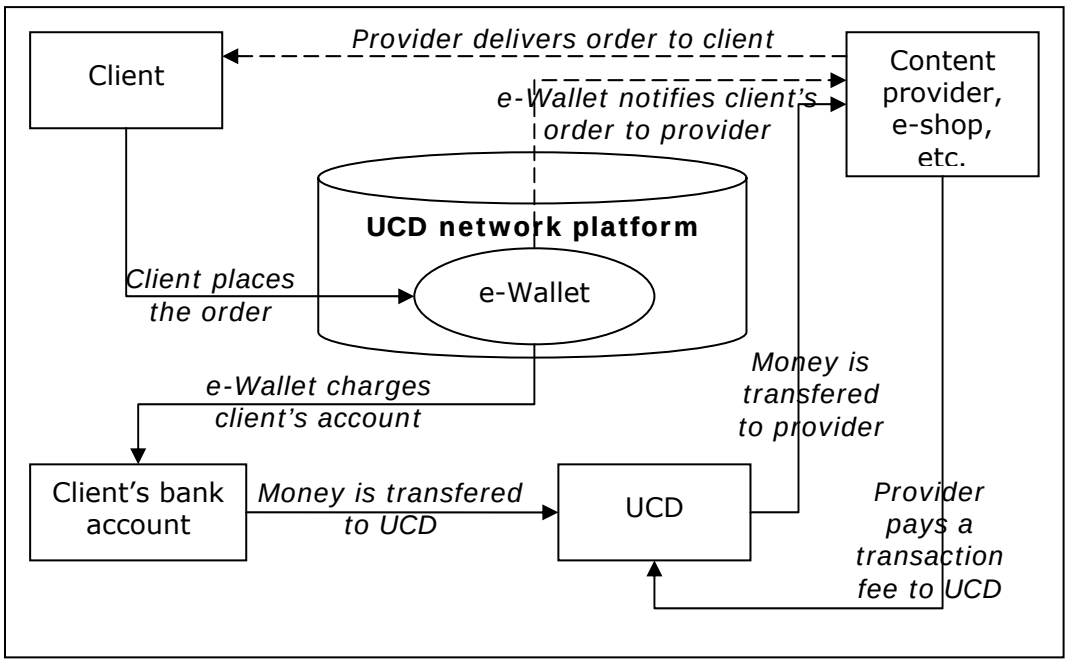


Figure 19: Transaction with e-Wallet

Distribution strategy of the Pitbox

After four and a half years of development, Daily Media will go on trial in the region of Rotterdam on October 1st, 2008 and is planning to roll out the service in the Netherlands in Q1 2009. Confident about the success of the launch of Daily Media on its home market, UCD is already preparing the roll-out the service to Scandinavia (Denmark, Sweden and Norway). Germany, Spain and Canada should come on a third phase.

UCD's strategy for Daily Media is much more marketing driven than technology driven. Similar to Nintendo's strategy when it launched the "Famicom/NES" in 1983, the Pitbox was developed in order to offer the best user experience with the cheapest set-top box of the market. This is the main reason why the Pitbox does not have a hard drive. The emphasis was put on the software and on the network infrastructure where much greater economies of scale can be made than on the hardware. The Pitbox production costs are 150 EUR per unit.

The challenge for Daily Media is therefore to reach within the shortest time a user base sizable enough to be able to attract both content providers and advertisers. This is why they chose not to commercialise the Pitbox directly, but to search for brands which are interested to buy the set-top box in orfer to give it away for free to their own customers for marketing purposes.

For the Netherlands, UCD made a distribution deal with LaSer Nederland B.V., the Dutch subsidiary of LaSer Group which is owned by Groupe Galeries Lafayette and Cetelem-Groupe BNP Paribas. LaSer a leading European provider of credit and customer programmes with well know brands like Cofinoga or S'Miles in France or DUET in the UK (4 million cardholders[286]).

[286] www.laseruk.com

LaSer Nederland commited to buy 1.5 million Pitboxes within a period of 3 years which is significant amount considering that the number of households in the Netherlands is 7.5 millions.
Apart from the possibility to use the Pitbox as a marketing tool to attract new customers, LaSer expects to be able to increase the number of payments processed using the credit card services of its customer fidelity cards with the media consumption and e-commerce payments which Pitbox users will do on their TV sets.

This sums up quite well the distribution strategy of UCD: Achieving a win-win relationship with brands in order to penetrate national (or regional) markets by offering consumers a set-top box for free which will make their media experience both easier and richer.

UCD plans to make further distribution partnerships in the Netherlands as well as in other coutries. Targeted stakeholders are the following:

- Small cable operators: By providing the Pitbox to their clients, small cable operators will be able to have a state-of-the-art television service without having to engage in the huge investments necessary to establish an infrastructure capable of delivering these services. Furthermore, for cable networks which have not been build so as to enable the two-ways communication needed to enable IP interactivity - which is the case for most cable networks in Europe -, the Pitbox combined with the service of an ISP makes interactive television possible over cable networks which actually cannot technically offer such services.
- Consumer electronics retailers: To attract clients, consumer electronics retailers could offer the Pitbox to clients who bought high priced TV sets; furthermore, they can include an e-commerce portal within Daily Media in order to increase online sales.
- Any type of B2C service which is looking at building customer relationships and increasing customer loyalty: For instance, in Canada, UCD is discussing with Domino's Pizza which could offer the Pitbox to its clients who could then use their TV set to place orders over the Domino's Pizza's video call center.

Daily Media's content offerings

TV / Video content

Daily TV Daily Media combines both DVB TV channels and free IPTV channels on the same user interface. Users can customize the list of TV channels according to their preferences.	
Web TV channels On top of DVB and IP TV channels, Daily Media also includes web TV channels like for instance Youtube or Bebo TV channels (these are professionally edited or edited by users themselves).	
Daily Radio Just like for television, Daily Media combines both radio stations accessible over DVB and over IP (web radios).	
Daily Movie Users can access VOD streaming and DVD rental offerings of retailers which have adapted their web sites for the Daily Media platform. Adapting a website to the Daily Media platform can be done very easily as the platform is fully html based. Costs involved are typically around 2,500 EUR. The processing of the payments is handled by the e-Wallet system.	
Daily Adult A specific section for adult content is included. It is secured with a parental control.	

Customised content

Similar to user accounts on a computer, the Pitbox gives the possibility to create user accounts which each user can customise as he pleases including defining colours and the wallpaper of the user interface as well as the favourite services, TV channels, etc. Hence, with the Pitbox, each member of the household can have his own account.
Each user with a user account has access to 2GB of online storage on UCD's server. This can be used to store any kind of media files.

My Daily Photo Users can store private photos with the possibility to share, to print, put in a slideshow or a full screen presentation.	
My Daily Video Online storage of video files. A personal video recorder (PVR) service is available to record TV programmes. It uses the programme information from standardised Electronic Programme Guides (EPG).	
My Daily Music Online storage of music files.	
My Daily Jukebox Feature enabling to setup play lists from one's own music library.	

Communication and comfort services

Daily Messenger The Pitbox includes a messaging service including calling and video calling based on Windows Messenger. For these services, a virtual keyboard can be accessed with the remote control but for such services, most users will use the wireless keyboard which is delivered with the Pitbox.	
Daily Mail The Pitbox includes an E-mail service with additional functionalities like voices messages.	
MyButler Daily Media is also offering a butler service using video conferencing. Users can select their favorite butler that will arrange different tasks that are possible from a call centre such as ordering flowers, ordering gifts, make a restaurant reservation, etc.	
Daily Home Domotica applications for controlling lights, cameras and heating of the home using the X-10 protocol developed by Marmitek which makes it home control and security possible using the Daily Media remote control.	
i GUARD Users can choose to use the I-Guard GPS service to trace cars, boats or persons which can be positioned on the screen.	

Further content offerings

CityPoint Users can access CityPoint which displays local information and enables local interactive services such as e-government. Companies can place advertising targeted at a selected postal area or set up online retail stores.	
Pitshop The Pitshop is the online shop for Daily Media products. Similar shops can be set up for online retailers. The processing of the payments is handled by the e-Wallet system. Since each Pitbox is registered to a specific address, the delivery can also be processed more smoothly.	
Daily Care Classic care applications can be used to operate as a first line care. This is especially valuable for senior users who need regular health follow-up. Daily Media enables a secure voice-video connection with the health care contact person.	

Business model

Advertising

The main revenue source of the Daily Media service is advertising. Indeed, Daily Media enables much targeted advertising which also allows for interaction. Futhermore, since all Pitboxes are registered to a specific address, local advertising is also possible using the postal codes.

Portal pages offer two advertising positions: On the right is a skyscraper advertising position and on the left a video commercial position. Both positions can be selected by the user who gets instant access to special pages of the company when he presses the red button of his remote control.

The "Red Button" of the remote control enables for interactive television services. This service is already quite developed in the UK for instance with BSkyB's set-top boxes. When interactive programmes are broadcasted, a "Press Red" icon will appear on the television screen. Users who press this button are linked to a special digital TV site offering further information on the programme. It can be also used for commercial purposes enabling TV-commerce (or e-commerce if the button links to an IP based site).

Another source of advertising revenues comes from the branded wallpapers which are available to users. When these are chosen, the brand has the possibility for a more sophisticated interaction with the users. **Figure 20** shows a sample of available wallpapers.

Figure 20: Examples of available wallpapers

E-Commerce

The second source of revenues for UCD comes from e-commerce when users buy media content or goods directly on their TV set using the e-Wallet solution. Of course, since users can still surf the Internet with the web browser integrated in the Pitbox, they can also buy directly on the Internet without using e-Wallet, in which case UCD does not receive any transaction fee.

Interactive TVB and IP TV services

UCD offers TV channels interactivity services which they can include to their programming. For instance they are in talks with a Dutch TV channel to enable viewers to interact with a talk show as well as with other viewers during the show, using the

communication services of the Daily Media platform. Coined "Daily Discussions" this service makes it possible to deliver a rich, customized, entertaining and highly interactive IPTV talk show experience to its users.

IPTV services to brands
With its platform UCD can provide any brand with the infrastructure to create a full IPTV channel available to Daily Media users. Obviously, since UCD is not a content aggregator, the brand would still have to provide or acquire the contents.

Transcoding, encryption and compression services
Finally, UCD offers transcoding, encryption and compression services for companies which have not already transferred their video content in a format that can be sent over IP at streams of 1MB still enabling a good rendering quality.

Partners

The Daily Media solution is open, but apart from free-to-air content available through DVB, only companies which strike a deal with UCD can display their content on the Daily Media platform.
Since UCD acts solely as a "switch" between content providers and users, its position is that it does not need to acquire a broadcasting license from national regulators. Nevertheless, IP offerings available on Daily Media are usually only accessible on computers. Therefore, some country regulatory bodies might challenge this position since no clear separation between DVB broadcasters and IP broadcasters can be made on the Daily Media platform.

In the Netherlands, UCD has packed its platform with content from the following providers. From the name of some of these companies, it is clear that the boundaries between entertainment, added value services and marketing/advertising are blurring.

Content partners

Sail.tv | BmyGUEST2 | Gamebasics | Vialis Traffic | Club Zipper

World Master Team | Zideo | IGuard | Weer online | Volkskrant

Stoneroos	Rabobank	Smart Concepts	Filmpjes.nl	Laser Cards
Grolsch	Hogeschool Rotterdam	Calibrate	Zoom.in	I Fanzy
FBI Design	Tradidi	Interned 1	Wegener	Auto by tel
Stichting Glasvezel	Movie Max	Videoland		

Conclusion

UCD is a good example of a European SME which, based on an innovative and skilful combination of current technical possibilities added to unconventional strategic choices, is potentially in the position of braking into the much closed market of television services distribution.
It goes against the current trend of walled garden IPTV solutions which is favoured by the "powers that be" being the main telco and broadcasting corporations. It remains to be seen whether such a small company can succeed in disrupting a market held by such stakeholders. Nevertheless, it illustrates how the current changes in the home entertainement sector represent a great opportunity for the European industry to see the emergence of new actors which will determine how Europeans will consume, produce and interact with audiovisual works in the future. A process which the MEDIA Programme should definitely strive to support.
Finally, the Daily Media service gives a good idea of how home entertainment is likely to evolve in the near future and which type of new practices and services the convergence of the media and telecommunication platforms is going to enable.

B. A Closer look at the games sector

Introduction

The games industry is a highly commercial and rapidly growing segment of the home entertainment sector which has been developing so far with hardly any support from the public sector and very little regulation.

The Consultant aimed at identifying possible market failures in the games sector which could be considered as falling within the scope of the general aims of the Commission as defined in the technical section of our offer (7 September 2007):

1. *Guarantee a good representation of newly produced European audiovisual works as well as of the European audiovisual heritage in the consumption of European households;*
2. *Unleashing and supporting the creative potential of European SMEs in order to guarantee a healthy market in terms of solutions and services for home entertainment as well as in terms of contents offered;*
3. *Finally, in compliance with the cultural and economical objectives of harmonisation of the development and of the exchanges at EU level, contribute to banking on the digital revolution in order to make new audiovisual consumption practices one of the driving forces for the economical recovery and cultural expression of countries or regions with low audiovisual production capacity and/or a restricted geographic and linguistic area*[287]*.*

For each segment of the games value chain, the Consultant describes the players, business models, etc., based on the example of three successful European games: Tomb Raider, The Settlers, and Assassin's Creed.

Furthermore, the Consultant assessed possible market failures which could be addressed by the MEDIA Programme based on a series of interviews with industry insiders.

Main Findings

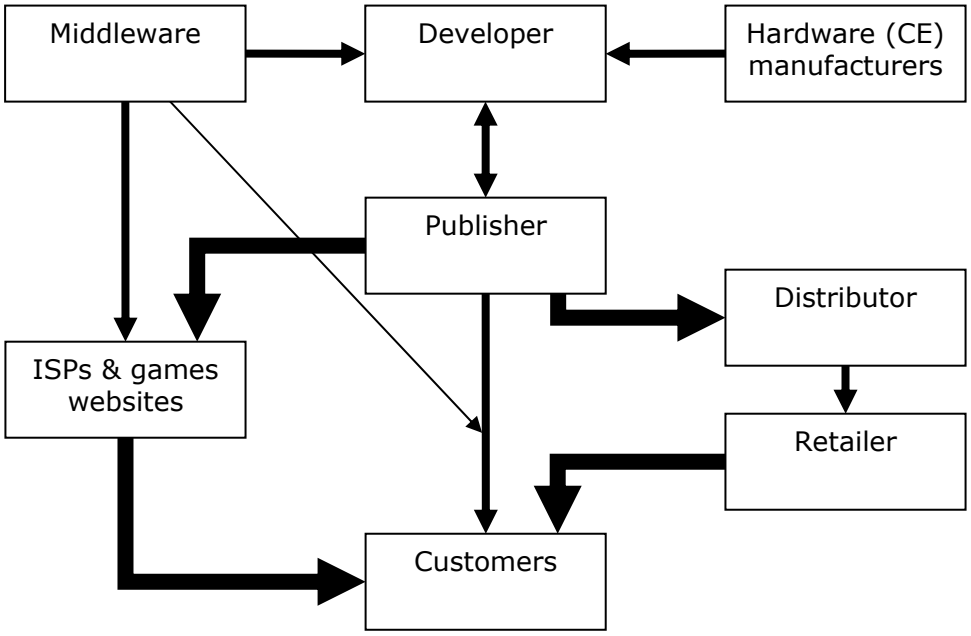
- The games sector represents a very dynamic market with clear business models
- Companies in this market experience high growth rates, many of them aiming to distribute (and sometimes also develop/produce) their products globally
- A great asset of the games sector is the existence of European distribution licensing which enables significant economies of scale on marketing.
- Two simultaneous processes are at work in the sector:
  - Vertical integration: Publishers tend to distribute and develop their games by way of internal or external expension.

[287] Decision No 1718/2006/CE of the European Parliament and of the Council of 15 November 2006 relating to the implementation of a support programme for the European audiovisual sector (MEDIA 2007), Chapter I "Global objectives and priorities of the programme":
Art. 1.4.c) *reducing the imbalances in the European audiovisual market between high audiovisual production capacity countries and countries or regions with low audiovisual production capacity and/or a restricted geographic and linguistic area.*

  - Co-operation between companies: Other companies tend to organise themselves within more or less loose cooperation relationships in order to increase their industrial output and/or their access to market.
- Online distribution is gradually changing the value chain with publishers increasingly distributing their products directly online thus short cutting national/local distributors.
- No clear market failure can be seen in the games sector: main threat for European SMEs is to be able to achieve critical mass to be able to control their distribution

The games value chain illustrated through the case of three successful European games

This part takes a closer look at the value chain in general, the different players of the games industry and their business models. Shown below is the general value chain for the games industry. In the following chapter the consultant will aim to explain how the industry works based on three successful European games. The value chain is changing as big publishers take over more segments of the value chain. They may for example act as publisher, developer and distributor as revealed in our examples.



Stakeholders of the games industry (Source: OECD, 2005)[288]

Definitions

Developer

Developers are the content producers of the industry. They create new games with the latest technological tools.

