



# The Digital Video Consumer

Transforming the European Video Content Market

**LIBERTYGLOBAL**  
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## Introduction

### Background and objectives of report

A fundamental shift in the European video content market is being predicted for the near future. Forces of change include:

- Wide availability of new digital content formats and interactive applications, and proliferation of digital platforms for distribution of content;
- Multifunctional devices like video-enabled mobile handsets, which allow consumers to become creators of unique and original content;
- Entry of new players, infrastructure-based or Internet-based (“over the top”), helping create an unprecedented level of innovation and competition.

These developments pose a critical question, namely, **who or what is at the heart of the future development of the European video content market?** This report will approach that question by, first, looking at the *evolution of the European digital video consumer*. The report examines which current content consumption trends are relevant for predicting demand and consumption behaviour over the next five years, and to what extent these consumer behaviour trends impact the *business models for the creation, aggregation and distribution of video content* in Europe. The report also describes a number of potential outcomes and scenarios resulting from the interaction of the forces of change described above.

Finally, the report describes how these outcomes relate to certain objectives of European policy. Relevant objectives already outlined by policymakers include:

- Creating an internal market to stimulate production and distribution of European linear and on-demand audiovisual content, by harmonisation of content and advertising rules;
- Shaping new audiovisual policies to stimulate content owners and creators making their content available for digital distribution, in particular for *online* distribution, as well as for distribution over *digital TV and mobile TV platforms*;
- Building confidence in the digital content market by:
  - protecting intellectual property rights and fighting *piracy*;
  - enhancing consumer protection and encouraging legitimate use of content.

Policymakers can play a key role in accelerating the growth and competitiveness of the European video content market. At the same time, any effective regulatory system involves careful management of multiple trade-offs. This report aims to provide new insights on the likely evolution of the market to help find the right balance.

## Key messages

- Europe is in a phase of migration towards a mass market for new digital video platforms and on-demand consumption;
- Several alternative scenarios are possible for the speed and nature of change in the next five years. Nevertheless, in all probable scenarios:
  - Technology evolution, innovation and competition will deliver to the consumer unprecedented power and choice about what they watch, when and how they want to;
  - On-demand viewing will be a key driver of growth; but traditional “lean back” TV will remain the predominate viewing choice. Whatever it is possible to do, most consumers will prefer to “lean back” rather than “lean forward”;
  - Even so, traditional players will be forced to raise their game: Competition will increase dramatically with the entry of new players including telcos offering IPTV services and “over the top” Internet aggregators of video.
- Given these factors, the *most likely five-year scenario*, in our view, is an “evolving” one:
  - Rapid but measured change: On-demand reaches up to 20% of viewing hours by 2012 and continues to grow steadily through 2017;
  - TV-based on-demand platforms (including Internet Protocol Television, or IPTV) drive a greater proportion of on-demand viewing than public Internet platforms;
  - Industry revenue growth continues at historical rates (4% to 6% p.a.).

- Many factors support this short-term conclusion, but four of them are critical:
  1. A “lean back” experience vs. a “lean forward” one is still a very important customer need;
  2. Infrastructure development is unlikely to deliver a public Internet-based “lean back” TV of same quality as IPTV/TVVOD in a five-year time frame;
  3. Youth viewing is shifting towards new VOD models—but the impact due to demographics is limited in the next five years;
  4. Content creators are likely to experiment, but unlikely to actively promote the development of Internet-based on-demand platforms at the expense of TV-based platforms.
  
- Alternative scenarios are possible and have been examined in this report:
  - “Next generation” (which we consider the natural next step of “Evolving”) highly skewed towards on-demand and new platforms;
  - “Free ride”, where established business models collapse but are not adequately replaced by viable new models, with resulting reduction in returns and investment along the value chain.

## Executive summary

The European video content market is rapidly transitioning into the age of digital video. It is a compelling drama unfolding on televisions, iPods, mobile phones, computers and any other device that can download video content.

The star player is the consumer, who will gain unprecedented power and choice with the emergence of new technology, new competitors and an explosion in digital video content. Increasingly, European viewers will be able to watch *what* they want, *when* they want and *where* they want. Such fundamental shifts are threatening the traditional order of who creates, manages and distributes video content. These shifts will change how the €120 billion plus European video content revenue pool is divided up as well as its long-term prospects for growth.

The picture painted by many industry observers and players is one of swift, radical and, above all, inevitable change. But our research suggests far more uncertainty, with multiple scenarios possible in the next five years. On balance, we expect the most likely outcome over the short-term to be one of measured change (our “Evolving” scenario), with viewers adopting emerging technologies steadily but gradually.

This scenario represents a staging post along the same long-term path as the more radical “Next generation” scenario; the difference is primarily timing. The “Evolving” scenario assumes that the market takes longer than five years to reach the “Next generation” outcome. It is possible for this development path (including its gradual evolution in the short term) to be a “win-win” for consumers and the industry. Consumers will have more choice and adopt improved services at their own pace, fuelling continued growth for the video content market. Traditional players will continue to be in business, but a dramatic increase in competition will force them to innovate and substantially raise their game. For new competitors, success will depend on their ability to deliver programming and viewing options that consumers value as being new and different, rather than “me-too” solutions.

## The European video content market in 2006

Demand for traditional video content remains healthy. Despite the popularity of other new forms of entertainment (like video games), Europeans are watching more TV every year, averaging 3.4 hours per person a day, a steady increase of 1% from 2001 to 2005. Our viewing habits are evolving relatively slowly, even though the opportunities are there, thanks to new technology. Overwhelmingly, we are “lean back” consumers, with 95% of viewing on the family TV at scheduled times.

This large and thriving TV audience has ensured strong market growth. In 2005, consumers paid €61 billion to the industry in subscriptions, license fees and other payments; advertisers added a further €28 billion. Some €34 billion of this total was passed on to production houses and rights owners by the other participants in the value chain. Therefore, total revenue for the industry was €123 billion. Since 2001, this total has grown an average of 6% annually.