Publisher

The publisher connects the creative part of the industry with the commercial one and is the most powerful and important link in the value chain. The publisher's main task is to identify titles and market these to retailers, distributors and, thanks to digital distribution, to the consumer.

Distributors

Distributors are still the connecting link between the publisher and the retailers but as mentioned earlier their market segment is diminishing as other players are taking over their field of expertise or finding new distribution channels. Distributors may also be in charge of the reproduction of the game discs or the translation of a game.

[288] Digital Broadband Content: The online computer and video game industry, OECD, Paris, 2005

Retailers

Retailers sell the games to the consumer. Retailers can be department stores (i.e. El Corte Inglés), kiosks, electronics stores (i.e. Mediamarkt, Saturn), supermarkets... Retailers are in charge of pricing, mark-downs, priority, and presentation.

Internet Service Providers (ISPs) and Game Websites

They are the newest players in the value chain and are trying to take over the role of distributors. Internet service providers (ISPs such as AOL) are increasingly important in the evolving value chain because, as mentioned, they have become extremely important as (online) distributors.

Hardware manufacturers

PC and console manufacturers are referred to as hardware manufacturers, but as console games are still the largest segment and their role is far more important than that of PC manufacturers, it is useful to focus on these. The console market is dominated by three manufacturers: Sony (Playstation), Microsoft (Xbox), and Nintendo (Wii).

Middleware

Middleware is the software that runs the graphics for game development, including game optimized high-speed code compilers, software libraries, game engines and platforms.

Games studied

Tomb Raider, first published in 1996, is a game series developed and published by several companies residing in the United Kingdom. Tomb Raider is an action-adventure game, centering on the adventures of the fictional female British archaeologist Lara Croft.

Tomb Raider was the first game to be adapted for the screen by Hollywood. To date, two movies have been released: "Lara Croft: Tomb Raider" and "Lara Croft Tomb Raider: The Cradle of Life". Both star American actress Angelina Jolie as Lara Croft. The brand generated, according to publisher and rights holder Eidos Interactive, total licensing revenues of $1.5 billion.[289]

The ten games of the series have sold more 30 million copies worldwide[290] and hence the series is one of the most successful video games in the world. The games have been published on all available platforms, from mobile phones to game consoles and PC. The newest game of the series is planned for release in November 2008. It is highly anticipated as it is the first Tomb raider game to be released on the next generation consoles (Xbox 360, PS3, Wii).

The game The Settlers is our second example for the games industry. This is a real-time strategy game developed and published by German studio Blue Byte Software. In the Settlers, the player's objective is to create a thriving settlement, while amassing an army and defeating rival nations. The first game was published in 1993 for Commodore Amiga and the last so far in 2007 for Windows. After developing and publishing the first four games of the series in 2001, Blue Byte Software was acquired by French publisher Ubisoft. The next three games of the series were developed by Blue Byte Software and published by Ubisoft. The seven games of the series sold over 7 million times.[291] Typically

[289] www.eidos.com
[290] www.eidos.com
[291] www.ubisoft.com

for real time strategic games, The Settlers was only published for PC. In 2007, Ubisoft published the first game of the series for Nintendo's handheld console DS.

Our third example is Assassin's Creed, developed and published by Ubisoft. The consultant chose this game as it was published on all current game consoles and PC, but also on mobile phone by a different publisher. Gameloft acquired the license for the mobile game from Ubisoft. This example has been chosen to show the relations between the different players in different industries.

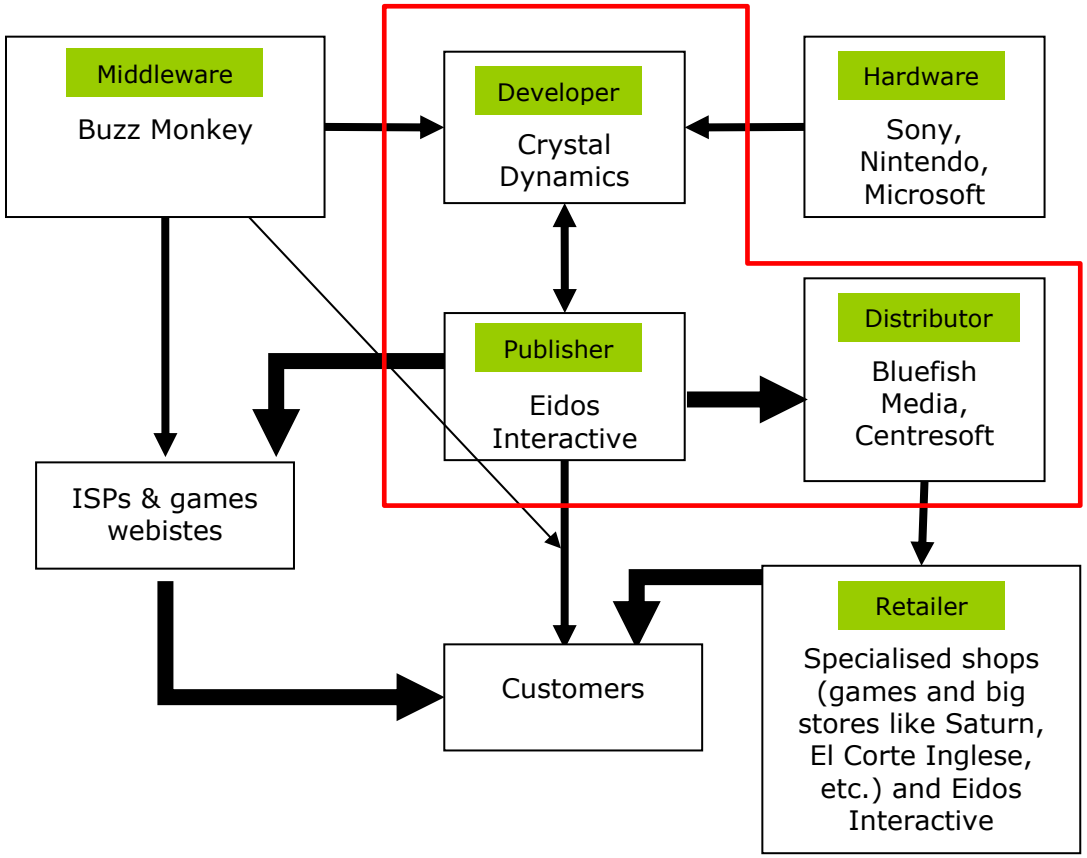
Assassin's Creed, unlike the other games, is not a series and only one game has been published so far and, according to Ubisoft, it sold 6 million copies.[292]

Assassin's Creed is a third-person stealth game in which the player assumes the role of Altaïr ibn La-Ahad, a member of the Hashshashin, The Assassin Brotherhood, which was not allied to either the Crusaders or Saracens during the third crusade. The brotherhood's primary enemy is the Knights Templar. Altaïr's objective in the game is to assassinate nine historical figures propagating the Crusades in the year 1191.

[292] www.ubisoft.com

Tomb Raider

Stakeholders involved in Tomb Raider



Companies part of the Eidos group

Stakeholders involved in Tom Raider (Based on OECD, 2005)[293]

Developer

The idea of Tomb Raider and the first six games of the series were developed by Core Design from Derby, UK, which was by the time of the first game, 1996, already a part of Eidos Interactive. Even though Core Design was owned by Eidos Interactive, the studio remained relatively independent and had more technical and most importantly financial opportunities, thanks to the mother company. However, in 2003 Eidos decided to move the further development of the series to Crystal Dynamics, another Eidos-owned studio.

Publisher

There are two ways for a publisher to create new titles. He can publish a game developed by an independent studio, in which case the publisher is in charge of product management, marketing funding, pricing, and inventory of the game and gets a high share of the revenue (around 40%). In the case of Tomb Raider, the idea for the game was developed by Core Design in accordance with Eidos. In this case, Eidos Interactive owns the developer and holds therefore all licenses for the title but also carries all

[293] Digital Broadband Content: The online computer and video game industry, OECD, Paris, 2005

economical risks as the development costs of the game are very high due to next generation consoles and more powerful PCs. Therefore, Eidos published Tomb Raider cross-platform (XBox, Playstation, Wii, PC, and mobile) to reduce risks by targeting a wider range of buyer segments.
Most of the revenue goes to the publisher as the financial risk is upon him. The normal value chain is not applicable for this game as Eidos acts not only as the publisher but also as the developer and distributor and therefore gets most of the revenue, roughly 70%. Eidos Interactive acts as retailer as well, as Tomb Raider Games are sold over the company's online shop. However, as consumers prefer actual shops the number of games sold directly by the publisher is low.

Distributors

The distribution of the Tomb Raider games is managed by Eidos Interactive. The online distribution is managed by Bluefish Media Digital distribution and the hard box distribution is Centresoft, both wholly owned subsidiaries of Eidos Interactive.

Retailers

For a long time, retailers, especially the large ones, were in a very good bargaining position since the only possibility for publishers was to sell through shops. Due to online distribution channels, this bargaining power is starting to erode.

Internet Service Providers (ISPs) and Game Websites

Online gameplay is managed by independent servers as well as servers provided by Eidos Interactive, who use the platform to market new games by providing free demos. The platform can either be financed by advertisement or by monthly subscriptions by gamers. Online console gaming, on the other hand, is controlled by console manufacturers, who demand online playability from developers in order to get their games published on the consoles.

Hardware manufacturers

As the Tomb Raider games have been published on consoles, the cooperation between publisher Eidos Interactive and hardware manufacturers is very important. The three manufacturers Sony, Microsoft, and Nintendo claim royalties from the publisher for providing the platform and development tools. As online console gaming is provided by hardware manufacturers, they demand online compatibility from publishers.

Middleware

For the latest Tomb Raider game, Buzz Monkey Software, resident in the USA, acts as middleware company by taking over the programming and partially the development of the game, focusing on the console versions of the game. Buzz Monkey software is known to be an expert in the programming and development of next generation console games (PS3, Wii, XBox).

Eidos Interactive

Short Chronology

1990: Eidos is founded as a company specializing in video compression and non-linear editing systems
1995: Acquisition of the PC games companies Domark Group Limited (Domark), Simis and Big Red Software
1996: Acquisition of CentreGold plc which included US Gold and Centresoft (Distributors). The first Tomb Raider game was published.
2004: Financial problems
2005: SCi Entertainment takeover of Eidos
2007: Opening of Eidos Montreal
2008: SCi announced take over and/or merger talks had been halted

Company History

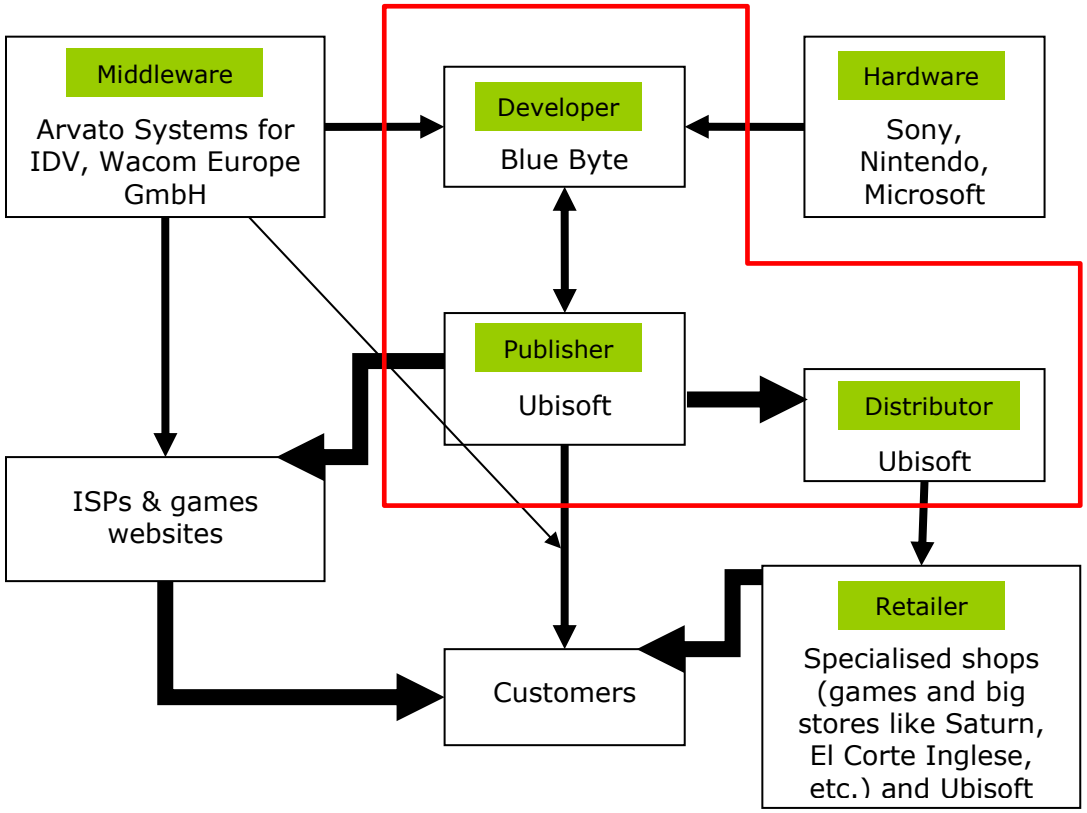
Eidos plc was founded in 1990 as a company specialising in video compression and non-linear editing systems, particularly for Acorn Archimedes computers. In the 1990s, Eidos entered the games sector at a time when it was booming, starting with the acquisition of the PC games companies Domark Group Limited (Domark), Simis and Big Red Software in 1995 through a reverse takeover. At the time, Domark was known for 3D Construction Kit, Championship Manager, Hard Drivin', and many other games. The three companies were then merged into one big firm: Eidos Interactive. In 1996, with the success of the Sony Playstation imminent, Eidos plc acquired CentreGold plc (which included US Gold and Centresoft). Centresoft was sold back in an MBO. US Gold included the valuable asset of Core Design (probably best known for Tomb Raider). A further series of acquisitions and skillful use of capital meant that Eidos plc (now almost entirely consisting of Eidos Interactive) was the fastest growing company in the world in the 1990s, with the share price rising over 400 times from its 1993 low to its 1999 high.

During this period, the company also considered entering the games console market with the release of a proprietary games console which would have been based on Acorn Computers' RISC operating system. Unfortunately, with the collapse of Acorn in 1998, the RISC OS was sold to Pace Mico Technologie and the Eidos' console project stopped.

The 2000s, however, saw this growth slow considerably. The company began losing money in 2004. In 2005, Eidos was purchased by the British games manufacturer SCi Entertainment. Since the SCi purchase, the vast majority of the old Eidos management have been let go. More trouble arose for the company in 2007 when it was announced that the company has been approached with a view to making an offer. In 2008, SCi announced that takeover and/or merger talks had been halted. As a result, the share price dropped by over 50%. Major investors called for the resignation of key personnel, including Jane Cavanagh, over this issue as well as delays to key titles. On January 18, 2008, the management of the company left the company.

The Settlers

Stakeholders involved in The Settlers



Stakeholders involved in The Settlers (Based on OECD, 2005)[294]

Developer

The first four Settlers games were published and developed by Blue Byte, a German development studio and publisher. After publishing and developing the first four games with huge success in 2001, Blue Byte was acquired by Ubisoft. After being taken over the development of the following four games and add-ons remained within Blue Byte.

Publisher

Ubisoft, one of the biggest publishers in the world, resident in France, acquired the development studio Blue Byte after the success of the first games and focus was put on the further development of the Settlers series. Since 2001, Ubisoft publishes the settler's games.

As in the case of Eidos Interactive, Ubisoft acts as retailer as well, with the games being sold over the company's online shop.

[294] Digital Broadband Content: The online computer and video game industry, OECD, Paris, 2005

Distributors

The distribution of the Settlers games is, since the takeover in 2001, managed by Ubisoft, as is the online distribution over the company's website.

Retailers

The usual retailers also carry games by Ubisoft: department stores (i.e. El Corte ingles, kiosks, electronics stores (i.e Mediamarkt, Saturn), supermarkets...

Internet Service Providers (ISP) and Game Websites

Online gameplay is managed by independent servers as well as servers provided by Ubisoft.

Hardware manufactures

As the Settlers has recently only been published on Nintendo's DS there is not yet information on the subject.

Middleware

For the latest Settlers, different middleware has been used for different aspects of the game, for example, Arvato Systems from Germany was used for online gameplay. Furthermore, IDV and Wacom Europe GmbH contributed middleware to the newest game.

Ubisoft

Short Chronology

1986: Founding of Ubisoft as a computer game publisher.
1991: International expansion: Creation of distribution subsidiaries in key world markets: United Kingdom, Germany and the U.S.
1992-1996: Opening of the first studio in France followed by other studios and distribution subsidiaries.
1996: Ubisoft Entertainment S.A. is listed on the Paris Stock Exchange.
Partnerships with big players in the entertainment industry such as Warner Brothers Interactive Entertainment and Disney.
1997-1999: Creation of new studios in China, Canada, Spain, Italy, Morocco, Montpellier and Annecy.
2000-2001: Acquisition of Redstorm Entertainment, Blue Byte Software and Game Studio.
2002-2004: Creation of distribution subsidiaries in South Korea, Finland, Canada and Switzerland, and acquisition of the Tiwak studio in France. One hundred millionth game unit sold.
2004-2005: Licensing deals signed with major Hollywood companies.
2006: 20 Year anniversary.