## Forces of change

### Consumer

While consumers are happy to experiment with new content and new media, they continue to value traditional video entertainment such as movies, sports and other TV shows watched on schedule. Even young viewers are still avidly watching traditional TV while also eagerly trying out new options, including video-sharing sites such as YouTube. Their habits are changing, but it may take 10 to 15 years for the demographics to flow through and have a large effect on the mass market.

Over the next five years, the most dramatic change will be in technology enablement. Advances in technology—in particular, the rollout of broadband Internet services—will accelerate the delivery of high-quality digital video content to homes. Digital terrestrial TV will gain momentum. Telcos rolling out Internet Protocol Television will compete head-on with established TV broadcasters and pay-TV operators. So will Internet-based content aggregators such as Google and Yahoo, which will offer more video content over the top of customers' existing Internet connections. As a result, the digital video consumer of the future will have greater access to media and an abundance of choices.

## Market development scenarios

To help players and policymakers prepare for the future, we developed four scenarios—snapshots of what the video content market may look like by 2012.

**Stability:** This is the least disruptive of the scenarios, but also the least innovative and perhaps the least positive for the consumer (and industry). Consumer behaviour remains stable, with limited growth for on-demand, new media and electronic formats and limited technology development. Traditional business models continue, and low single-digit growth is primarily driven by the government-mandated upgrade from analogue terrestrial TV to digital terrestrial TV.

**Next generation:** In this scenario the technology infrastructure is upgraded rapidly and consumers quickly change their viewing preferences. Content is delivered seamlessly on-demand, across digital media platforms—traditional TV, pay-TV, IPTV, the public Internet and wireless devices. On-demand reaches ~50% of total viewing hours and on-demand public Internet platforms equal TV-based platforms. Industry growth accelerates. The industry finds solutions to keep piracy to a minimum while making content widely available; continuing investment in high-quality content is maintained. New business models win substantial market share, particularly in on-demand, but traditional players share in industry growth, providing incentives for continued investment in technological enablement. Overall, this scenario assumes a series of mutually reinforcing benefits for consumers and industry participants.

**Free ride:** In contrast to the previous one, this scenario is a “lose-lose” outcome for both consumers and industry players. Initially, as in “Next generation,” the technology infrastructure is upgraded rapidly; on-demand consumption is adopted widely by consumers; and many new Internet-based business models thrive. However, in the “Free ride” scenario, the value chain participants fail to find viable commercial models to reward the various stages of content creation, aggregation and infrastructure as the traditional models are marginalised. Meanwhile, no viable solution is found to contain or limit piracy, and consumption of pirated content explodes. This undermines long-term investment in high-quality content production. After a period of decline in investment, new business models and sources of capital may emerge. However, it appears likely that infrastructure and content would suffer, possibly for a protracted time, before the situation improved.

**Evolving:** In our view, this is the most likely scenario. The video content market evolves towards “Next generation.” Consumer viewing habits undergo a gradual change. They move from analogue to digital TV and start adopting digital TV on-demand. Growth continues at historical rates (4% to 6% p.a.), fuelled by broader distribution of content and new video viewing opportunities. Profits start shifting from traditional players to new media competitors, but traditional business models are still profitable. Video piracy is an issue, but unlike in the music industry, it is not such a fundamental threat that it prevents content owners from making programming available online. Investment continues in content quality, distribution infrastructures and innovation.

### There are six key reasons why we see “Evolving” as the most likely scenario:

1. Watching TV is very different from surfing the Internet—a “lean back” vs. “lean forward” experience—and there is little evidence that Internet usage is cannibalising TV viewing today;
2. In the next five years, alternative technology solutions for viewing video content will make real progress in terms of viability for the consumer. However, it will take



time to catch up with the “lean back” experience of traditional TV. In particular, Video on demand (VOD) based on TV (or IPTV) will be likely to offer a superior experience to Internet-based VOD for most or all of the period;

3. Youth behaviour is changing, with viewing shifting towards new Internet VOD models—but the impact will likely be limited in the period through to 2012, since the demographic changes will take time to flow through and also because experience suggests that only some youth behaviour will carry forward into later life;
4. In the short term, content creators are unlikely to actively promote the development of Internet-based on-demand platforms at the expense of TV-based platforms. However, they are likely to experiment with all channels to get their content to customers;
5. Equally, we believe industry players along the value chain (content creators, aggregators and distributors) will be successful in rethinking their business models and regulators will provide policies aimed at avoiding extreme outcomes;
6. The regulatory framework in this scenario is assumed to be one that follows market trends rather than aggressively steering towards a desired outcome.

Over the next 10 years (to 2017), the natural development of the “Evolving” scenario would lead to “Next generation.” The main constraints to the “Next generation” scenario coming sooner are infrastructure roll out, and scale to make it attractive for producers to make content available on alternative platforms.

## Implications—market players

When compared with “Next generation,” the “Evolving” scenario implies less choice for the consumer and slower market growth in the short term. Nevertheless, we see it as a positive staging post.

Gradual change does not mean that established industry players can sit back and do nothing. Quite the opposite: They must position themselves now to remain competitive in the future. The consumer’s increasing power raises the stakes. To keep this empowered viewer from defecting, content quality, content aggregation and a superior customer experience are more important than ever.

A company’s individual strategy for success in this evolving marketplace will vary depending on its geographic location, industry segment and position in the market. Traditional players will need to raise their game to compete—in particular, to adapt to a world with a limitless variety of media content and multiple content delivery platforms. Conversely, emerging competitors will need to think carefully through what they bring to the mass market and how to genuinely differentiate themselves from established competitors.

## Implications—regulators and policymakers

Policymakers aiming to increase consumer welfare and choice whilst fostering sustainable growth in the European video content industry will face multiple trade-offs. For example:

1. Trade-offs between removing restrictions on the sharing and use of content to encourage “democratisation” vs. exposing copyright holders (and the creators of content) to abuse, through illegal sharing and copying;
2. Trade-offs between stimulating alternative platforms and networks for distributing content vs. maintaining incentives for the players that currently provide most of the investment in technology enablement;
3. Trade-offs between using regulation/deregulation to promote maximum choice of content for the consumer (such as “unbundling” distribution from aggregation) vs. allowing consumers and industry players to capture value of integrated propositions;
4. Trade-offs between stimulating public service programming through public funding vs. ensuring that publicly funded players do not become overly dominant in content creation and aggregation;
5. More broadly, regulators face trade-offs between intervening in issues relating to the development of new business models vs. allowing market forces to resolve them. Some important questions in this arena include:
  - How to create *scale for video on demand (VOD) products* and support their access to distribution?
  - How to make sure that *cross-border content licensing* opportunities can be increased by reducing complexity in copyrights clearance systems?
  - Whether and how to adjust regulation to *reflect shifting competitive balance* in the content value chain?
  - How to *increase confidence* in digital rights management systems, so that consumers have flexibility to use content they acquire in different ways, and owners have the security they seek to protect their investments?

## The European video content market in 2006

### a / Overview of video content industry

#### Definition

In order to look at the future of the video content market in Europe, it is important to define the types of players driving change. They fall into three groups: content creators, aggregators and distributors. (See Figure 1.)

The emergence of new channels and technology platforms for the distribution of digital video content may change the balance of power and distribution of profits between players in the value chain. These new channels and platforms will simplify the way video is distributed and make it easier for viewers to pick and choose what they want, when and where they want it. Emerging technologies include digital terrestrial TV (DTT)—state-of-the-art digital technology that enables broadcasting of high-definition, conventional and other TV formats; Internet Protocol TV (IPTV), delivered by telcos over their digital subscriber lines (DSLs) to viewers' TV sets; and “over the top” Internet content aggregation services such as Google, Yahoo and Internet retailers like Amazon.com.

#### Market size and profitability

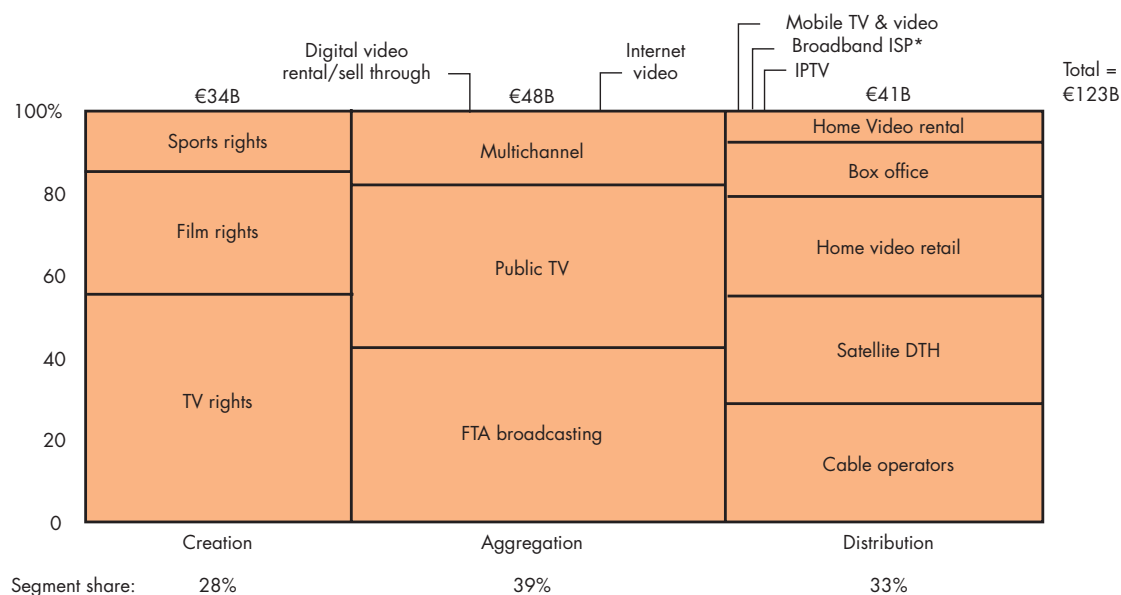
In 2005, consumers paid €61 billion to the industry directly or indirectly. That includes subscriptions to pay-TV, license fees and direct government funding to national broadcasters. Advertisers added a further €28 billion, driving a total €89 billion flowing into the industry from external sources. Some €34 billion of this total was passed on by other players (distributors and aggregators) to production houses and rights owners. Therefore, total revenue market size for the industry was €123 billion (equivalent to ~1.2% of EU 15 gross domestic product or GDP). The market has been growing at ~6% annually over the last five years.

Figure 1: Video content value chain definition and examples

	Content creation	Aggregation		Distribution
		Narrow	Broad	
Definition	<ul style="list-style-type: none"> <li>Develop and produce content</li> </ul>	<ul style="list-style-type: none"> <li>Aggregation of content targeted to a specific audience</li> <li>Programming/ selection of content</li> </ul>	<ul style="list-style-type: none"> <li>Aggregations of content targeted to a broad audience</li> <li>Programming/ selection of content</li> </ul>	<ul style="list-style-type: none"> <li>Deliver entertainment to consumers via infrastructure, point of sale and retail operations</li> <li>Often bundled with aggregation</li> </ul>

Figure 2: European video content market is ~€123 billion (revenue)

**European video market revenues, 2005**



\* Assumes 1% broadband online time spent on video, source-Nielsen/Netratings  
 Source: PricewaterhouseCoopers, Screen Digest, Informa, company filings, analyst reports, MEDIA Salles, Gartner

A detailed financial breakout of the market paints a vivid picture of the players and the power they wield. Content aggregators generate the largest portion (39%) of total revenue, followed by distributors (33%) and content creators (28%). (See Figure 2.)