Company History

Ubisoft was founded in France in 1986 as a family business specializing in computer game publishing. Distribution deals with Electronic Arts, Sierra On-Line, and MicroProse soon followed. Toward the end of the 1980s, Ubisoft began expanding internationally, including the United States, the United Kingdom, and Germany.

In the early 1990s, Ubisoft initiated its in-house game development program which led to the 1994 opening of a studio. Ubisoft became a publicly traded company in 1996 and continued to expand to offices around the globe, opening locations in Shanghai and Montreal.

In the late 1990s and early 2000s, Ubisoft entered the online games sector by publishing Uru: Ages Beyond Myst, The Matrix Online, and the European and Chinese operation of EverQuest. The publisher established ubi.com as its online division. However, in 2004, Ubisoft cancelled the deal. One week later, however, the company announced its acquisition of Wolfpack Studios, developer of the hit game Shadowbane.

From 2004, a concentration process began. On the one hand, rival Electronic Arts purchased a 19.9% stake in the firm, an action Ubisoft referred to as "hostile" on EA's part. In 2005, Ubisoft acquired part of MC2-Microïds (Microïds Canada) and integrated it into their Ubisoft Montreal. In 2006, Ubisoft also bought the Driver franchise from Atari for a sum of €19 million in cash for the franchise, technology rights, and other assets. Additionally, though Ubisoft is not acquiring the studio outright, the members of Driver developer Reflections Interactive became employees of Ubisoft. As a result, Reflections Interactive was subsequently renamed Ubisoft Reflections. In 2007, Ubisoft announced that it had acquired German game developer Sunflowers, followed by an acquisition of Japanese developer Digital Kids that November.

Ubisoft also publishes other franchises not developed in-house, such as Resident Evil 4 for PC, which is a Capcom production, and Innocent Life: A Futuristic Harvest Moon for Playstation 2 and Harvest Moon Online, which are Marvelous Interactive productions.[295]

[295] www.ubisoft.com

Blue Byte

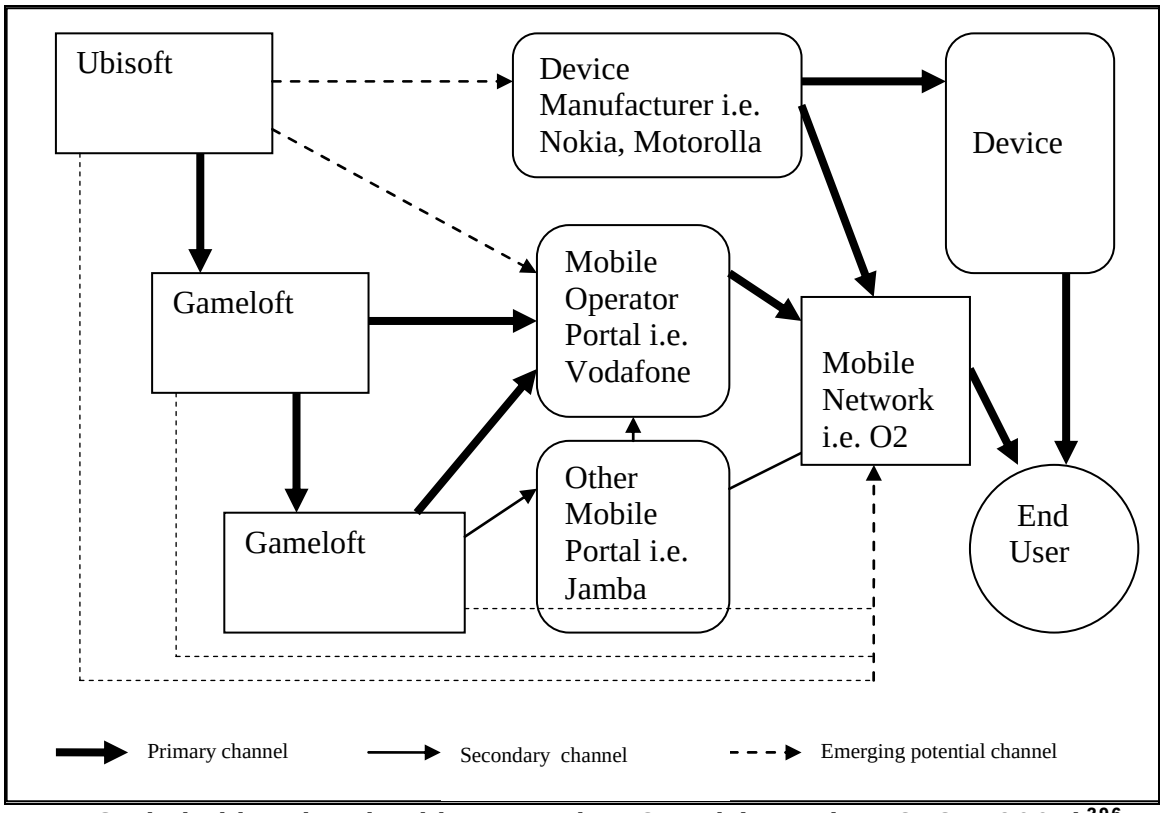
Founded in 1988, Blue Byte Software launched its publishing activities with the tennis simulation game Great Courts, released in 1989 by Ubisoft. Blue Byte's first big success in Germany and Europe was the turn-based strategy game Battle Isle, completed in 1991. The company's next big success followed in 1993 with the release of the managerial game The Settlers (Die Siedler). The Settlers became the most well-known of Blue Byte's products.

Over the years, Blue Byte developed and published numerous innovative titles but most of them were not successful internationally. Efforts to break into the American market, usually aided with publishing by Accolade, failed and success was limited to Germany and parts of Europe, although the firm did establish an international office in the United States in 1995.

In 2001, Blue Byte was acquired by Ubisoft, and tasked to focus on Blue Byte's two most popular series. As of 2004, Blue Byte released the newest game of the Settlers series under the name Die Siedler: Das Erbe der Könige ("The Settlers: Heritage of Kings"), followed by several expansions.

Assassin's Creed

Stakeholders involved in Assassin's Creed



Stakeholders involved in Assassin's Creed (Based on OECD, 2005)[296]

Developer

The game was developed by Ubisoft by an in-house development studio. Ubisoft developed the game for consoles and PC. Gameloft, in which Ubisoft holds a 20% stake, took the idea and developed a mobile version of the game. The mobile version is very similar to the original version. Gameloft adapted the storyline and made necessary changes to increase playability on mobile. Gameloft maintains a development team specialised in developing and adopting games for mobile phones. Gameloft's business model is based on developing games for mobile devices or to acquire licenses for well-known games and adapting them for mobile phones.

Publisher

Assassin's Creed for mobile devices was published by Gameloft. Gameloft in this case is basically involved in every aspect of the game: product management, marketing, funding, pricing and inventory of the game. The revenue share of Gameloft for this game reaches from 25% to 75% depending on the sales channel of the game. When sold by Gameloft over their website, the share is 75%, the remaining share of 25% going to Ubisoft. If the game is sold via a mobile phone operator portal or independent portal, revenue is shared between three parties with 50% going to the retailer, in this case the portal, 25% for Gameloft and 25% for Ubisoft.

[296] Digital Broadband Content: The online computer and video game industry, OECD, Paris, 2005

Hardware Manufacturers

Hardware manufacturers in this case are mobile phone manufacturers. Cooperation between Gameloft and mobile phone manufacturers is very important as Gameloft has to adjust the programming of their games with the technological possibilities of mobile devices and the software provided by manufacturers. Mobile manufacturers are interested in having strong games available for their devices as a further selling argument.

Distributor

The distribution and retail of the game is handled either by the developer or publisher, in this case Gameloft, via the company's website and sold directly to the customer. The game is also sold via other portals, as seen in the figure above. There are independent portals selling the game like Jamba and mobile phone operator portals like Vodafone's portal.

Middleware

The middleware for the mobile version of the game was developed by Gameloft and aims to increase the compatibly of the game for different mobile manufacturers and their software.

Gameloft

Short Chronology

1999: Gameloft is founded in France.
2003: Gameloft is profitable for the first time.
2008: Gameloft announces the release of 15 games for iPhone.

Company History

Gameloft is a leading international publisher and developer of video games for mobile phones and consoles. Established in 1999, it has emerged as one of the top innovators in its field. The company creates games for mobile handsets equipped with Java, Brew or Symbian technology. The total number of games-enabled handsets is anticipated to exceed four billion units by 2012. Gameloft games are also available to players on WiiWare and DS, Microsoft's Xbox LIVE Arcade, Apple's iPod, iTouch and iPhones, and PCs.

Partnership agreements with leading licensors and sports personalities allow Gameloft to form strong relationships with international brands. In addition to the partnerships, Gameloft owns and operates titles such as Block Breaker Deluxe, Asphalt: Urban GT and New York Nights.

Through agreements with major telephone wireless carriers, handset manufacturers, specialized distributors and its online shop, Gameloft has a distribution network in over 80 plus countries.[297]

[297] http://www2.gameloft.com/corpo_gl_brief.php

Revenue Share

The revenue streams differ from platform to platform and from the players involved. For example, for a strong brand game like Tomb Raider, hardware manufacturers collect lower royalties than for games like the new Tomb Raider, coming out in 2008.

Title	PC Game	Console game	Handheld game	Online PC game	Online console game	Mobile game
Developer	20%	40%	40%	20%		25%
Publisher	40%			15%		25%
Distributor	10%	10%	10%	15%		
Retailer	30%	30%	30%			50%
Middleware						
Hardware Manufacturer		20%				
Online gameplay subscriptions						
ISPs				50%		

These numbers are based on general research, as it is not possible to obtain figures from the companies; the main source here being Digital Broadband Content: The online computer and video game industry, OECD, Paris, 2005.

Prices for the games may vary depending on the publishers. There are two different types of games on the market. There are budget games, which are normally 29,99€, and there are premium games which cost between 49,99€ for the PC version and 69,99€ for the console version. The prices of the games are the same in Europe since, unlike in the film business, videogames do not need a license for every country but get a European wide license. The main advantage is that the marketing of the game is cheaper as the publisher needs to carry out only one campaign for Europe, with games being published in English rather than in the different European languages.

The games mentioned in this study are premium games, which is what publishers focus on. The main difference between budget and premium games is not necessarily the quality of the game but the branding of the game. A well known game like Tomb Raider is less likely to flop than an unknown game. Therefore, publishers invest more in the marketing and development of popular brands.

Subscription prices for online computer games are based on the same model. When providing online gaming facilities for well known games, providers may charge more than with less known games.

With online console gaming, the game itself is not relevant for the pricing of the subscriptions as hardware manufacturers control the pricing of the online gaming facilities. Hardware manufacturers control the games which get published on their consoles as they grant licenses for which they collect royalties. For publishers it is very important to get their games published on the newest console as it is a growing and lucrative market. Hardware manufacturers are interested in having strong titles for their console as it is a further selling argument for their consoles. Therefore, manufacturers are very likely to lower their royalties for a game like Tomb Raider as it is very likely that further consoles will be sold and more console owners will buy subscriptions.

Comparison between the three games companies studied

Ubisoft and Eidos are very similar in the way they do business and the way they started their companies. They started out as small companies and rose to the top thanks to smart acquisitions and expansion policy. The strategy of Eidos and Ubisoft are similar: both try to be an active player in every aspect of the game industry's value chain. They already act as developer, publisher, sometimes middleware developer in-house as well, distributor, provider of servers for online gameplay and finally retailer thanks to broadband diffusion resulting in digital distribution.

The development of the Tomb Raider games was different to the development of the Settlers games. The original idea for Tomb Raider was developed by a rather small development studio which did not have the means to publish and develop the game by itself; hence, Eidos financed the development of the game and took care of the marketing. In return, Eidos received the license for the character and therefore the games. Later Eidos acquired Core Design, the original developer of Tomb Raider in 2003; however, Eidos moved the development of the games to Crystal Dynamics also owned by Eidos.

The main difference between Tomb Raider and the Settlers is that Blue Byte, the developer of the Settlers, before being taken over by Ubisoft in 2001, published the first four games of the series on their own. The market becoming more competitive forced Blue Byte to agree to Ubisoft's take-over offer. Blue Byte has since become a part of the Ubisoft cooperation group. The further development of the Settlers series is very similar to the Tomb Raider series, wherein the publisher pulls the strings.

On the other hand, Gameloft's Assassin's Creed was originally created by Ubisoft and then converted to mobile by Gameloft. Gameloft's business model is based on mobile games and therefore slightly different from that of the publishers mentioned above.

Some games are developed by in-house studios while others are converted to mobile phones by Gameloft. The main advantage when taking already existing games, thus paying licensing fees, is that the marketing for the game is mostly already done by the publisher. Assassin's Creed was originally published on consoles and PC before coming out on mobile; therefore, the game was popular and the marketing was already done.

Year 2007	Ubisoft	Eidos Interactive	Gameloft
Employees including subsidiaries	4350	864	4000
Revenue	€ 928 Million	£ 118.9 Million	€ 96.1 Million
Founding Year	1986	1990	1999
Headquarters	Montreuil-sous-Bois, France, Montreal, Canada	Wimbledon, Great Britain	Paris, France, Seattle, Washington, San Francisco, California
Net income	€27.2 Million	£8.1 Million	€- 1.1 Million
Operating Revenue	€41.4 Million	£28.8 Million	€ 2.9 Million
Owner	-	SCi Entertainment Group	-

Source: companies' websites.

Possible market failures in the European games sector

Methodology

Interview list

Emmanuel Forsans – Director of the French Agency for Video Games (AFJV) - France
John Marshall – Regional International Trade Advisor of Screen East – UK
Jeremy Cooke – Chair of Games Eden – UK
Lubomir Momchilov – Marketing Manager of Pulsar - Bulgaria
Jürgen Bansch – Interactive Software Federation of Europe (ISFE)

Interview guide

The European Commission aims at supporting the creative potential of SMEs so as to ensure a good market share to European companies in terms of proposed services and content.
Therefore, the objective of this interview is to assess any specific market failures that could be addressed by the MEDIA programme

The questions addressed the following indicators:
- Convergence of the level of development and changes in the value chain
- Competition and level of dependency between big companies and SMEs
- Independent publishers' challenges
- European developers' challenges
- Training and human resources needs
- The developer/publisher relationship
- Access to finance
- Specificity of the video game industry in comparison with the creative industries

Convergence of the level of development and changes in the value chain

Current changes in the games industry's value chain affect the SMEs of the sector. Convergence means that the creative plan in these SMEs is becoming increasingly important. Indeed, indigenous development teams are best placed to understand the creative interactive requirement of their home territory. The creation of assets is increasingly a cost consideration which brings some games companies to outsource part of their production to low-wage countries like China or India. Therefore, European SMEs not big enough to benefit from the economies of scales and/or to outsource, find it more and more difficult to compete. However, new opportunities are appearing with the convergence of media, which see traditional media increasingly engaging with interactive digital talent, thus creating new business opportunities for SMEs of the games industry. The emerging digital download market requires content creators and distributors to communicate more effectively with their target consumer audience.

Furthermore, the accelerating uptake of online gaming is bringing about a change of paradigm in the way the game industry is doing business, as distribution is increasingly dematerialised. This has impacted the publisher/developer relation. Indeed, publishers used to finance 100 % of the development studios, buying out the intellectual property rights, because studios could not afford financing themselves. With the explosion of online gaming between 2001 and 2003, the situation evolved, enabling studios to become producers and to keep part of the intellectual property rights. In France, the CNC

(Centre National de Cinematographie) supported this evolution by offering developers financial support to increase their financial capacity.

Another point is that the development of online games puts gamers in the position to develop new stories while playing a game. The input of users in games development is continuously increasing. This trend also impacts casual games with development costs of many casual games being only a fraction of those of average games and with some publishers offering tools to develop one's own games within a game (i.e. Microsoft XNA, EA's Spore).

Nevertheless, as seen in the past, these changes will probably lead to yet a new sectoral consolidation with the sale of successful independent units to larger publishers.

Competition and level of dependency between big companies and SMEs in the games industry

Independent publishers

The enhanced sophistication of next generation consoles and of online games has increased the development costs, which makes it increasingly difficult for independent publishers to compete. Nevertheless, casual and mobile games are much cheaper to produce and some enjoy also considerable success. Furthermore, major games publishers base their market dominance on their global distribution and marketing infrastructure which enables them to establish brands on which retailers' revenue rely strongly. Large games publishers hardly invest in small games; they rather focus on sure bets such as the purchase of an NBA licence whereas small publishers can take risks as they invest less.

Small publishers' strategies tend to focus on exploring niche product opportunities, focussing on regional personalised products and developing and acquiring unique intellectual property rights rather than trying to compete with global blockbusters. Nevertheless, independent publishers are also good pioneers, innovating with new types of games unseen before. Some are good plagiarists as well and able to release copies of big games for less money.

Middleware companies

Middleware companies are relatively less at risk than publishers as they focus on developing already proven technology rather than trying and creating new technologies, content and brands. Furthermore, middleware companies can benefit from economies of scale.