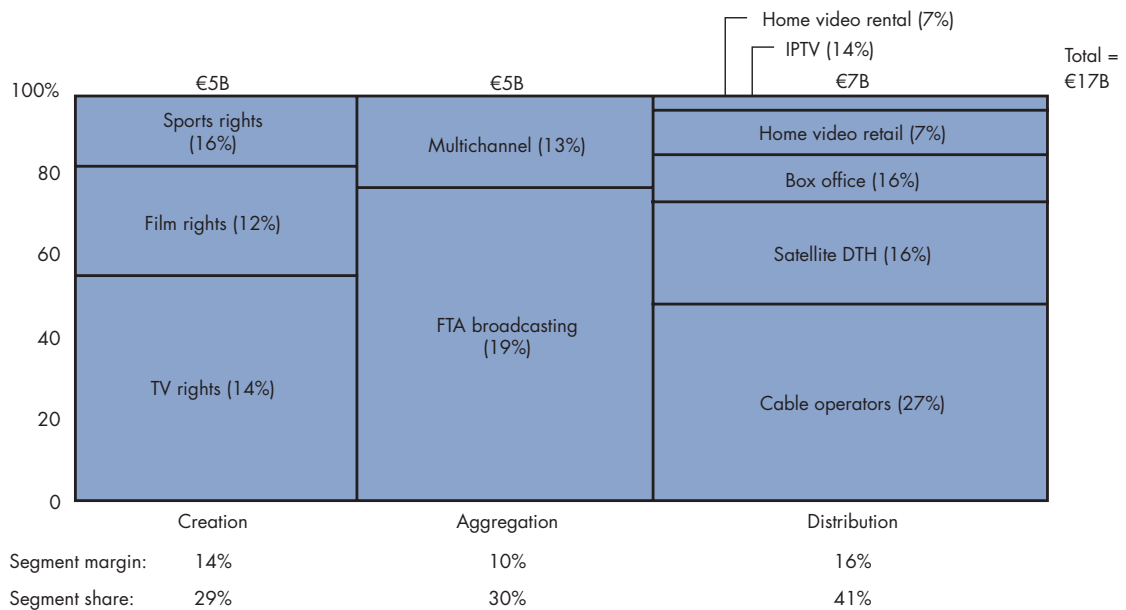
To give a sense of industry profitability, we calculated the total EBITDA (earnings before interest, taxes, depreciation and amortisation) generated by the different players. EBITDA is a good starting point, although it does not consider the very different capital intensity (of the distributors vs. aggregators, for example).

Total EBITDA for the industry in Europe was €17 billion in 2005. That represents an average 13% EBITDA margin for the industry. Of this total, distributors generate 41% (16% EBITDA margin), aggregators ~30% (10% EBITDA margin including public service broadcasters, 17% excluding them) and content creators 29% (14% EBITDA margin). Effectively, EBITDA margins are similar across the three elements of the value chain.

In **content creation**, 24% of the total EBITDA is generated by US majors operating in Europe and 76% by European content producers. Of the European players, the majority (46%) are

Figure 3: The European video content profit pool is €17 billion

**European video content market profit pool, 2005**



Note: Aggregation segment margin excluding public broadcasting is 18%  
 Source: PricewaterhouseCoopers, Screen Digest, Informa, company filings, analyst reports, MEDIA Salles, Gartner

from the production arms of public or commercial-free TV broadcasters, followed by sports organisations (18%), niche content creators (12%) and the production arms of pay-TV operators (1%).

**In content aggregation**, ~78% of EBITDA is earned by traditional commercial free-to-air broadcasters, with the vast majority of the balance going to multichannel programmers. Public service broadcasters, which account for more than 40% of revenue for this group, are not profit-making. New competitors managing video content on the Internet represent less than 1%. Of that group, user-generated video content represents a minute portion—total YouTube revenue globally in 2006 was just \$12.7 million.<sup>1</sup>

**In content distribution**, EBITDA is split primarily between the video operations of the various pay-TV operators (cable 48% and satellite 26%), box office (13%) and DVD rental/retail (13%). IPTV represents less than 1% of the total. (See Figure 3.)

<sup>1</sup> Bain & Company analysis of European profit pools

## b / Video content viewing behaviour

There are several ways to define how video content is consumed by:

1. Type of content;
2. How content is packaged and distributed (broadcast vs. DVD retail);
3. Where it is watched;
4. How it is watched (on what device);
5. When it is watched.

(See Figure 4.)

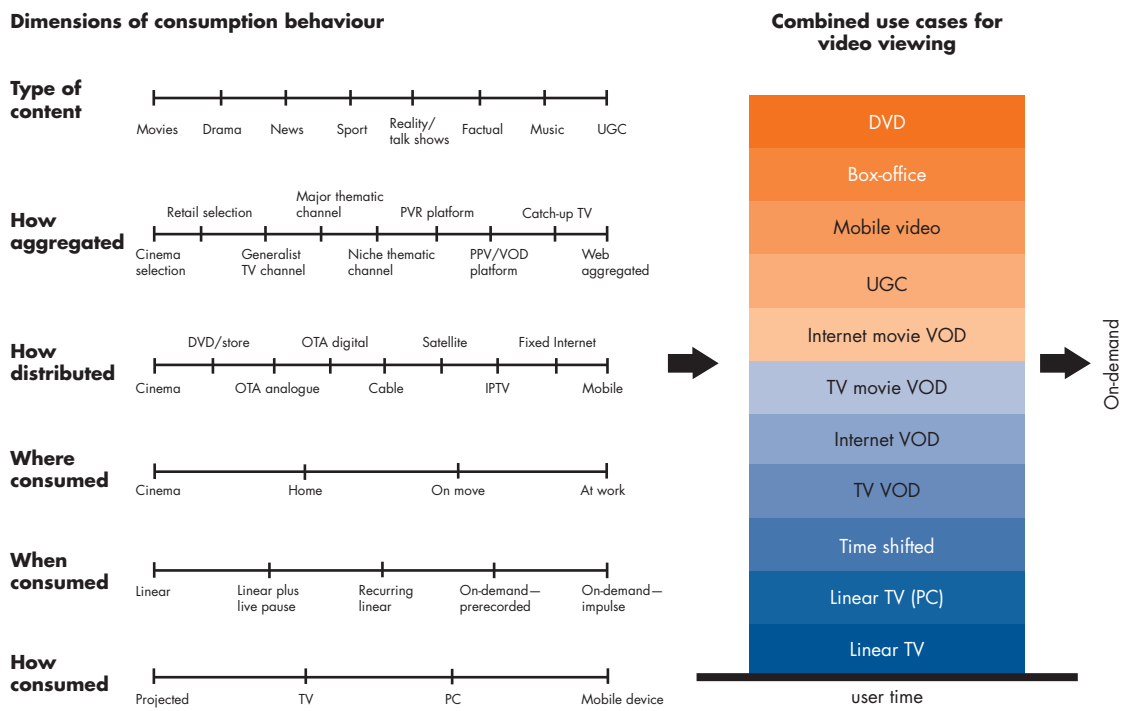
Today, more than 95% of video content viewing in Europe is traditional “linear” television—with viewers watching shows at their regularly scheduled times. On average, Europeans consumers view more than 1,200 hours of television per year—about 3.4 hours per person a day, a steady increase of 1% a year from 2001 to 2005. TV consumers enjoy a wide variety of programming, including news, drama, entertainment, sports, reality, children’s and movies, with approximately 60% of all programming produced by European content creators.