This partly explains why SMEs working in the middleware sector are mostly independent from publishers. If publishers can find outside quality middleware that they are unable to source internally, they will procure externally, and the other way around. It is true that the logic of publishers tends to be towards vertical integration in order to acquire maximum value and skilled staff. Yet, it is still tricky to turn a case-by-case assessment into a general principle. It also has to be noted that middleware SMEs do not have the same business model as big publishers. The latter will work for themselves whereas middleware companies will invest at least as much money but can mutualise its investment by selling to development studios as many exploitation licences as possible. In addition, it is common that publishers buy a licence from a middleware company as it is less expensive than having an in-house team. Both schemes are observed: an in-house middleware team and the buying of licences depending on the publisher's business and innovation strategy.

Independent publishers' challenges

Independent publishers have many challenges to cope with. On the one hand, they have to succeed in accessing unique and compelling intellectual property rights and brands (i.e. successful movies) as well as future exclusion by corporations that control integrated platforms and games development (i.e. Nintendo). They also struggle with volume throughput as a strong product portfolio is required to meet retail needs. Also, stretching smaller budgets across multiple platforms and projects is difficult.

On the other hand, the developing process is one of the main challenges of independent publishers who are also responsible for their product's manufacturing and marketing, including market research and all aspects of advertising. They usually finance the development, by external development or an internal studio. As for the creation of a competitive game, top level staff is needed, such as designers, programmers etc. and they are mostly already working for the biggest. Another issue is the customer and players support that cannot be managed very well by an independent publisher if the title becomes too big.

Lastly, distribution is a major constraint as well. The large video game publishers also distribute the games they publish, while some smaller publishers instead hire distribution companies (or larger video game publishers) to distribute the games they publish. But there is not enough space for all the titles and particularly the smallest. Other tasks include paying for localization and licenses, layout, printing, writing of the user manual and the creation of graphic design elements such as the box design. In addition, publishers are very good on their national territory but do not cross borders.

European developers' challenges

Regarding online games, two of the most important games are "World of Warcraft" and "Dofus". The first one was developed by Blizzard Entertainment (partially owned by Vivendi) and published by Vivendi and it required millions to develop. Whereas the second one is developed and published by French independent company Ankama Games and required far less investment for its development. It was originally targeted at a niche audience and only a few thousand euros were spent on its development. The following update versions were then developed at high costs.

European developers have trouble competing on price with the teams in India and China, and with countries where high national or regional support exist for the game industry like in Canada, Australia, USA and France – public support to the games industry is usually more in the form of tax incentives or infrastructural support for the creation of company clusters rather than subsidies. For European developers, it is quite challenging to sustain huge teams on huge projects. One possible alternative would be for them to find new sources of revenue with traditional media companies to help bring indigenous communication media to the internet.

Whereas next-generation consoles, complex MMOGs and movie licenses are pushing costs up, there is a growing market for much less expensive casual and mobile games where creativity trumps technology.

Another challenger for European developers is accessing unique and compelling intellectual property rights (i.e. movie titles, character rights).

Training and human resources needs

Appropriate training is instrumental for a healthy European games industry. This is because games production travels easily and will go to the places where the right skill set

is available. Unfortunately, there is not enough proper training in terms of games in Europe. There are a lot of engineers but they are mainly computer scientists and do not have training in games production.

The situation is contrasted from the UK where technical and design skills are probably well catered for on a national level so that a quality game curriculum is available in various universities as well as in France, which boasts half a dozen "pôles image", to Greece and Italy where quality training is in scarce supply. Nevertheless, it has to be underlined that there is an increasing requirement for highly trained graduates in subjects such as maths, physics and algebra. Universities need to engage with the commercial business community to better understand more effective degree coursework. Constructors such as Nintendo could collaborate with engineering universities by providing development kits which cost 20,000 euros and that universities cannot afford. A degree in "computer games" is largely worthless and non-aligned coursework is pointless.

However, there are no needs regarding sound, design, special effects or infographic training. It is mostly technical training that is lacking.

Specific technical training is highly needed for producers and specific sectoral business skills as well collaboration with actors to develop emotional depth in games and characters (emotioneering).

Human resources at producer and management level are not sufficient enough to satisfy the industry's demand.
There is an increasing need for talented designers, mathematicians, physicists to satisfy the European interactive entertainment requirements. There is certainly a skills shortage in the UK and fierce competition for skilled and motivated engineers. More largely, on a European scale, there is not enough skilled and experienced staff available as they are all already working for the big companies and staff turnover is not sufficient.

The developer / publisher relationship

In most cases, the relationship developer-publisher is a subcontractor relationship in which most of the power lies with the publisher. The main consequence of this asymmetry is that developers have limited access to rights ownership, making it difficult to build an asset base and sustainable development for their companies.

The relationship works as follows. Publishers invest in projects which they think will meet market success. For its production, they sign a contract with one (or in some cases more) developer and middleware company. Because the publisher usually finances development, it has to monitor the progress of the developer in order to manage development risks. Most games created by an external game developer are paid for with periodic advances on royalties. These advances are paid when the developer reaches certain stages of development. These advances are then recouped against an agreed percentage of the copyright.

Access to finance

The film and TV industries receive enormous support via tax credits and grant funding. The games industry occupies an increasingly important role in the lives of the emerging adolescent population and everyone below the age of 40. The Internet dictates that awareness and support for digital creativity is an absolute requirement for a socially aware and forward thinking society.

France is one of the only European countries where public support has been focussing on the games industry in the form of financing access support such as funding for video games as well as the tax relief measure for video games implemented by the National Centre for Cinematography (CNC) and specific "clusters" which focus on R&D. Such support schemes have a direct impact on production. Yet, it is still not enough. The games industry needs investment, yet investors are very cautious when it comes to investing in smaller titles.

Professionals in the video game industry are quite pleased that the sector was included in the MEDIA programme as financial support for the development of such projects is scarce and SMEs need it to develop projects and raise investor interest.

Specificity of the video game industry in comparison with the creative industries

There are many differences between the video game industry and the creative industries. First, the video game industry is young, with the advantages and disadvantages taht implies.

Video games were "born digital", i.e. they were shaped by digital technology. In contrast, music and movies predate the digital "revolution". They remain talent-heavy even though digital technology plays an increasing role in the production and distribution of their works.
The games industry has a far better understanding of the effect of digital interaction upon the life of the consumer. Traditional media continue to deliver their tried-and-tested products into an existing customer base. Understanding why a particular digital interaction is compelling is the domain of game development. Traditional creative media stumble to understand digital interaction – their domain is largely a performance art targeting an audience that watches without actually participating. For example, movies are works of art fixed for ever with no possibility to tinker with their content without infringing the related intellectual property rights. Bringing niche consumer audiences into creative and exciting interactions requires the involvement of creative people that understand the digital landscape – the games industry.

Secondly, in the video game industry, there is no development phase consisting in script writing or drawing a story board such as in the cinema or audiovisual industry because the project cannot be developed properly on paper and must be produced directly. Thus, the project is produced once and then modified and reproduced until it meets all the requirements needed and targeted to the audience, which is a very expensive conception process.

Then, another difference is that the video game industry faces very short technological cycles, shorter than in any other industry. Every 5 years maximum, all the technology is renewed and each time, it has revolutionary compared to the former one in terms of conception, production, processors, architecture of the graphic card, etc. Technological cycles are definitely too short and this is due to the fierce competition amongst all the operators.

Finally, the European game industry has enjoyed global success with little or no government support so far (see how Vivendi, now Activision Blizzard, Ubisoft, Atari, Eidos, etc, have reached the top rankings among world game publishers). This stands in stark contrast to the European movie industry that has little international impact despite decades of generous government support.

Conclusion

Specific areas of the video game industry require attention:

- **Development of high level training:** addressing the specificities and real needs of the sector as there is no proper training in terms of video games in Europe, especially with regards to technical training. In addition, there is not enough skilled and experienced staff available as they are all already working for the big companies and the staff turnover is not sufficient.
- **Better access to finance for SMEs:** Financial support for the development of such projects is scarce and SMEs need it to develop projects and become of interest for investors.
- **Better distribution across countries** is essential. Publishers are very good on their national territory but do not cross borders, therefore distribution often does not go beyond the national territory.

C. Main findings

This study on the role of SMEs and European audiovisual works in the changing home entertainment sector makes it clear that the European home entertainment sector is in a phase of transition. Main drivers of these changes are the following:

- **Media convergence:** The digitalisation of content distribution makes content available on a multitude of distribution platforms and makes the combination of various types of content possible;
- **Interaction**: The digitalisation of content gives the viewer/user the possibility of interacting with the content, of sending feedback in real time though the distribution network and of creating original content which can in turn be made accessible for other users/viewers;
- **Commoditisation/Diversification**: The digitalisation of content changes the patterns for its availability and its consumption; the explosion of the number of delivery channels makes most content become more of a commodity with a strong pressure on prices while, at the same time, the possibility to reach niche audiences is increasing.

The most significant new aspects of the home entertainment sector resulting from this transition are the following:

- **Increasing importance of video content on the Internet**, although users/viewers tend to favour content accessible for free, leaving little room for other business models than ad-funded entertainment.
- **Dominance of "walled garden" solutions for IPTV** offered by the major telecom, satellite and cable operators.
- **Changes in the audiovisual value chain**, either due to the merging of roles which used to be distinct or due to the disappearing of some roles. For instance, in the VoD sector, many new players are entering the value chain as "platform editors" (media companies, telecommunication companies, independents and also online retailers) while the importance of the role of "aggregators" is constantly increasing. In the games sector, besides the continuous process of integration around games publishers, a number of partnerships between stakeholders are emerging, especially between publishers and aggregators, amongst developers and, of course, between publishers and developers.
- **Increasing importance of games** as an industry as well as a form of cultural expression. In the EU15 countries, 23.5% of all households own a game console[298]; hence, considering that most European gamers actually play on their PC (72% according to the most recent Nielsen Interactive Entertainment study[299]), games can arguably be considered as a mainstream segment of the home entertainment sector. Moreover, one major impact of the continuous technological progress of games development combined with the phenomenon of media convergence is that games are increasingly influencing other types of media (especially film and animation) and vice versa.
- **Slow development of mobile entertainment**. The development of TV, video, games and interactive entertainment services distributed over mobile networks is slow. The lack of an attractive pricing for mobile data transfer is seen as the main reason for this.
- **Persistence of territorialisation** for the exploitation of digital rights of audiovisual works. Unlike the game industry that can leverage on multi-territorial licenses, the full benefits of digital distribution of video content are still hampered by the territorialisation of licenses. This is mainly due to the heterogeneity of European

[298] Eurostat, 2008

[299] *Video Gamers in Europe 2007*, Nielsen Interactive Entertainment (prepared for the Interactive Software Federation of Europe - ISFE), London/Brussels 2007

markets with different consumption patterns, different regulations and the domination by local players.

- **New distribution platforms represent an opportunity for European SMEs** to reach their audience and to understand it better by means of interaction. Furthermore, as business models are still in the process of being defined, they represent a real chance for production companies to improve their position in the sharing of the copyright than what is the commonly accepted rule on the traditional platforms (TV, cinema and video/DVD).

Legal challenges to the development of new platforms in Europe

Users' interest for audiovisual content available for free on the new platforms does not need to be further demonstrated. The question is rather about how to finance this content which, so far, too few users seem to be willing to pay for. Except for premium content on certain Internet platforms, the only economically viable model so far seems to be ad-financed content such as branded entertainment, brand integration or web ads on the page displaying the content.

Since the consumers' interest for paid-for content has been limited so far, the main revenue source on new distribution platforms are advertising or brands' marketing budgets. The rules limiting ad-funded entertainment contained in the AVMS directive as well as in national legislations make it more challenging to produce such types of content in Europe compared to other regions like Northern America and South East Asia which are less regulated. In the long run, there is a threat that audiovisuals works produced outside of Europe will be able to achieve better production quality and be more widely available to European consumers since their will have been more easily financed and their investment recouped on their home markets.

The European Commission could consider engaging with the industry stakeholders in order to find ways to reduce these barriers to the development of the new digital platforms.

D. Recommendations for additions to current Media support schemes

Training

The MEDIA programme should support training programmes and institutes in the two following sectors:

- Interactive storytelling, multiplatform storytelling: Classic film or TV scriptwriters do not know how to write non-linear stories which leave room for interactivity.
- Technical games engineers: The European industry lacks skilled human resources in this area especially for people trained at programming console games.

New Technologies

Pilot projects: Support for "360° production strategy"

"360° production strategy" refers to the idea of developing a piece of content over all existing media platforms (cinema, TV, Internet, mobile, print, games…), usually with originally developed content for each specific media platform.

Audiovisual works are increasingly developing as brands which should be able to reach their audience on all media platforms in order to increase consumers' fidelity and to enable interaction. Since this type of strategy is still at the first movers' stage and producers, distributors as well as viewers/users are still very little acquainted to such approaches, their development represents an important financial risk. Hence, a specific support should be launched to support industry stakeholders which are doing the pioneer work of developing this new market and exploring these new possibilities.

Such a support could be targeted directly at TV production companies or at TV broadcasters enabling them to allocate financing for the development of innovative content alongside with the traditional TV formats.

Film production and distribution companies could also be targeted for the development of such content which would be meant as a promotional tool for the movie or as additional content such as audiovisual works developing further the main story or certain characters. Such a support could also be included as a standalone scheme within the Promotion line of support.

Creation of a special scheme to support media clusters

The Consultant thinks that the Commission could follow good practices already supported by many other DGs which focus on the networking and clustering of companies focussing on different markets and with different competencies. Such clusters could bring together companies having technological know-how to produce and distribute digital content and companies having creative know-how to produce original content which could be developed for various media platforms.

Indeed, in the field of the new digital platforms, most European SMEs have not the financial and operative strength to enter the market on their own or have too small catalogues of rights to offer to consumers with a good chance of a return on investment in the face of the cost needed for distribution - even when they choose to focus solely on digital distribution. The Commission could support the set up of networks and of clusters in order to boost the creativity and the ability to provide the right services and programmes for a changing market.

Producer's Support

Development: Interactive works.

The Consultant thinks that the support for the development of interactive works should be increased as the funds currently available are not in relation with the variety, the economical size as well as the economical and cultural potential of the types of media addressed in this scheme.

An observation made by the Consultant is that the support provided by the MEDIA Programme in this sector might not be fully in phase with the market. Indeed, except for games for which a profitable market already exists, there are only a few companies in Europe which are capable of taking the risks involved with the development and production of interactive works other than games such as content for the Internet or for mobile. These risks are high since the business models are not clearly defined and no real market for such audiovisual works exists so far. Supporting companies pioneering in this area would allow the development of future markets for second movers as well, but many of these companies cannot apply for MEDIA support since they are not "independent". Indeed, to be considered as independent, and thus eligible for support from the MEDIA Programme, companies cannot be majority controlled by a television broadcaster, either in shareholding or commercial terms. Majority control is considered to occur when more than 25% of the share capital of a production company is held by a single broadcaster (50% when several broadcasters are involved) or when, over a three-year period, more than 90% of a production company's revenue is generated in co-operation with a single broadcaster.[300]

The Commission could therefore take into consideration allowing some tolerance to the "independent" rule to support the appearance of this new market.

Distribution

Although interactive works are for the time being not included in the scope of the MEDIA Programme for distribution, the Commission could take into consideration emulating what it has been able to do with its Producers' Support and including Interactive works in the scope of the Distribution scheme of the MEDIA Programme. Such an addition could aim at:

- Supporting for the international distribution of games released by independent games publishers
- Supporting independent content aggregators which are active internationally.

No recommendation were formulated for the following schemes

- Promotion (except eventually to support 360° strategies for film releases – see "New Technologies" above)
- Festivals
- Exhibition

[300] Call for proposals EACEA 25/2008 – Development - Interactive Work

D. Recommendations for a new support instrument focussing on the access to finance of European audiovisual SMEs

Funding issues

The key issue which will determine the consumption of European audiovisual works at home will be the gateway enabling the access, the research and the delivery of the content, should it be:

- Set top boxes, TV sets or game consoles backed by a delivery network (terrestrial, cable, satellite - or even mobile) enabling access to DVB and IP distributed content offerings
- Mobile content platforms
- Video sharing, Web TV or VOD platforms and search engines

Therefore the MEDIA Programme and the European Commission should encourage a variety of stakeholders to be active at this critical point of the value chain in order to guarantee the access of European consumers and users to European audiovisual content. Furthermore, such support could help some young innovative SMEs to eventually develop as major European corporations.

For the time being, the strong stakeholders of the industry (i.e. TV networks such as BSkyB, telecom operators such as Deutsche Telekom as well as search engines such as Google/Youtube or VOD platforms such as iTunes) start to position themselves as gatekeepers of the access to home viewers/users. Most of them are favouring walled-garden solutions meaning that only the content which they have licensed is accessible. Thanks to their economical weight and to the fact that, for some of them, the bulk of their revenues does not come from audiovisual content distribution, they can easily determine the terms of trade, especially in the face of independent content owners.