After TV, viewing movies is the second most popular activity—consumers watch films in cinemas, purchase DVDs or rent them from stores, and use pay-per-view services.

Other emerging video content viewing options—user-generated video and mobile video—are among the fastest-growing options, but the number of users is still small.

We describe viewing trends in detail in the Forces of change section on page 37.

Figure 4: "Use cases" describe shift towards on-demand consumption of video content



## Market scenarios and likely outcomes

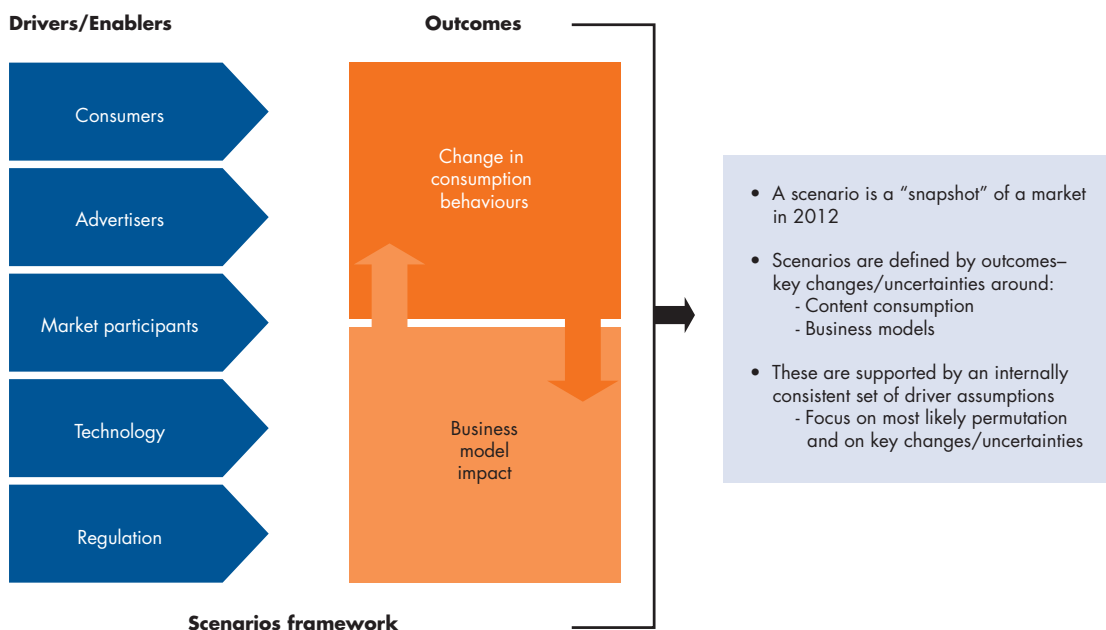
### a / Purpose of scenarios

The future of the European video content market over the next few years is uncertain. Different industry players and observers are making different assumptions about change—how fast the technology will evolve and how quickly consumers will adopt new viewing options. As a result, there's little consensus about how consumers, advertisers and policy-makers will react to digital video innovations. The conclusions are wide-ranging.

We have developed a set of industry scenarios to help the players and policymakers navigate this uncertainty. The time frame for our scenarios: the development of the European video content market to 2012. We've excluded scenarios that we consider impossible or unlikely given the available facts. Current trends in consumer behaviour, digital video technology, competition and other key forces make some scenarios more likely than others.

The scenarios look at the different potential **outcomes** in (a) consumer behaviour (what content is consumed, how, where and when), and (b) the impact on business models (overall industry growth and distribution of profits among the players). Each scenario is based on specific assumptions about how the **forces of change**—consumers, advertisers, competition, technology and regulation—will play out. While we expect that all European markets will be subject to the same forces of change, local factors will influence the way individual regions and countries develop. (See Figure 5.)

Figure 5: A range of scenarios was developed based on a thorough assessment of industry drivers





## b / Major uncertainties

### Forces of change

Based on a review of all potential forces of change, we see two major uncertainties that could impact the future of the video content industry—the degree of availability of digital video technology and the competitive behaviour of certain market players.

The availability of digital video **technology** is subject to uncertainty on the following key factors:

1. Degree of increase in broadband capacity to the home;
2. Extent of rollout of IPTV services;
3. Penetration/availability of “home hubs”—digital devices that allow viewers to move digital video easily between devices, particularly from a PC to a TV;
4. Emergence of interoperable digital rights management systems that allow for both high levels of content portability for the consumer and high confidence for the rights holder.

The likely **competitive behaviour** of the following market players is uncertain:

- **New entrants:** Competitive intensity will increase with the entry of telcos providing IPTV, and Internet “over the top” content aggregators. The question is how disruptive they will be—for example, in terms of acquisition of exclusive content rights;
- **Content creators and owners:** It is unclear how quickly they will take advantage of new digital video opportunities. For example, decisions on the timing of release for movies onto TV and Internet on-demand (vs. DVD) will have a major impact on the adoption of new services.

Meanwhile, consumer preferences and advertiser behaviour are less likely to be drivers of change in the next five years:

- **Consumers:** For the purpose of our scenarios, we do not assume a major demographic shift or major changes in behaviour for a given level of technology enablement. Therefore, for the most part consumer behaviour varies based on the level of enablement assumed in each scenario. However, we do look at the impact of the changing habits of younger viewers;

- **Advertisers:** While there is evidence that advertisers are shifting their spending from print to the Internet, there is currently relatively little evidence that the Internet is winning away ad spending from TV. If viewers start watching more video on the Internet, this will change. Again, for the purpose of our scenarios, we assume advertisers will follow viewing trends, instead of trying to influence them.

We did not explicitly incorporate changes in **policy and regulation** as an input to the scenarios—although clearly, they could impact outcomes significantly.

### Consumption behaviour outcomes

Each scenario reflects different ways the forces of change could play out, influencing the final outcome. For **consumption behaviour**, the outcome will be defined by how consumers respond to the increasing choices available to them:

- What proportion of total video viewing is on-demand—our scenarios range from as little as 10% to more than 50%;
- How much on-demand viewing is done via traditional TV platforms such as VOD vs. video downloaded from the Internet;
- The proportion of content consumed that is pirated and/or obtained illegally.

An important consideration with each of these factors is the behaviour of younger viewers (under 35) and their impact on the mass market: especially how much of today's youth audience opts for on-demand as they become adults.

### Industry business model outcomes

For **industry business models**, the outcome will be defined by the future size of the industry profit pool, whether growth accelerates or flattens out, and how profits are distributed among the various market players. Factors affecting the shape of the future profit pool will be:

- How content creators' profitability is affected by:
  - Increased revenue from new video content distribution channels, and new consumer viewing options;
  - Decreased revenue as consumers shift viewing from commercial programming to free, user-generated videos, and/or consumer content obtained illegally.

- How much content aggregation profits shift from traditional TV to newer players such as multichannel programmers and new Internet-based content aggregators;
- How content distributors' profits are impacted by increased competition from IPTV (through price competition);
- The overall impact on established pay-TV operators from:
  - New revenue from digital services such as VOD;
  - Potential decline in revenue as consumers obtain more programming direct from content creators and via websites.

## c / Four scenarios for Europe in 2012

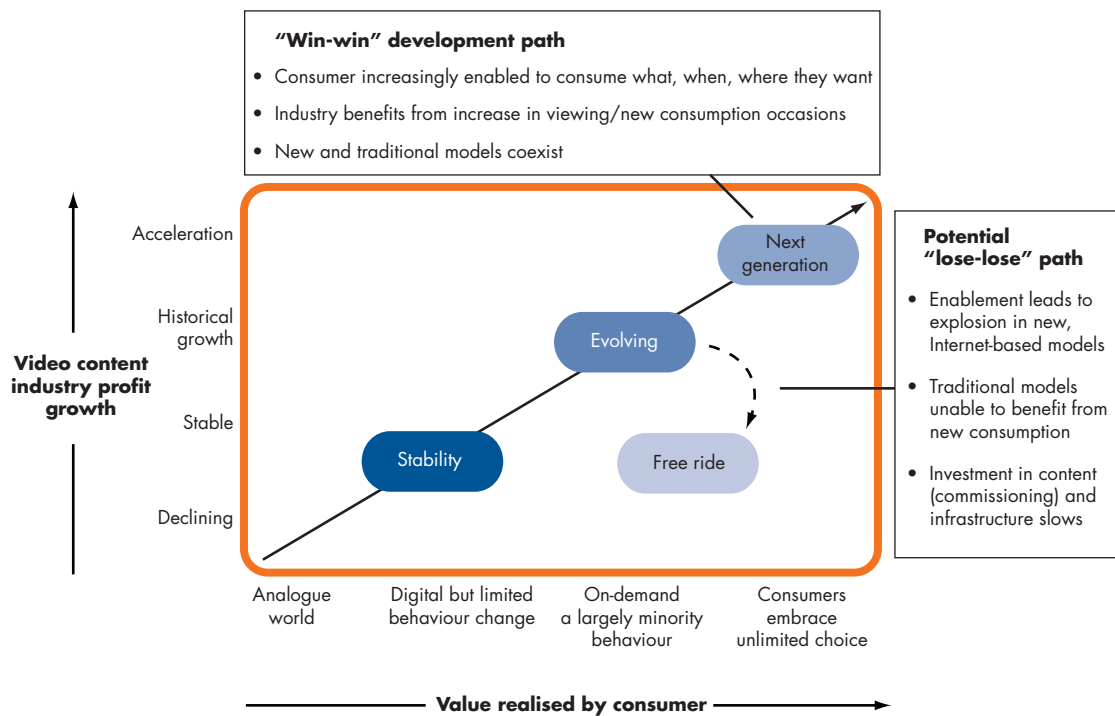
We see four scenarios that could unfold over the next five years.

**Stability:** This is the least disruptive of the scenarios, but also the least positive for the consumer (and industry). Overall, consumer behaviour remains stable, with limited growth for on-demand, new media and electronic formats. Technology enablement is slow. Traditional business models continue, and low single-digit growth is primarily driven by the government-mandated upgrade from analogue terrestrial TV to digital terrestrial TV.

**Next generation:** This scenario would be the most positive “win-win” for the consumer and the industry. The technology infrastructure is upgraded rapidly and consumers quickly change their viewing preferences. Content is delivered seamlessly on-demand, across digital media platforms—traditional TV, pay-TV, IPTV, the public Internet and wireless devices. Industry growth accelerates. The industry finds solutions to keep piracy to a minimum while making content widely available; continuing investment in high-quality content is maintained. New business models win substantial market share, particularly in on-demand, but traditional players share in industry growth, providing incentives for continued investment in technological enablement.

**Free ride:** This scenario appears to be a “lose-lose” outcome for both consumers and industry players. Initially, as in “Next generation”, the technology infrastructure is upgraded rapidly; on-demand consumption is adopted widely by consumers; and many new Internet-based business models thrive. However, in the “Free ride” scenario the market participants are slow to find viable commercial models to reward the various stages of content creation, aggregation and infrastructure. For example, established distributors are bypassed, but do not or cannot find alternative ways to commercialise their assets (e.g., through establishing commercial models with “over the top” players for access to higher bandwidth or quality of service).

Figure 6: Scenarios matrix



The infrastructure investment required for a digital video content mass market begins to slow. Meanwhile, no viable solution is found to contain or limit piracy, and consumption of pirated content explodes. This undermines long-term investment in high-quality production. After a period of decline in investment, new business models and sources of capital may emerge. However, it appears likely that infrastructure and content would suffer, possibly for a protracted time, before the situation improved.