In order to guarantee a diversified offer of audiovisual works to the European households, the European Commission should aim at facilitating the emergence of alternative stakeholders in this field. As a matter of fact, most of these alternative stakeholders are SMEs at a relative early stage of development such as Holland's United Content Distributors. As we know, European innovative SMEs face a great challenge in bridging the gap between the seed and start-up capital phase where they are usually able to find business angel and bank investment locally and the expansion phase where venture capital investment is necessary.

Supports already available

The Commission has a wide range of supports available for European SMEs. These are available in different forms such as grants, loans and, in some cases, guarantees. Support is available either directly from DG Enterprise, DG Regio or DG INFSO or through programmes managed at national or regional level, such as the European Union's Structural Funds. SMEs can also benefit from a series of non-financial assistance measures in the form of programmes and business support services.[301]

[301] http://ec.europa.eu/enterprise/sme/fund_tools/fund_tools_readme_en.htm

There is no specific instrument for financing the SMEs of the home entertainment sector. Nevertheless, there are funding and financial mechanisms that can be accessed by SMEs from this sector. These include the following[302].

Thematic funding opportunities

Funding for project within a specific thematic identified as strategic by the Commission. These fund's management is centralised.

- Seventh Framework Programme (FP7) for Research and Technological Development (2007-2013) [303]: Provides funding for reseach projects within 10 thematic areas including Information and Communication Technologies (ICTs)
- eConTec [304] – Supportung excellence in eContent and eBusiness technologies: Managed within FP7 by the pan-European network for market-orientated, industrial Research & Development (EUREKA): Provides funding for technologies facilitating the collaboration between the digital content users and industries industries (content owners, aggregators) on the one hand, and the infrastructure (devices, systems, networks) on the other hand.
- i2i Audiovisual of the MEDIA Programme [305]: Facilitate access of independent audiovisual production companies to financing from banks and other financial institutions by subsidising part of the cost of the guarantees required by these institutions and/or part of the financing itself (covers insurance, completion guarantee and financing costs)

European regional development fund (ERDF) [306]

In regions covered by the Convergence objective, ERDF focuses its intervention on modernising and diversifying economic structures as well as safeguarding or creating sustainable jobs, with action in eleven areas including research and technological development (RTD), innovation and entrepreneurship, information society and culture. Its management is decentralised i.e. funds are managed by regional authorities.

National schemes to support internationalisation of SMES

Each Member State has a range of measures and support measures in place to help smaller companies expand their international operations [307].

Financial instruments

- Joint European Resources for Micro to medium Enterprises (JEREMIE) [308]:
  Provides guarantees, venture capital, securitisation and loans on market terms for the development of micro, small and medium-sized enterprises in the regions of the EU. Jointly managed by DG Regio, the European Investment Fund (EIF) and regional authorities. The EIF is a tripartite structure between the European Investment Bank (EIB), the majority shareholder, the European Commission and several banks and financial institutions.
- Joint Action to Support Micro-finance Institutions in Europe (JASMINE) [309]:
  Conducts market analysis, establishes guidelines, and promotes training courses to support microfinance institutions in Europe (loans up to €25.000). Financial support would come from the existing technical assistance budget of the ERDF.
- Competitiveness and Innovation Programme 2007-2013 (CIP) (see Figure 21):
  Helps SMEs raise equity and debt finance. The programme is managed by the

[302] This list was provided to the Consultant by the services of the MEDIA Programme
[303] http://ec.europa.eu/research/fp7/index_en.cfm?pg=info
[304] http://www.econtec.org
[305] http://ec.europa.eu/information_society/media/producer/i2i/index_en.htm
[306] http://ec.europa.eu/regional_policy/funds/prord/prord_en.htm
[307] http://ec.europa.eu/enterprise/entrepreneurship/support_measures/internationalisation/report_internat.pdf
[308] http://ec.europa.eu/regional_policy/funds/2007/jjj/jeremie_en.htm
[309] http://ec.europa.eu/regional_policy/funds/2007/jjj/micro_en.htm

European Investment Fund (EIF) which provides finance through financial intermediaries.

- The High Growth Innovative Scheme: Provides risk capital for innovative SMEs in their early stages (GIF1) and in their expansion phase (GIF2);
- SME Guarantee Facility (SMEG): Provides loan guarantees to encourage banks to make more debt finance available to SMEs by reducing the banks' exposure to risk;
- Seed Capital Action and Partnership Action: Helps to reinforce the capacity of financial intermediaries to invest in and lend to SMEs.

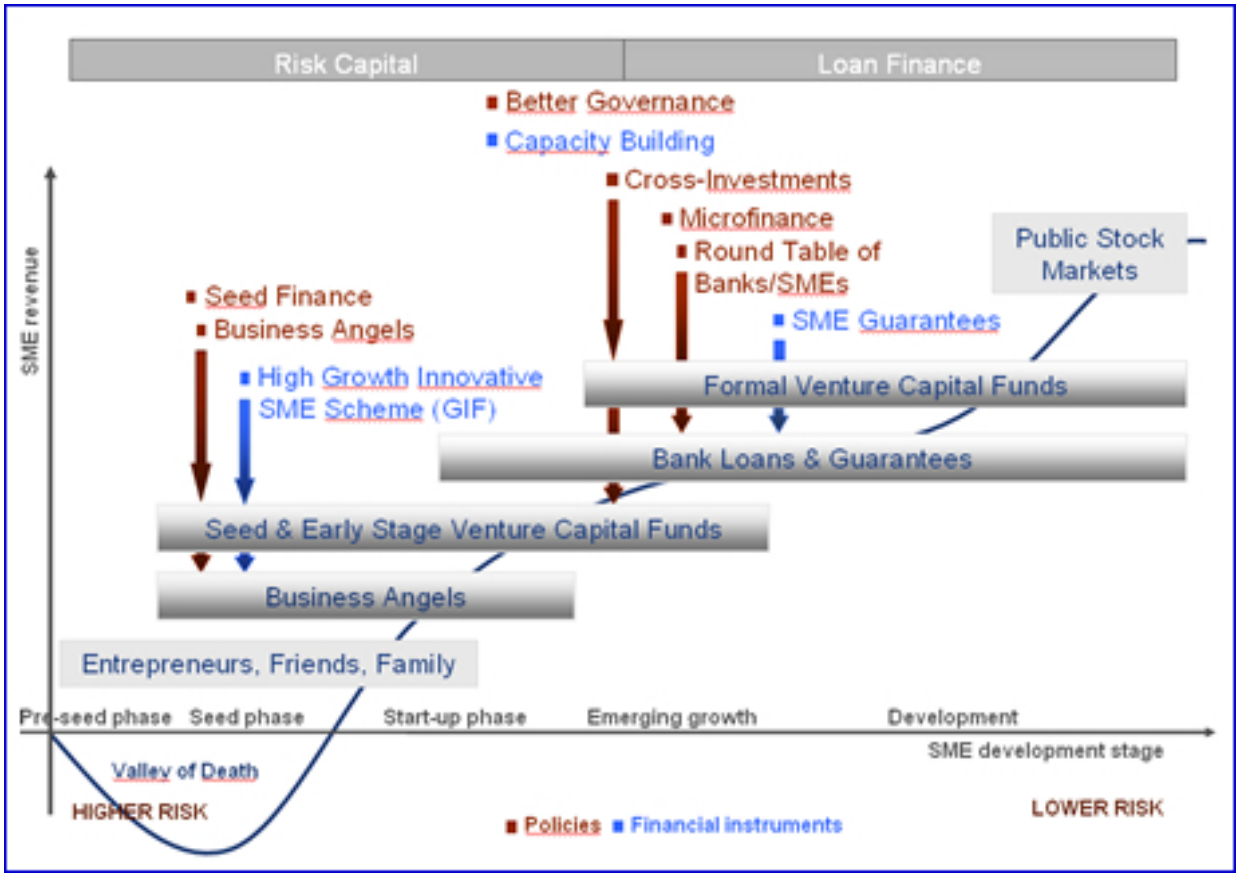


Figure 21: Competitiveness and Innovation Programme 2007-2013 (CIP) (Source: DG Enterprise, European Commission [310])

- Preparatory and pilot actions
  In parallel to the CIP, preparatory and pilot actions are regularly launched to test new financial instruments such as 'SMEs in the new financial environment' which was set up by the European Commission between 2004 and 2006 in cooperation with participating international financial institutions (IFIs) in the framework of the PHARE programme, to assist regional financial institutions, especially from the new Member States, to further develop their credit operations vis-à-vis SMEs.

Unfortunately, it seems that SMEs from the audiovisual sector are very much underrepresented in the companies benefiting from these supports. A detailed analysis of this situation and of its origins was not in the scope of this study. Nevertheless, considering the economical and cultural importance of home entertainment, a financial instrument more focussed at the audiovisual/home entertainment sectors appears to be needed.

[310] http://ec.europa.eu/enterprise/entrepreneurship/financing/index_en.htm

Creation of a new intervention instrument: A public fund for bridge investment in innovative European audiovisual SMEs

One option for the European Commission could be to set up a public fund to bridge the equity gap for innovative European audiovisual SMEs. Investments at this critical phase of the development of such companies would aim at helping them expanding internationally. The European Commission would aim at exiting such an investment within a period of 5 to 10 years by means of a management buy-out, trade sale or public sale. Furthermore, the EC could choose not to aim primarily at making a major profit with such investments but rather examine the possibilities of binding the support with some European criteria within these companies, sustainable after its exiting of the investment. Such soft criteria could include ways to guarantee the access of European audiovisual works to the home or to guarantee the European ownership of the company for a significant period of time. Indeed, as we know, the challenges which European companies face in finding start-up and growth finance appear at the end of the scale as well when the company is seeking funds to finance its global expansion. At this very stage, most European SMEs often have to go the US to find such funds since large scale venture investment is scarce in Europe. This was the case for instance for Skype which was acquired by eBay for more than USD2b in 2005[311] or for Jamba! which was acquired by VeriSign in 2004 for USD270m and turned into a joint venture with News Corp. for USD188m two years later [312].

Such public funds have already been set up at regional or national levels in some members States, most of them focussing on the "creative industries" and including both national/regional funds and European funds. Most prominent examples are the following:

- NESTA (UK): The National Endowment for Science, Technology and the Arts is a unique and independent body established by an Act of Parliament in 1998 with a mission to make the UK more innovative. It invests in early-stage companies, informs and shapes policy, and delivers practical programmes with the hope to inspire others to solve issues around the financing of innovative companies. It invests the interests of its endowed funds of over £300m, as well as the returns from its investments.
- Creative Capital Fund (London): The CCF is a £5m equity fund that helps talented entrepreneurs and businesses in London's creative industries achieve their potential by providing seed capital investment and business support. It was established in March 2005 as part of the Creative London programme. Creative London is the strategic agency for the creative industries and is part of the London Development Agency. It is managed by independent fund managers appointed by Creative London.
- VC Fonds Kreativwirtschaft (Berlin): The VC Fonds Kreativwirtschaft Berlin is focused on investments in young creative industries companies located in Berlin. It was set up in 2008 with a volume of €30m co-financed by the European Regional Development Fund (ERDF) and the State of Berlin. It is managed by the Investitionsbank Berlin (IBB).

It is clear that a crucial aspect for setting up such a fund will be the definition of the institution which will manage it which should have sufficient experience. Furthermore, at this point, the Consultant is not in the capacity of making some suggestions about the amount of the initial investment which would be needed for such a fund to have an impact at European level, nor about the investment criteria and investment processes which should have to be set. All these elements will have to be examined very closely in order to achieve the fund's objectives.

[311] http://news.bbc.co.uk/1/hi/business/4228866.stm
[312] http://www.jamba.de/corp/ueber-jamba/daten-fakten/
http://news.cnet.com/News-Corp.-takes-majority-stake-in-Jamba/2100-1027_3-6114809.html

Glossary

Term	Definition	Source
1G (First Generation Cellular Mobile Wireless)	The first generation of cellular wireless was based on analogue technology. The systems were designed only to carry voice services.	"The International Communications Market 2007", Ofcom, London, 2007
2G (Second generation of mobile telephony systems)	Uses digital transmission to support voice, low-speed data communications and short messaging services.	"The International Communications Market 2007", Ofcom, London, 2007
3G (Third generation of mobile system)	Provides high-speed data transmission and supports multimedia applications such as full-motion video, video-conferencing and internet acces, alongside conventional voice services.	"The International Communications Market 2007", Ofcom, London, 2007
3.5G	Refers to evolutionary upgrades to 3G services starting in 2005-2006 that provide significantly enhanced performance. High Speed Downlink Packet Access is widely expected to become the most popular 3.5G technology.	"The International Communications Market 2007", Ofcom, London, 2007
360° programming	Refers to the idea of developing a piece of content over all existing media platforms (cinema, TV, Internet, mobile, games, print…), usually with originally developed content for each specific media platform.	peacefulfish/MCG
Action Games	Action games are fast-paced and require constant attention, coordination, and quick reflexes. They tend to require less strategic thinking than other types of genres.	IGDA, Web and Downloadable Games White Paper, 2004
Ad serving	Ad serving describes the technology and service that places advertisements on web sites. Ad serving technology companies provide software to web sites and advertisers to serve ads, count them, choose the ads that will make the website or advertiser most money, and monitor progress of different advertising campaigns.	Wikipedia
Advergame	Although more a business model than a genre, the advertisement game or "advergame" exploded in popularity during the last year. These games may contain broad and deep game play, or they may be reduced to a single scenario and test of skill or knowledge. The simpler examples might even run inside of a banner or popup ad, while fuller games are featured beside other web games on portals.	IGDA, Web and Downloadable Games White Paper, 2004

Term	Definition	Source
Advertising network (ad network)	Company that connects web sites that want to host advertisements with advertisers who want to run advertisements.	Wikipedia
Analogue Terrestrial Television (ATT)	The television broadcast standart that all television industries launched with. Most countries are planning to phase out ATT in the next ten years.	"The International Communications Market 2007", Ofcom, London, 2007
Application streaming (Games on Demand)	Application streaming (commonly marketed as Games on Demand) is a broadband-only service wheere games application data is downloaded to a user's PC on a continual basis as and when needed. Often, the game interface is installed on the user's PC, giving the semblance of a full game installation and the actual game application is run on the local PC tather than on the server.	"Interactive content and convergence", European commission, Brussels, 2006
Arcade game	Basically, an arcade game is a coin-operated entertainment machine, typically installed in businesses such as restaurants, pubs, video arcades, and Family Entertainment Centers, but many independent developers are now producing games in the arcade genre that are designed specifically for use on the Internet. Arcade games often have very short levels, simple and intuitive control schemes, and rapidly increasing difficulty.	Wikipedia
Asymmetric Digital Subscriber Line (ADSL)	A digital technology that allows the use of a standart telephone line to provide high speed data communications. Allows higher speeds in one direction (toward the customer) than the other.	"The International Communications Market 2007", Ofcom, London, 2007
Average Revenue per User (ARPU)	Average revenue a carrier recognizes as revenue by each user per month, including instances where the carrier bills on behalf of others (BOBO). It does not include revenue generated through a wireless phone that is not billed through the carrier.	Mobile Entertainment Forum
Bluetooth	Wireless standart for short-range radio communications between a variety of devices such as PCs, headsets, printers, mobile phones and PDAs.	"The International Communications Market 2007", Ofcom, London, 2007
Board/Card Games	These are also called "classic" card and board games, since they are primarily based on the famous games that have entertained people throughout the ages. Solitaire is one of the most popular types of card games on the Internet.	IGDA, Web and Downloadable Games White Paper, 2004
Broadband	A type of transmission which offers much faster internet-based communications than dial up connection. The main technology used for this type of service in Europe is DSL.	Factbook 2007, Association of Commercial Television in Europe (ACT), Brussels 2007

Term	Definition	Source
Browser based casual games	Casual games that are served and played within, through or downloaded from a PC internet browser. Browser based casual games include content delivered under a number of business models including digital download, subscription and pay per vue play	"Interactive content and convergence", European commission, Brussels, 2006
Cable operators	Enterprises operating technical installations intended for the transmission of broadcasting programme signals by means of metallic cables, optical fibres, waveguides, radio links and/or any combinations of such (including collective antennas of large sites). The operator is responsible for the selection of TV and radio programme services which are transmitted.	"Cinema, TV and radio in the EU. Statistics on audiovisual services", European commission, Luxembourg, 2003
Casino games	The casino genre (separate from "online gambling") is a mainstay of online games. Their ease of play and widely known rules make them a great entry-level game. Popular games in the genre include Slots, BlackJack, and Video Poker.	IGDA, Web and Downloadable Games White Paper, 2004
Casual Gamer	Gamers who play games for enjoyment and relaxation rather than games with steep learning curves or requiring high levels of commitment or involvement.	IGDA, Casual Games White Paper, 2006
Casual games	Casual games are very simple games, easily accessible, that can be played everywhere. They generally involve less complicated game controls and overall complexity in terms of gameplay.	peacefulfish/MCG
Catch-up TV	VoD service offered by a linear television broadcaster allowing consumers to catch up on a selection of programmes which were already broadcasted.	peacefulfish/MCG
Clan	A clan is an organized gaming team which enters leagues and tournaments	Cyber Psychology and Behavior Vol. 6, Mary Ann Liebert, Breaking the stereotype : the case of online gaming, 2003
Computer Game	Game played on a personal computer, rather than on a video game console or arcade machine.	Wikipedia
Core Gamer	Gamer who typically play games with a steeper learning curve or games that require some level of deeper involvement or complex tactical challenges.	IGDA, Casual Games White Paper, 2006
Covermounts	Free DVDs attached to newspapers and magazines that aim to stimulate newspaper and magazine circulation	Global Entertainment and Media Outlook: 2007-2011
Digital Right Management (DRM)	DRM is an umbrella term that refers to access control technologies used by publishers and copyright holders to limit usage of digital media or devices.	Wikipedia