**Evolving:** In our view, this is the most likely scenario. The video content market evolves towards “Next generation”. Consumer viewing habits undergo a gradual change. They move from analogue to digital TV and start adopting digital TV on-demand. Growth continues at historical rates (4% to 6% p.a.), fuelled by broader distribution of content and new video viewing opportunities. Profits start shifting from traditional players to new media competitors, but traditional business models are still profitable. Video piracy is an issue, but unlike in the music industry, it is not such a fundamental threat that it prevents content owners from making programming available online. Investment continues in content quality, distribution infrastructures and innovation. (See Figure 6.)

In the following pages, we walk through each scenario in more detail.

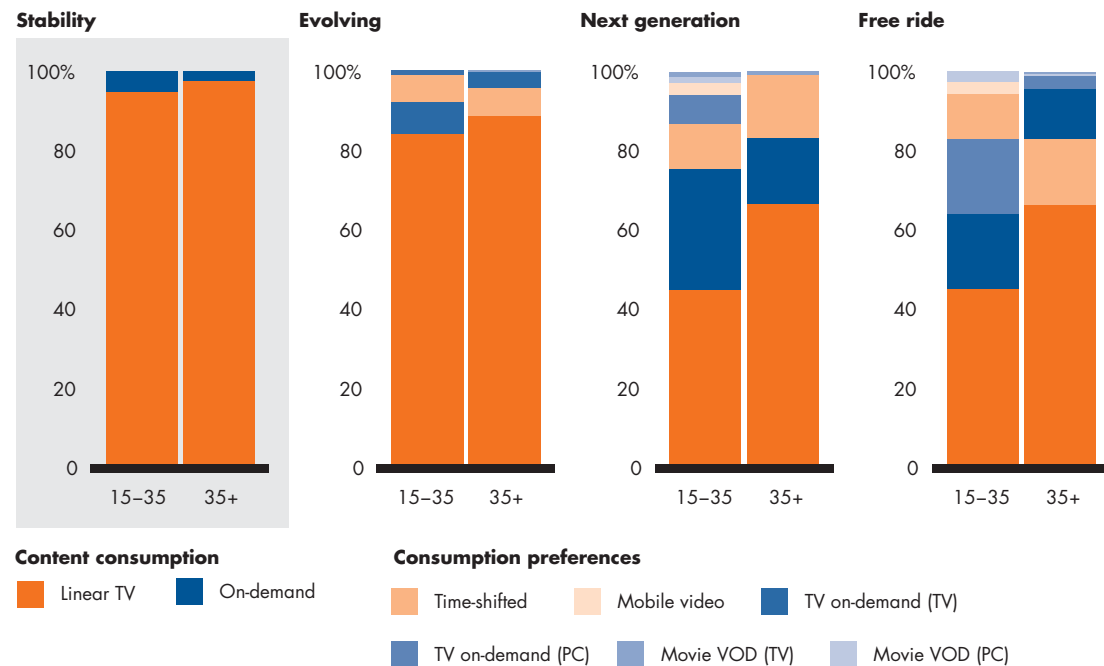
## Stability

### Consumer behaviour

In the “Stability” scenario, consumer behaviour doesn’t change much—adults watch 95% of their programming on traditional TV broadcasts in their homes. Even among younger viewers (those up to 35 years old), traditional TV watching holds steady at about 90% of the total. They will watch about the same amount of television and movies as they do today, with limited shifts to on-demand viewing of TV and movies over the Internet. Among adults, there is virtually no use of the Internet for viewing TV and movies. (See Figure 7.)

As with all the scenarios, the “Stability” outcome could result from numerous different combinations of individual forces of change (or lack of change for this scenario). In our view, the key constraining factor that might result in “Stability” would be slow or limited rollout of infrastructure—for example, DSL, two-way digital cable, and personal video recorders (PVRs). This could occur if infrastructure owners felt they would not get a return on their investment. A less likely but still possible combination of circumstances would be substantial rollout but very limited customer adoption.

Figure 7: Video consumption behaviour of average household



Note: Excludes box office and DVD; on-demand includes TV on-demand via PC, movie VOD via PC, mobile TV and UGC

## Business models

In this scenario, industry participants have mixed fortunes. On the one hand, the profit pool is largely unchanged and established players benefit from a stable marketplace. On the other hand, there is little industry growth, beyond the government-required change from analogue to digital terrestrial TV. Traditional content creators, led by the US major film studios, continue to control video production and content rights. Traditional engines for growth, such as movie DVD sales, stay flat, and no new distribution formats take hold. Established video content aggregators also retain their market position, benefiting from “lean back” viewers who don’t adopt the on-demand option. These traditional broadcasters hold onto their market share, and the amount of available video content doesn’t change.

With low numbers of online viewers, Internet content aggregators are unable to make money from Internet-based video programming. As a result, the Internet and TV consumer markets remain distinct, with Internet offerings focused on short video clips and user-generated video. Finally, established video distribution players continue to be the only source of TV and movie programming for most consumers. They’re unable to take advantage of growth opportunities from on-demand and emerging digital services, such as providing improved quality and offerings to new players such as Google and Amazon.com that use their infrastructure.