Term	Definition	Source
Digital Subscriber Line (DSL)	A family of technologies generally referred to as DSL, or xDSL, capable of transforming ordinary phone lines into high-speed digital line, capable of supporting advanced services such as fast Internet access and video-on-demand. ADSL, HDSL (High data rate digital subscriber line) and VDSL (Very high data rate digital subscriber line) are variants of xDSL.	"The International Communications Market 2007", Ofcom, London, 2007
Digital switchover	The process of switching over the current analogue television broadcasting to digital, as well as ensuring that people have adapted or upgraded their televisions and recording equipment to receive digital TV.	"The International Communications Market 2007", Ofcom, London, 2007
Digital Terrestrial Television (DTT)	DTT delivers digital television via a conventional aerial, converted through a digital terrestrial adapter.	Factbook 2007, Association of Commercial Television in Europe (ACT), Brussels 2007
Digital Video Broadcasting - Handheld (DVB-H)	DVB-H is a technical specification for bringing broadcast services to handheld receivers. It uses the same broadcasting channel as DTT.	Adapted from Factbook 2007, Association of Commercial Television in Europe (ACT), Brussels 2007
Digital Video Broadcasting (DVB)	A set of internationally accepted open standarts for digital broadcasting, including standarts for distribution by satellite, cable, radio and handheld devices.	"The International Communications Market 2007", Ofcom, London, 2007
Digital Video Recorder (DVR)	DVRs are TV recording devices with in-built hard disk recorders allowing viewers to record TV digitally without the need for video tapes. They use electronic programming guides (EPG) thus allowing viewers to easily record schedules television programming for watching at times of their choices.	"IPTV developments", Organisation for Economic Co-operation and Development (OECD), Paris, 2007 combined with Factbook 2007, Association of Commercial Television in Europe (ACT), Brussels 2007
Download to Burn (DTB)	Purchase of a VoD programme with the possibility of burning it onto a DVD.	"Video on Demand in Europe", NPA Conseil for Direction du développement des médias and European Audiovisual Observatory, 2007
Download to Own (DTO)	Purchase of a VoD programme by download it. The file is stored on a computer without the user being able to transfer it or read it on another peripheral device.	"Video on Demand in Europe", NPA Conseil for Direction du développement des médias and European Audiovisual Observatory, 2007
Download to Rent (DTR)	Rental of a VoD programme according to a specific business model.	"Video on Demand in Europe", NPA Conseil for Direction du développement des médias and European Audiovisual Observatory, 2007
Downloadable game	A game, typically less than 15MB, where the primary method of distribution requires download to, installation on, and execution from the end-user's hard-drive. These games are almost exclusively available by downloading from websites	IGDA, Web and Downloadable Games White Paper, 2004

Term	Definition	Source
DVD console	Games consoles with the capacity to play a DVD	peacefulfish/MCG
Educational games	An educational game is a game designed for learning, a subset of both play and fun. It is a melding of educational content, learning principles, and computer games. Digital game-based learning is organized to provide both education and pleasure. Play relaxes people, putting them in a receptive state for learning.	Penn State Learning Design Community Hub
Free en Demand (FoD)	VoD service where the content is accessible free of charge	"Video on Demand in Europe", NPA Conseil for Direction du développement des médias and European Audiovisual Observatory, 2007
Games on Demand (GoD)	Application streaming (commonly marketed as GoD) is a broadband-only service where games application data is downloaded to a user's PC on a continual basis as and when needed.	Screen digest, Interactive Content and convergence, 2006
Guild	A guild is a collection of players who share a common principle or outlook. Guilds are popular among the variety of MMOGs available. Often, guilds will have a deity alignment (good, evil, neutral) and carry out actions consistent to this alignment	Cyber Psychology and Behavior Vol. 6, Mary Ann Liebert, Breaking the stereotype : the case of online gaming, 2003
Handheld Games Console	A handheld game console is a lightweight, portable electronic machine for playing video games. Unlike video game consoles, the controls, screen and speakers are all part of a single unit.	Wikipedia
Hardcore Gamer	Gamer who typically plays high-action, extremely competitive games that require a greater degree of involvement or dexterity in order to progress.	IGDA, Casual Games White Paper, 2006
Hardcore, Core (Traditional) Games	Games developed for and delivered on a dedicated game console (set-top or handheld) as well as CD-ROM or DVD that generally involve more complicated game and overall complexity in terms of gameplay or investment required to get through game controls	peacefulfish/MCG
Heavy Gamer	Gamers playing at least once a week	peacefulfish/MCG
High-Definition Television (HDTV)	HDTV is TV with more than four times the picture quality of current digital and analogue systems.	Factbook 2007, Association of Commercial Television in Europe (ACT), Brussels 2007
Home Hub	The home hub is viewed as a solution key to the convergence of the PC and TV. A variety of hubs now bridge TVs and PCs in the digital home, ranging from the new generation of gaming consoles and PC media centers to digital media adapters—dedicated devices equipped with WiFi or Ethernet connections that allow a user to stream or store multimedia content from their PC to their TV.	"The Digital Video Consumer - Transforming the European Video Content Market," Bain & Company, Boston, 2007

Term	Definition	Source
Integrated Services Digital Networks (ISDN)	A standart developed to cover a range of voice, data, image services intended to provide end-to-end, simultaneous handling of voice and data on a asingle link and network.	"The International Communications Market 2007", Ofcom, London, 2007
Interactive television (iTV) games	Games that are played through the interactive TV channels of digital TV networks	"Interactive content and convergence", European commission, Brussels, 2006
Internet Protocol	The packet data protocol used for routing and carriage of messages accrosss the Internet and similar networks.	"The International Communications Market 2007", Ofcom, London, 2007
Internet Protocol Television (IPTV)	Delivery of television content using Internet protocol within a "walled garden" network (as opposed to "online TV" on open internet), over a broadband network. IPTV has been widely used by telecoms operators to offer TV over their DSL networks. IPTV can also be used by cable companies both within their own network infrastructure and as a means of expanding their service reach outside their areas of operation over unbundled third-party DSL-networks.	"Interactive content and convergence", European commission, Brussels, 2006
Internet Service Provider (ISP)	A company that provides access to the Internet.	"The International Communications Market 2007", Ofcom, London, 2007
LAN (Local Area Network)	A LAN is a type of network topology that is commonly used in businesses and organizations. It is a means of networking computers within an internal specified area.	Cyber Psychology and Behavior Vol. 6, Mary Ann Liebert, Breaking the stereotype : the case of online gaming, 2003
Massively Multi-Player Online Games (MMOGs)	MMOGs are games designed to be played online by hundreds, thousands or even hundreds of thousands of users. The majority of MMOGs are set in shared game worlds that remain constantly on and where gameplay, as a result, is persistant rather than defined (and limited) by session, duration or score.	Screen digest, Interactive Content and convergence, 2006
MMORPG (Massively Multiplayer Online Role Playing Games)	MMORPG are different from traditional games, as they do not have a beginning or end but instead provide an evolving environment in which players come and go. These games currently work best on PCs because players spend much of their time chatting with friends via a functional keyboard. They are mainly fantasy/science-fiction games with mainly “intensive” players	Digital Broadband Content: The online computer and video game industry, OECD, Paris, 2005
MOB	The NPCs that constitute the adversaries in the game.	Cyber Psychology and Behavior Vol. 6, Mary Ann Liebert, Breaking the stereotype : the case of online gaming, 2003

Term	Definition	Source
Mobile games	Games that are played on mobile phones and devices.	"Interactive content and convergence", European commission, Brussels, 2006
Mobile retail	Mobile "over the air" distribution refers to download/streaming of content directly to mobile devices through wireless networks, and differs from "sideloaded" distribution.	"Interactive content and convergence", European commission, Brussels, 2006
Mobile TV	The term encompasses transmission of television feeds and on demand television programmes, over broadcast network/technologies (3G).	"Interactive content and convergence", European commission, Brussels, 2006
Multichannel advertising	Multichannel advertising refers to advertising on networks that are accessed by viewers via cable (analog or digital), satellite, digital terrestrial television (DTT), or other means but that are not otherwise available without these services.	"Global Entertainment and Media Outlook: 2007-2011", Wilkofsky Gruen Associates Inc., Pricewaterhouse Coopers LLP, New York, 2007
Multichannel television household	Household with receiving television through several distribution channels (terrestrial, cable, satellite, IP).	peacefulfish/MCG
Multimedia Messaging Service (MMS)	The next generation of mobile messaging services adding photos, pictures and audio to text messages.	"The International Communications Market 2007", Ofcom, London, 2007
Multiplay	Multiplay services are offered by telecommunications, cable and satellite operators and combine several different types of services: fixed-line telephony, internet access, television and mobile telephony. The following terms are used depending on the service combination: - double play (usually fixed-line and internet access) - triple play (usually fixed-line, internet access and television) - quadruple play (usually fixed-line, internet access, television and mobile telephony)	Adapted from "Video on Demand in Europe", NPA Conseil for Direction du développement des médias and European Audiovisual Observatory, 2007
Near Video on Deman (Near VoD)	A service based on a linear schedule that is regularly repeated on multiple channels, usually at 15-minutes intervals, so that the viewers are never more than 15 minutes away from the start of the next transmission.	"The International Communications Market 2007", Ofcom, London, 2007
NPC	This is a character in a game that is controlled by artificial intelligence or a gamemaster.	Cyber Psychology and Behavior Vol. 6, Mary Ann Liebert, Breaking the stereotype : the case of online gaming, 2003
Off-deck	Mobile content services offered by companies that market to wireless customers outside the wireless operators' content menu.	Billboard
On-deck	On-deck features are the brands and information carriers choose to showcase directly on their mobile Internet home pages to provide consumers access to them	Clickz.com

Term	Definition	Source
Online retail	A method of selling digital content that gives the customer ownership over the files they have downloaded, allowing the customer to use the content as many times as they like - the digitaly distributed equivalent of conventional retail channels. Digital Retail is also kown as both "download-to-own", "electrnic sell-thru" and "digital sell through"	"Interactive content and convergence", European commission, Brussels, 2006
Online TV	TV programming distributed over the open internet -including news, sports and genre programming (such as children's entertainment, comedy and drama), but excluding music videos and user-generated content.	"Interactive content and convergence", European commission, Brussels, 2006
Pay Per View (PPV)	A service offering single viewings of a specific film, programme or event, provided to consumers for a one-off fee.	"The International Communications Market 2007", Ofcom, London, 2007
Peer to peer distribution	The process of directly transferring information, services or products between users or devices that operate on the same hierarchical level.	"The International Communications Market 2007", Ofcom, London, 2007
Pet Management Games	Users create and raise a virtual pet, selecting various methods of nutrition, training, and care to mold the pet as desired. The overt game comes into play when pets compete against each other.	IGDA, Web and Downloadable Games White Paper, 2004
Physical Sell-Through	In the home video industry, sell-through refers to units which are sold directly to consumers (in retail outlets or through Web sites), rather than to stores that rent them out.	Wikipedia
Puzzle Games	The puzzle genre dominates web-based games. These games may contain some action components, such as the real-time falling of blocks in Tetris, yet the primary characteristic is logic over dexterity.	IGDA, Web and Downloadable Games White Paper, 2004
PVR (Personal Video Recorder)	A device, similar to a VCR, that records television data in digital format. PVRs have all of the same functionality of VCRs plus the ability to instantly jump to any part of the program without having to rewind or fast forward the data stream.	The Database Marketing Institute, Telecom Marketing, 2008
Red Button iTV	Refers to interactive TV services offered on traditional broadcast digital TV (e.g. satellite TV), with a return-path. Some of classical "Red Button" functions can even be emplemented without return-path, in which case "interactivity" is provided by the data pre-pushed to the set-top box. The technically limited "Red Button iTV" differs from the full interactivity offered on two-way broadband networks (online TV or IPTV)	"Interactive content and convergence", European commission, Brussels, 2006
Server	A powerful machine that host various software, files, and information to computers that connect to it. Game servers will hold the gaming worlds data, all details of characters/players connected to it that will provide feedback to all the computers around the world.	Cyber Psychology and Behavior Vol. 6, Mary Ann Liebert, Breaking the stereotype : the case of online gaming, 2003

Term	Definition	Source
Set-top Box	A set-top box (STB) or set-top unit (STU) is a device that connects to a television and an external source of signal, turning the signal into content which is then displayed on the television screen.	Wikipedia
SIM card	A removable smart card used in mobile phones to autenticate the mobile subscriber and store data. Each card has a unique number known as International Mobile Subscriber Identity.	"The International Communications Market 2007", Ofcom, London, 2007
Skill game	A web game played in a tournament format, in which an entry fee is paid to compete and money or prizes are awarded to the most skilled player or players. Elements of luck have either been eliminated or greatly reduced in the game.	peacefulfish/MCG
Social networks	Social networks are web-based platforms that allow users to get in touch with other people, produce and share data, discuss and exchange information. Social networks are the basis of the Web 2.0.	peacefulfish/MCG
Sports Games	Sports games differentiate themselves from action games with familiar gameplay and blend of strategy and action. Players can easily transfer their knowledge from the original sport to those aspects that are being adapted to the web-based game.	IGDA, Web and Downloadable Games White Paper, 2004
Strategy Games	Games of strategy, tactical squad games, artillery games, war games, and trading games. These games face an intrinsic difficulty in that if the pace of the strategy slips into contemplation, then the user will break his spell of concentration and find something outside the game to click on.	IGDA, Web and Downloadable Games White Paper, 2004
Streaming content	Audio or video files sent in compressed form over the internet and consumed by the user as they arrived. Streaming is different to downloading, where content is saved on the user's hard disk before the user accesses it.	"The International Communications Market 2007", Ofcom, London, 2007
Subscription VoD (SVoD)	A type of VOD system, where the subscribers have unlimited access to specific programming for a regularly charged fee	Wikipedia
Television Without Frontiers (TVWF)	A range of provisions to achieve coordination of the legal, regulatory and administrative frameworks of European Union member states with respect to television broadcasting, adopted by the European Council in 1989 and amended in 1997.	"The International Communications Market 2007", Ofcom, London, 2007
Terrestrial advertising	Terrestrial advertising consists of advertising generated by free-to-air broadcast networks that can be received through an ordinary television receiver, even if viewers can also receive such networks through a cable, satellite, or DTT service.	"Global Entertainment and Media Outlook: 2007-2011", Wilkofsky Gruen Associates Inc., Pricewaterhouse Coopers LLP, New York, 2007

Term	Definition	Source
Triple-play	Supply of TV, broadband and landline from a single supplier for a single subscription fee.	"The International Communications Market 2007", Ofcom, London, 2007
Unique Mobile Users	Individual persons registered to at least one cellular network, irrespective of usage and activity levels.	Mobile Entertainment Forum
User Generated Content (UGC)	On-line content that is produced by users as opposed to traditional media producers such as broadcasters and production companies. The work has to be published on a publicly accessible website or on a page on a social networking only accessible to a select group of people.	"Participative web: User-Created Content", Organisation for Economic Co-operation and Development (OECD), Paris, 2007
Video game console	A video game console is an interactive entertainment computer or electronic device that manipulates the video display signal of a display device (a television, monitor, etc.) to display a game. The term "video game console" is used to distinguish a machine designed for consumers to buy and use solely for playing video games from a personal computer, which has many other functions, or arcade machines, which are designed for businesses that buy and then charge others to play.	Wikipedia
Video sharing website	A website offering video hosting services to users enabling them to upload video clips and access video clips shared by other users. Most such websites include also social networking services allowing users to set up a personal profile (such as a personalised area within the website) and to interact with other users.	peacefulfish/MCG
VoD	Video-on-demand. VOD systems allow users to select and watch video content over a network as part of an interactive television system. VOD systems either “stream” content, allowing viewing while the video is being downloaded, or “download” in which the programme is delivered in its entirety to a set-top box before viewing starts.	Factbook 2007, Association of Commercial Television in Europe (ACT), Brussels 2007
Walled garden networks	Set-top box-based digital TV networks, offering services such as interactive TV and video-on-demand platforms. Differs from "online TV" offering similar services through open Internet.	"Interactive content and convergence", European commission, Brussels, 2006
Web 2.0	A perceived second generation of web-based communities and hosted services - such as social-networking sites and wikis, which facilitate collaboration and sharing between users.	"The International Communications Market 2007", Ofcom, London, 2007

Term	Definition	Source
Web game	A game launched via a web page with no prior installation of software required. This category does not include games that are downloaded to the user's hard-drive and run outside of the web-browser, but it does include games launched from a web page that might require/installation of a general or custom ActiveX control. Common examples of this are the Flash™, Shockwave™ and Java™	peacefulfish/MCG
Word Games	Like a crossword puzzle in a newspaper, these games are rampant on the web. They take great advantage of the keyboard and mouse interface available and the fact that many computer users are more literate than they are computer literate.	IGDA, Web and Downloadable Games White Paper, 2004

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Digital TV Group	DTG	London	http://www.dtg.org.uk/
DoubleClick Inc.		USA	http://www.doubleclick.com/
Entertaiment Software Association	ESA	USA	http://www.theesa.com/
European Association of craft,small and medium-sizes enterprises	UEAPME	Brussels	http://www.ueapme.com/
European Audiovisual Observatory	OBS	Strasbourg	www.obs.coe.int
European Broadcasting Union	EBU	Geneva	http://www.ebu.ch
European commission	EC	Brussels	http://ec.europa.eu/
European Digital Media Association	EDIMA	Brussels	http://www.europeandigitalmediaassociation.org/

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European Internet Services Providers Association	EuroISPA	Brussels	http://www.euroispa.org/
European multimedia forum	EMF	Brussels	http://www.e-multimedia.org/
European Telecommunications Network Operators' Association	Etno	Brussels	http://www.etno.be/
Eurostat		Brussels	http://ww.eurostat.eu
Fachverband der Audiovisions- und Filmindustrie Österreich	FAF	Wien	http://www.fafo.at/
Finnish Games and Multimedia Association	FIGMA	Helsinki	http://www.figma.fi/
Game Research		Copenhagen	http://game-research.com
Gruner+Jahr Market Analysis (G+J)	G u. J.	Berlin	http://www.guj.de/
GSM World	GSMA	Brussels	http://www.gsmworld.com/gsmeurope
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International game developers association	idga	USA	http://www.igda.org/chapters/#Europe
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International Telecommunication Union	ITU	Geneva	http://www.itu.int/net/home/index.aspx
International Video Federation	IVF	Brussels	www.ivf-video.org
international video federation	ivf	Brussels	http://www.ivf-video.org/
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mobile data association	MDA	Sleaford	http://www.themda.org/
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Mobile Operators Association	MOA	London	http://www.mobilemastinfo.com/
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Organisation for Economic Co-operation and Development	OECD	Paris	http://www.oecd.org
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Swiss Interactive Entertainment Association	SIEA	Zürich	http://www.siea.ch/
Syndicat des Editeurs de Logiciels de Loisirs	S.E.L.L.	Paris	http://www.sell.fr/
Text it		London	http://www.text.it/home.cfm
The Digital Terrestrial Television Action Group	DigiTAG	Geneva	http://www.digitag.org/
the Entertainment & Leisure Software Publishers Association	ELSPA	London	http://www.elspa.com/
The Game Manufacturers Association	GAMA	USA	http://www.gama.org/
The Mobile Media Authority	m:metrics	USA	http://www.mmetrics.com/
Verband für digitales broadcast- und internetbasiertes Fernsehen i.G.	Vdif	Eningen	http://www.vdif.de/

Appendix

Questionnaire – Game CE Manufacturers

This questionnaire aims to evaluate the share of digital games in audiovisual entertainment content consumption in your country (please use one form per country if you are in charge of several countries) and at better understanding consumer practices in this field.

Company: .....

Country: .....

1/ TURNOVER IN 2006 AND 2007

All numbers should only include the price of the software – hardware excluded.

Indicator	Unit	2006	2007
Videogames (played on consoles)			
Unit sold	Thousands	.....	.....
Average price per unit	€/Unit	.....	.....
Turnover	k€	.....	.....
Videogames (played on handhelds)			
Unit sold	Thousands	.....	.....
Average price per unit	€/Unit	.....	.....
Turnover	k€	.....	.....

Comments: .....

2/ DISTRIBUTION CHANNELS

Please give an estimate of the distribution of your turnover between online and offline distribution channels (in % or, if available, in €).

	Unit (in % or €)	Retail sales	Online sales (download or mail order)
Videogames (consoles)	.....	.....	.....
Videogames (handhelds)	.....	.....	.....

Comments: .....

3/ COUNTRY OF ORIGIN OF THE GAMES DEVELOPERS

Please give a rough estimate on the country of origin of the companies that developed the games played on your consoles:

Country of origin	National (in %)	Rest of EU (in %)	Non European (in %)

Videogames (consoles)			
Videogames (handheld)			

Comments: ……

Please list the 2007 top 10 games (with the development company):

	Videogames (consoles)		**Videogames (handheld)**	
	Game	Company	Game	Company
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

Comments: ……

4/ USERS OF YOUR CONSOLES

Please give information on the users of your consoles (please give rough estimates if no precise data is available).
If you are using another user segmentation, please neglect the one below and enter the information as you have it after this chart.

User segment	**Consoles**	**Handheld**
0 to 9 years old		
10 to 15 years old		
16 to 19 years old		
20 to 29 years old		
30 to 49 years old		
50+ years old		

Other user segmentation / Comments: ……

5/ LEGAL FRAMEWORK OF GAMING AND TV/VIDEO SERVICES

Specify which kind of national law(s) serve(s) as legal environment to your product or service?

- ☐ Copyright law
- ☐ Consumer Protection laws
- ☐ Data protections law
- ☐ Protection of minors / Child protection laws
- ☐ Broadcasting Laws
- ☐ Media Law
- ☐ Other IP protection law
- ☐ Competition law
- ☐ Criminal law
- ☐ Other, please specify ……

Comments: .....

6 / SUGGESTIONS / REMARKS

a) According to you, what are the main opportunities and threats for the development of a healthy game industry in Europe?

.....

b) Do you have any further remarks?

.....

7 / COMPANY DETAILS

Number of employees of your company in your country: .....

2007 Turnover in your country: .....

2007 Balance sheet total in your country: .....

Name and country of base of your main stakeholder(s): .....

8 / PERSONAL DETAILS

Name: .....

Position: .....

E-mail: .....

Phone number: .....

Questionnaire – Games Distributors

This questionnaire aims to evaluate the weight of digital games in audiovisual entertainment content consumption in your country and at better understanding consumer practices in this field.

Company: .....

Country: .....

1/ DIGITAL GAMES TURNOVER IN 2006 AND 2007 OF YOUR COMPANY

All numbers should only include the price of the software – hardware excluded. Please ignore the types of platforms for which you are not distributing.

Indicator	Unit	2006	2007
Computer games			
Unit sold	Thousands	.....	.....
Average price per unit	€/Unit	.....	.....
Turnover	k€	.....	.....
Videogames (consoles)			
Unit sold	Thousands	.....	.....
Average price per unit	€/Unit	.....	.....
Turnover	k€	.....	.....
Videogames (handhelds)			
Unit sold	Thousands	.....	.....
Average price per unit	€/Unit	.....	.....
Turnover	k€	.....	.....
Online games (only including time credits/gameplay turnover)			
Average number of subscribers	Thousands	.....	.....
Average monthly spend per subsciber	€/Month	.....	.....
Turnover	k€	.....	.....
Mobile games (mobile phones and PDAs)			
Unit sold	Thousands	.....	.....
Average price per unit	€/Unit	.....	.....
Turnover	k€	.....	.....

Comments: .....

2/ DISTRIBUTION CHANNELS

Please give an estimate of the distribution of your turnover between online and offline distribution channels (in % or, if available, in €).

	Unit (in % or €)	Retail sales	Online sales (download or mail order)
Computer games	.....	.....	.....
Videogames (consoles)	.....	.....	.....

Videogames (handhelds)			
Online games			
Mobile games			

Comments:

3/ DIGITAL GAMES TURNOVER IN 2006 AND 2007 OF YOUR COUNTRY

Please give an estimate of the games turnover of your country.

	Unit	2006	2007
Computer games	in k€		
Videogames (consoles)	in k€		
Videogames (handhelds)	in k€		
Online games	in k€		
Mobile games	in k€		

Comments:

4/ MAIN GAMES DISTRIBUTORS IN YOUR COUNTRY

Please list the 5 main games distributors in your country in hierarchical order depending on their market share.

	Name of the company	Mother company HQ (if elsewhere)	Best selling games	Estimated Market share
1				
2				
3				
4				
5				

Comments:

5/ COUNTRY OF ORIGIN OF THE DIGITAL GAMES DEVELOPERS

Please give a rough estimate on the country of origin of the companies which developed the games distributed by your company:

Country of origin Type of content	National (in %)	Rest of EU (in %)	Non European (in %)
Computer games			
Videogames			
Online games			
Mobile games			

Comments:

Please list the 2007 top 10 games (with the development company):

	Computer games		**Videogames**		**Online games**		**Mobile games**	
	Game	Company	Game	Company	Game	Company	Game	Company
1								

2								
3								
4								
5								
6								
7								
8								
9								
10								

Comments: .....

6 / USERS OF DIGITAL GAMES

Please give information on the users of the various platforms (please give rough estimates if no precise data is available). If you are using another user segmentation, please neglect the one below and enter the information as you have it after this chart.

User segment	Computer games	Consoles	Handheld	Mobile	Online
0 to 9 years old	.....	.....	.....	.....	.....
10 to 15 years old	.....	.....	.....	.....	.....
16 to 19 years old	.....	.....	.....	.....	.....
20 to 29 years old	.....	.....	.....	.....	.....
30 to 49 years old	.....	.....	.....	.....	.....
50+ years old	.....	.....	.....	.....	.....

Other user segmentation / Comments: .....

7 / LEGAL FRAMEWORK OF GAMING AND TV / VIDEO SERVICES

Specify which kind of national law(s) serve(s) as legal environment to your product or service?

- ☐ Copyright law
- ☐ Consumer Protection laws
- ☐ Data protections law
- ☐ Protection of minors / Child protection laws
- ☐ Broadcasting Laws
- ☐ Media Law
- ☐ Other IP protection law
- ☐ Competition law
- ☐ Criminal law
- ☐ Other, please specify .....

Comments: .....

8 / SUGGESTIONS / REMARKS

a) According to you, what are the main opportunities and threats for the development of a healthy game industry in Europe?

---

b) Do you have any further remarks?

9/ COMPANY DETAILS

Number of employees of your company in your country: ---

2007 Turnover in your country: ---

2007 Balance sheet total in your country: ---

Name and country of base of your main stakeholder(s): ---

10/ PERSONAL DETAILS

Name: ---

Position: ---

E-mail: ---

Phone number: ---

Questionnaire – Games Distributors Association

This questionnaire aims to evaluate the share of digital games in audiovisual entertainment content consumption in your country.

Organisation: .....

Country: .....

1/ DIGITAL GAMES TURNOVER IN 2006 AND 2007 OF YOUR COUNTRY

All numbers should only include the price of the software – hardware excluded.

	Unit	2006	2007
Computer games			
Units sold	Thousands	.....	.....
Average price per unit	€/Unit	.....	.....
Turnover	k€	.....	.....
Videogames (consoles)			
Units sold	Thousands	.....	.....
Average price per unit	€/Unit	.....	.....
Turnover	k€	.....	.....
Videogames (handhelds)			
Units sold	Thousands	.....	.....
Average price per unit	€/Unit	.....	.....
Turnover	k€	.....	.....
Online games (only including time credits/gameplay turnover)			
Average number of subscribers	Thousands	.....	.....
Average monthly spend per subscriber	€/Month	.....	.....
Turnover	k€	.....	.....
Mobile games (mobile phones and PDAs)			
Unit sold	Thousands	.....	.....
Average price per unit	€/Unit	.....	.....
Turnover	K€	.....	.....

Comments: .....

2/ DISTRIBUTION CHANNELS

Please give an estimate of the distribution of turnover between online and offline distribution channels (in % or, if available, in €).

	Unit (in % or €)	Retail sales	Online sales (download or mail order)
Computer games	.....	.....	.....
Videogames (consoles)	.....	.....	.....
Videogames (handhelds)	.....	.....	.....
Online games	.....	.....	.....
Mobile games	.....	.....	.....

Comments: .....

3/ MAIN GAME DISTRIBUTORS IN YOUR COUNTRY

Please list the 5 main games distributors in your country in hierarchical order depending on their market share.

	Name of the company	Mother company HQ (if elsewhere)	Best selling games	Estimated Market share
1	.....	.....	.....	.....
2	.....	.....	.....	.....
3	.....	.....	.....	.....
4	.....	.....	.....	.....
5	.....	.....	.....	.....

Comments: .....

4/ COUNTRY OF ORIGIN OF DIGITAL GAME DEVELOPERS

Please give a rough estimate on the country of origin of the companies which develop the games distributed in your country:

Country of origin Type of content	National (in %)	Rest of EU (in %)	Non European (in %)
Computer games	.....	.....	.....
Videogames	.....	.....	.....
Online games	.....	.....	.....
Mobile games	.....	.....	.....

Comments: .....

Please list the 2007 top 10 games (with the development company):

	Computer games		**Videogames**		**Online games**		**Mobile games**	
	Game	Company	Game	Company	Game	Company	Game	Company
1	.....	.....	.....	.....	.....	.....	.....	.....
2	.....	.....	.....	.....	.....	.....	.....	.....
3	.....	.....	.....	.....	.....	.....	.....	.....
4	.....	.....	.....	.....	.....	.....	.....	.....
5	.....	.....	.....	.....	.....	.....	.....	.....
6	.....	.....	.....	.....	.....	.....	.....	.....
7	.....	.....	.....	.....	.....	.....	.....	.....
8	.....	.....	.....	.....	.....	.....	.....	.....
9	.....	.....	.....	.....	.....	.....	.....	.....
10	.....	.....	.....	.....	.....	.....	.....	.....

Comments: .....

5/ USERS OF DIGITAL GAMES

Please give information on the users of the various platforms (please give rough estimates if no precise data is available). If you are using another user segmentation, please neglect the one below and enter the information as you have it after this chart.

User segment	Computer games	Consoles	Handheld	Mobile	Online
0 to 9 years old	.....	.....	.....	.....	.....
10 to 15 years old	.....	.....	.....	.....	.....
16 to 19 years old	.....	.....	.....	.....	.....
20 to 29 years old	.....	.....	.....	.....	.....
30 to 49 years old	.....	.....	.....	.....	.....
50+ years old	.....	.....	.....	.....	.....

Other user segmentation / Comments: .....

6 / LEGAL FRAMEWORK OF GAMES IN YOUR COUNTRY

Specify which kind of national law(s) serve(s) as legal environment to your product or service?

- ☐ Copyright law
- ☐ Consumer Protection laws
- ☐ Data protections law
- ☐ Protection of minors / Child protection laws
- ☐ Broadcasting Laws
- ☐ Media Law
- ☐ Other IP protection law
- ☐ Competition law
- ☐ Criminal law
- ☐ Other, please specify .....

Comments: .....

7 / SUGGESTIONS / REMARKS

a) According to you, what are the main opportunities and threats for the development of a healthy game industry in Europe?

.....

b) Do you have any further remarks?

.....

8 / PERSONAL DETAILS

Name: .....

Position: .....

E-mail: .....

Phone number: .....

Questionnaire – Games Social Networks

This questionnaire aims to evaluate the share of games social networks in audiovisual entertainment content consumption in each European country and at better understanding consumer practices in this field.

Please give rough estimates if no precise data is available.

Company: .....

European countries where you are generating revenues:

.....

1/ PLAYING MODE OF YOUR PLATFORM

- ☐ Single-player Games
- ☐ Multiplayer Games
- ☐ MMOGs
- ☐ Skill-based Games
- ☐ Other, please specify: .....

Comments: .....

2/ TOP 10 GAMES

Please list the 2007 top 10 games played on your platform:

	Game	Development company
1	.....	.....
2	.....	.....
3	.....	.....
4	.....	.....
5	.....	.....
6	.....	.....
7	.....	.....
8	.....	.....
9	.....	.....
10	.....	.....

Comments: .....

3/ ORIGIN OF GAMES AVAILABLE ON YOUR PLATFORM

Country of origin of developer	National (in %)	Rest of EU (in %)	Non European (in %)
Games	.....	.....	.....

Comments: .....

4/ USERS OF YOUR PLATFORM

Average number of page impressions per month: .....
Average number of visits per month: .....
Average number of subscribers per month (if applicable): .....

Split between the various European countries / Comments:

.....

5/ USER SEGMENTATION OF YOUR PLATFORM

If you are using another user segmentation, please neglect the one below and enter the information as you have it after this chart.

User segment	Consoles	Handheld
0 to 9 years old	.....	.....
10 to 15 years old	.....	.....
16 to 19 years old	.....	.....
20 to 29 years old	.....	.....
30 to 49 years old	.....	.....
50+ years old	.....	.....

Other user segmentation / Comments: .....

6/ REVENUE IN 2006 AND 2007

Source of revenue	Unit	2006	2007
Advertising	k€	.....	.....
Sponsoring	k€	.....	.....
Subscriptions	k€	.....	.....
Sales	k€	.....	.....
Services	k€	.....	.....
Other (please specify: .....)	k€	.....	.....
Other (please specify: .....)	k€	.....	.....
Total	**k€**	.....	.....

If you are active in several countries, please give a rough estimate of the revenue split between the various countries:

.....

Comments: .....

7/ COMPETITION IN YOUR COUNTRY

Please list the 5 main competing platforms used by users from the countries where you are active:

.....

Comments: .....

8/ LEGAL FRAMEWORK FOR GAMES COMMUNITIES IN YOUR COUNTRY

Specify which kind of national law(s) serve(s) as legal environment to your product or service?

- ☐ Copyright law
- ☐ Consumer Protection laws
- ☐ Data protections law
- ☐ Protection of minors / Child protection laws
- ☐ Broadcasting Laws
- ☐ Media Law
- ☐ Other IP protection law
- ☐ Competition law
- ☐ Criminal law
- ☐ Other, please specify .....

Comments: .....

11/ SUGGESTIONS/REMARKS

a) According to you, what are the main opportunities and threats for the development of a healthy games social network landscape in Europe?

.....

b) Do you have any further remarks?

.....

12/ COMPANY DETAILS

Number of employees of your company in your country: .....

Name and country of base of your main stakeholder(s): .....

13/ PERSONAL DETAILS

Name: .....

Position: .....

E-mail: .....

Phone number: .....

Questionnaire – Mobile Operators

This questionnaire aims to evaluate the share of mobile entertainment content in audiovisual entertainment content consumption in your country and at better understanding consumer practices in this field.

It focuses exclusively on 2 categories of infotainment: **gaming and video/TV**, excluding ringtones, music/audio, graphics, basic (non-video) infotainment and other types of infotainment such as directory and location services, voting, etc.

Company: .....

Country: .....

1/ GAMING AND VIDEO/TV REVENUES IN 2006 AND 2007

Indicator	Unit	Annualised for 2006	Annualised for 2007
Gaming			
Users (who use a gaming service at least once a month)	thousands	.....	.....
Market ARPU (monthly spending on gaming pro user)	€/User	.....	.....
Market Revenue	k€	.....	.....
Carrier Spending with Content Providers	k€	.....	.....
Video/TV			
Users (who use a Video/TV service at least once a month)	thousands	.....	.....
Market ARPU (monthly spending on Video/TV pro user)	€/User	.....	.....
Market Revenue	k€	.....	.....
Carrier Spending with Content Providers	k€	.....	.....

Comments: .....

2/ USERS OF GAMING AND TV/VIDEO SERVICES

Which category of your users are using gaming or TV/Video services (please give rough estimates if no precise data is available). If you are using another user segmentation, please neglect the one below and enter the information as you have after this chart.

User segment	Proportion of gaming revenue (in %)	Proportion of TV/Video revenue (in %)
0 to 9 years old	.....	.....
10 to 14 years old	.....	.....
15 to 17 years old	.....	.....
18 to 24 years old	.....	.....
25 to 34 years old	.....	.....
35 to 49 years old	.....	.....
50 to 65 years old	.....	.....
65+ years old	.....	.....

Other user segmentation: .....

Comments: .....

3/ GAMING AND TV/VIDEO CONTENT ACQUIRED DIRECTLY BY CARRIER

Please give a rough overview on how the content which accounts for your 2007 Carrier Net Revenue for gaming and TV/video was acquired:

Type of content	Proportion of gaming Carrier Net Revenue (in %)	Proportion of TV/Video Carrier Net Revenue (in %)
Commissioned by carrier nationally	.....	.....
Commissioned by carrier at group level	.....	.....
Licensed by carrier nationally	.....	.....
Licensed by carrier at group level	.....	.....
Other (please specify: .....)	.....	.....

Please list the 5 main content providers from which you commissioned this content for:
- Gaming:
- TV/Video:

Please list the 5 main content providers from which you licensed this content for:
- Gaming:
- TV/Video:

Comments: .....

4/ GAMING AND TV/VIDEO CONTENT NOT ACQUIRED DIRECTLY BY CARRIER

Please list the 5 main content providers which account for the 2007 Consumer Spending directly with Content Providers generated with gaming and TV/video services:

- Gaming content providers: .....
-
- TV/Video content providers: .....

Comments: .....

5/ COUNTRY OF ORIGIN OF GAMING, VIDEO AND TV CONTENT

Please give a rough overview of the country of origin of the company which developed the content distributed over your network:

Country of origin Type of content	National (in %)	Rest of EU (in %)	Non European (in %)
Gaming	.....	.....	.....
Video	.....	.....	.....
TV	.....	.....	.....

Please list the 2007 top 10 contents (with the production company):

	Games		Video		TV	
	Content	Company	Content	Company	Content	Company
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						

Comments:

6/ PRICING OF GAMING AND TV/VIDEO SERVICES

Please give an overview of the most common pricing model which you use for your gaming and TV/video services:

Type of pricing	Gaming services (specify if needed)	TV/Video services (specify if needed)
A. All inclusive monthly fee		
B. Capped monthly fee + costs for extra use		
C. Transaction fee		
D. Pay to own		
E. Pay to rent (streaming)		
F. Pay to rent (download with DRM)		
G. Pay per minute of broadcast		
H. Other (please specify:)		
Combination of the above (please list the letters e.g. B+C or A+C)		

If none of the above applies, please detail roughly your pricing system for:

- Gaming:
- TV/Video:

Comments:

7/ LEGAL FRAMEWORK OF GAMING AND TV/VIDEO SERVICES

Specify which kind of national law(s) serve(s) as legal environment to your product or service?

- ☐ Copyright law
- ☐ Consumer Protection laws
- ☐ Data protections law
- ☐ Protection of minors / Child protection laws
- ☐ Broadcasting Laws
- ☐ Media Law
- ☐ Other IP protection law
- ☐ Competition law
- ☐ Criminal law
- ☐ Other, please specify

Comments: .....

8/ SUGGESTIONS/REMARKS

a) According to you, what are the main opportunities and threats for the development of a healthy mobile entertainment industry in Europe?

.....

b) Do you have any further remarks?

.....

9/ COMPANY DETAILS

Number of employees of your company in your country: .....

2007 Turnover in your country: .....

2007 Balance sheet total in your country: .....

Name and country of base of your main stakeholder(s): .....

10/ PERSONAL DETAILS

Name: .....

Position: .....

E-mail: .....

Phone number: .....

Questionnaire – Video Association

This questionnaire aims to evaluate the share of home video in audiovisual entertainment content consumption in your country and at better understanding consumer practices in this field.

Organisation: .....

Country: .....

1/ VHS AND DVD TURNOVER IN 2006 AND 2007 OF YOUR COUNTRY

Please include the distribution between online and offline turnover in % if you do not have exact numbers.

	Unit	2006	2007
VHS			
Sales turnover	k€	.....	.....
• Retail	k€ or %	.....	.....
• Online	k€ or %	.....	.....
Rental turnover	k€	.....	.....
• Retail	k€ or %	.....	.....
• Online	k€ or %	.....	.....
DVD			
Sales turnover	k€	.....	.....
• Retail	k€ or %	.....	.....
• Online	k€ or %	.....	.....
Rental turnover	k€	.....	.....
• Retail	k€ or %	.....	.....
• Online	k€ or %	.....	.....

Comments: .....

2/ MAIN VHS/DVD DISTRIBUTORS IN YOUR COUNTRY

Please list the 5 main VHS/DVD distributors in your country in hierarchical order depending on their market share.

	Name of the company	Country of base of the mother company	Estimated Market share
1	.....	.....	.....
2	.....	.....	.....
3	.....	.....	.....
4	.....	.....	.....
5	.....	.....	.....

Comments: .....

3/ ORIGIN OF DISTRIBUTED AUDIOVISUAL WORKS

Please give a rough estimate on the origin of the works distributed:

Country of origin Type of works	National (in %)	Rest of EU (in %)	Non European (in %)
Fiction	.....	.....	.....
Documentaries	.....	.....	.....
Animation	.....	.....	.....

Comments: .....

4/ CUSTOMER PROFILE OF VHS/DVD IN YOUR COUNTRY

Please provide us with some information on the users of VHS/DVD (please give rough estimates if no precise data is available). If you are using another user segmentation, please neglect the one below and enter the information as you have it after this chart.

User segment	Proportion of the VHS/DVD Sales Turnover	Proportion of the VHS/DVD Rental Turnover	Proportion of the VHS/DVD online Turnover	Proportion of the VHS/DVD offline Turnover
0 to 9 years old	.....	.....	.....	.....
10 to 15 years old	.....	.....	.....	.....
16 to 19 years old	.....	.....	.....	.....
20 to 29 years old	.....	.....	.....	.....
30 to 49 years old	.....	.....	.....	.....
50+ years old	.....	.....	.....	.....

Other user segmentation / Comments: .....

5/ LEGAL FRAMEWORK OF VHS/DVD IN YOUR COUNTRY

Specify which kind of national law(s) serve(s) as legal environment to your product or service?

- ☐ Copyright law
- ☐ Consumer Protection laws
- ☐ Data protections law
- ☐ Protection of minors / Child protection laws
- ☐ Broadcasting Laws
- ☐ Media Law
- ☐ Other IP protection law
- ☐ Competition law
- ☐ Criminal law
- ☐ Other, please specify .....

Comments: .....

6/ SUGGESTIONS/REMARKS

a) According to you, what are the main opportunities and threats for the development of a healthy VHS/DVD industry in Europe?

---

b) Do you have any further remarks?

7/ PERSONAL DETAILS

Name: ---

Position: ---

E-mail: ---

Phone number: ---

Questionnaire – Video Publishers

This questionnaire aims to evaluate the share of home video in audiovisual entertainment content consumption in your country and at better understanding consumer practices in this field.

Company: .....

Country: .....

1/ VHS AND DVD TURNOVER IN 2006 AND 2007 OF YOUR COMPANY

Please include the distribution between online and offline turnover in % if you do not have exact numbers.

	Unit	2006	2007
VHS			
Sales turnover	k€	.....	.....
• Retail	k€ or %	.....	.....
• Online	k€ or %	.....	.....
Rental turnover	k€	.....	.....
• Retail	k€ or %	.....	.....
• Online	k€ or %	.....	.....
DVD			
Sales turnover	k€	.....	.....
• Retail	k€ or %	.....	.....
• Online	k€ or %	.....	.....
Rental turnover	k€	.....	.....
• Retail	k€ or %	.....	.....
• Online	k€ or %	.....	.....

Comments: .....

2/ MAIN VHS/DVD DISTRIBUTORS IN YOUR COUNTRY

Please list the 5 main VHS/DVD distributors in your country in hierarchical order depending on their market share.

	Name of the company	Country of base of the mother company	Estimated Market share
1	.....	.....	.....
2	.....	.....	.....
3	.....	.....	.....
4	.....	.....	.....
5	.....	.....	.....

Comments: .....

3/ ORIGIN OF DISTRIBUTED AUDIOVISUAL WORKS

Please give a rough estimate on the origin of the works distributed:

Country of origin Type of works	National (in %)	Rest of EU (in %)	Non European (in %)
Fiction	.....	.....	.....
Documentaries	.....	.....	.....
Animation	.....	.....	.....

Comments: .....

4/ CUSTOMER PROFILE OF VHS/DVD

Please provide us with some information on the users of VHS/DVD (please give rough estimates if no precise data is available). If you are using another user segmentation, please neglect the one below and enter the information as you have it after this chart.

User segment	Proportion of the VHS/DVD Sales Turnover	Proportion of the VHS/DVD Rental Turnover	Proportion of the VHS/DVD online Turnover	Proportion of the VHS/DVD offline Turnover
0 to 9 years old	.....	.....	.....	.....
10 to 15 years old	.....	.....	.....	.....
16 to 19 years old	.....	.....	.....	.....
20 to 29 years old	.....	.....	.....	.....
30 to 49 years old	.....	.....	.....	.....
50+ years old	.....	.....	.....	.....

Other user segmentation / Comments: .....

5/ LEGAL FRAMEWORK OF VHS/DVD IN YOUR COUNTRY

Specify which kind of national law(s) serve(s) as legal environment to your product or service?

- ☐ Copyright law
- ☐ Consumer Protection laws
- ☐ Data protections law
- ☐ Protection of minors / Child protection laws
- ☐ Broadcasting Laws
- ☐ Media Law
- ☐ Other IP protection law
- ☐ Competition law
- ☐ Criminal law
- ☐ Other, please specify .....

Comments: .....

6 / SUGGESTIONS / REMARKS

a) According to you, what are the main opportunities and threats for the development of a healthy VHS/DVD industry in Europe?

---

b) Do you have any further remarks?

---

7 / COMPANY DETAILS

Number of employees of your company in your country: ---

2007 Turnover in your country: ---

2007 Balance sheet total in your country: ---

Name and country of base of your main stakeholder(s): ---

8 / PERSONAL DETAILS

Name: ---

Position: ---

E-mail: ---

Phone number: ---

Questionnaire – Video Social Networks

This questionnaire aims to evaluate the share of video social networks in audiovisual entertainment content consumption in your country and at better understanding consumer practices in this field.

Please give rough estimates if no precise data is available.

Company: .....

Country: .....

1/ GENRE OF AUDIOVISUAL WORKS AVAILABLE ON YOUR PLATFORM

Genre	Yes/No	% of the available content
Fiction	.....	..... %
Documentary	.....	..... %
Animation	.....	..... %
Music videos/Live concerts	.....	..... %
News/Reports	.....	..... %
Real TV	.....	..... %
Other (please specify: .....)	.....	..... %

Comments: .....

2/ TYPE OF AUDIOVISUAL WORKS AVAILABLE ON YOUR PLATFORM

Genre	Yes/No	% of the available content
User Generated Content	.....	..... %
Professionally produced works (non-sponsored)	.....	..... %
Sponsored Content	.....	..... %
Advertising/Music videos	.....	..... %
Other (please specify: .....)	.....	..... %

Comments: .....

3/ ORIGIN OF AUDIOVISUAL WORKS AVAILABLE ON YOUR PLATFORM

Country of origin	National (in %)	Rest of EU (in %)	Non European (in %)
Audiovisual content	.....	.....	.....

Comments: .....

4/ TOP 10 AUDIOVISUAL WORKS

Please list the 2007 top 10 professionally produced works and user-generated content (excluding sponsored content, advertising and music videos):

			Type of content (please choose)	
	Name	Number of downloads/viewers	UGC	AV Work (Specify the company)
1	.....	.....	.....	.....
2	.....	.....	.....	.....
3	.....	.....	.....	.....
4	.....	.....	.....	.....
5	.....	.....	.....	.....
6	.....	.....	.....	.....
7	.....	.....	.....	.....
8	.....	.....	.....	.....
9	.....	.....	.....	.....
10	.....	.....	.....	.....

Comments: .....

5/ TOP 10 VIDEO GROUPS OR CHANNELS ON YOUR PLATFORM

If applicable, please list the 2007 top 10 video groups or channels on your platform.

			Type of group		Type of content	
	Name	Average number of downloads/ viewers/subscribers per month	User group	Aggregator's channel (please specify the company)	UGC	AV Works
1	.....	.....	.....	.....	.....	.....
2	.....	.....	.....	.....	.....	.....
3	.....	.....	.....	.....	.....	.....
4	.....	.....	.....	.....	.....	.....
5	.....	.....	.....	.....	.....	.....
6	.....	.....	.....	.....	.....	.....
7	.....	.....	.....	.....	.....	.....
8	.....	.....	.....	.....	.....	.....
9	.....	.....	.....	.....	.....	.....
10	.....	.....	.....	.....	.....	.....

Comments: .....

6/ USERS OF YOUR PLATFORM

Average number of page impressions per month: .....
Average number of visits per month: .....
Average number of subscribers per month (if applicable): .....

Comments: .....

7/ USER SEGMENTATION OF YOUR PLATFORM

If you are using another user segmentation, please neglect the one below and enter the information as you have it after this chart.

User segment	Average split of platform users (in %)
0 to 9 years old	.....
10 to 15 years old	.....
16 to 19 years old	.....
20 to 29 years old	.....
30 to 49 years old	.....
50+ years old	.....

Other user segmentation / Comments: .....

8/ REVENUE IN 2006 AND 2007

Source of revenue	Unit	2006	2007
Advertising	k€	.....	.....
Sponsoring	k€	.....	.....
Subscriptions	k€	.....	.....
Sales	k€	.....	.....
Services	k€	.....	.....
Other (please specify: .....)	k€	.....	.....
Other (please specify: .....)	k€	.....	.....
Total	**k€**	.....	.....

Comments: .....

9/ COMPETITION IN YOUR COUNTRY

Please list your 5 main competing platforms used by users from your country

.....

Comments: .....

10/ LEGAL FRAMEWORK FOR VIDEO COMMUNITIES IN YOUR COUNTRY

Specify which kind of national law(s) serve(s) as legal environment to your product or service?

- ☐ Copyright law
- ☐ Consumer Protection laws
- ☐ Data protections law
- ☐ Protection of minors / Child protection laws
- ☐ Broadcasting Laws
- ☐ Media Law
- ☐ Other IP protection law
- ☐ Competition law
- ☐ Criminal law
- ☐ Other, please specify .....

Comments: .....

11/ SUGGESTIONS/REMARKS

a) According to you, what are the main opportunities and threats for the development of a healthy video social network landscape in Europe?

.....

b) Do you have any further remarks?

.....

12/ COMPANY DETAILS

Number of employees of your company in your country: .....

Name and country of base of your main stakeholder(s): .....

13/ PERSONAL DETAILS

Name: .....

Position: .....

E-mail: .....

Phone number: .....