## Evolving

### Consumer behaviour

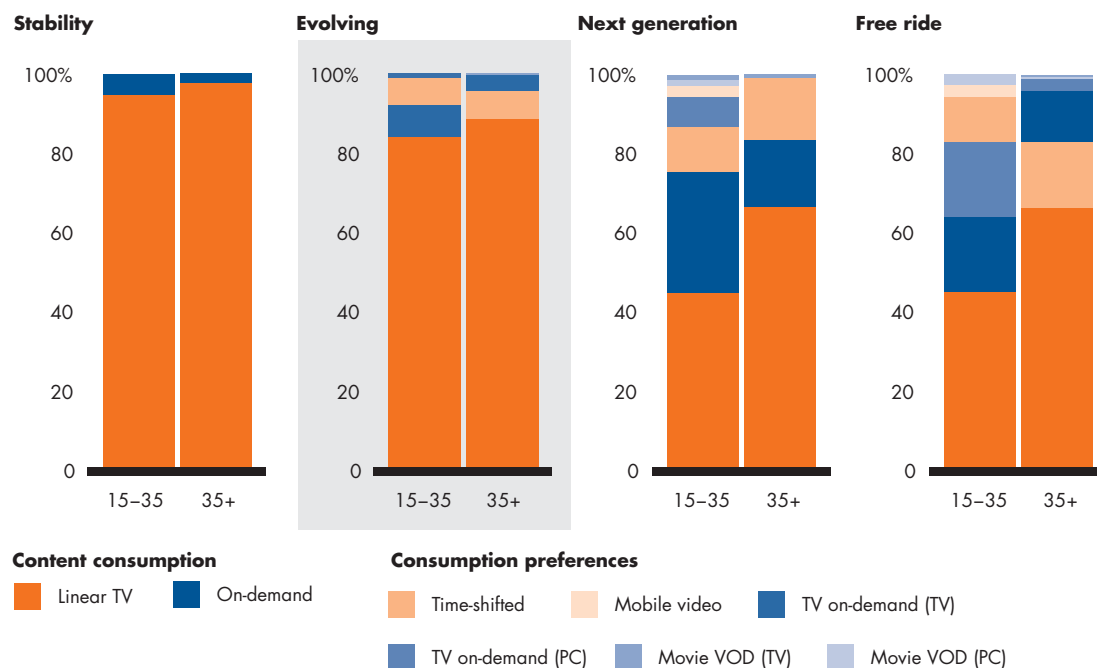
In the “Evolving” scenario, consumers make a gradual move towards on-demand due to quick but not explosive rollout of digital technologies. Digital TV is in ~75% of homes, broadband is in 50% to 70% (depending on which country in Europe), TV VOD is offered to 100% of digital cable and IPTV homes (about 35% of the viewing audience), and 20% to 30% have home hubs, reducing the overall impact on the industry. Younger viewers may opt to watch as much as 20% of their TV shows on-demand. For the mass market, up to 10% of consumer viewing could shift to on-demand. Time-shifting also increases—the use of PVRs to delay watching shows. Younger viewers use PVRs to time-shift about 10% of their TV programming, while time-shifting among adults accounts for less than 10% of viewing. (See Figure 8.)

### Business models

Overall, the profit pool continues to grow at historical rates (4% to 6% p.a.), boosted by broader distribution of existing content and new viewing options. Traditional business models are still profitable, but the distribution of profits is affected:

- Content creators have stable profits and make some gains as consumers start watching more multichannel TV, from direct sales to consumers over the Internet and from increased negotiating leverage with aggregators and distributors;
- Content aggregators overall have stable profits, but there are changes in the works. Traditional TV broadcasters as well as premium cable-TV channels enjoy increased revenues by using the public Internet to distribute programming directly to consumers, but this is offset by increased competition for audiences and content, reducing profits. The end result: They begin losing viewers to newer subscriber-based multi-channel TV providers and public Internet content aggregators such as Google;
- TV content distributors also start feeling the impact of market shifts. In many European markets, IPTV gains a foothold, winning a limited, but significant, share of all TV viewers, and increasing competition among pay-TV distributors. Pay-TV distributors benefit as more consumers select on-demand, allowing them to start seeing profits from emerging services such as VOD.

Figure 8: Video consumption behaviour of average household



Note: Excludes box office and DVD; on-demand includes TV on-demand via PC, movie VOD via PC, mobile TV and UGC

## Next generation

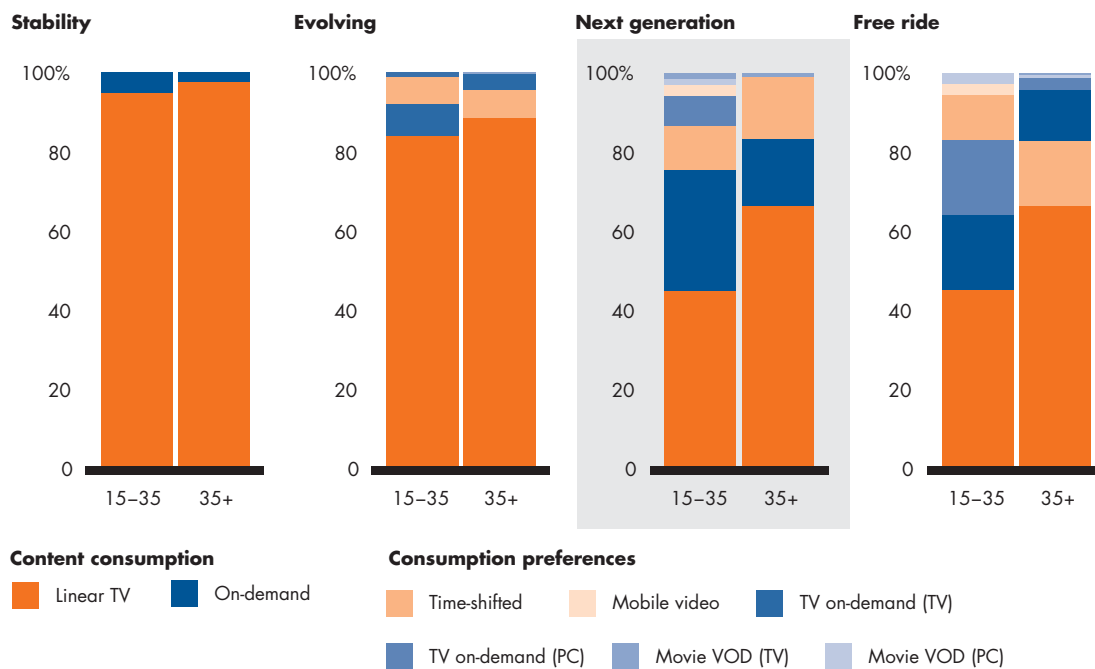
### Consumer behaviour

In this scenario, mass-market viewing undergoes dramatic change. Consumers start watching a wide range of digital video content through TV VOD platforms, by logging onto the public Internet, on mobile devices, and to a lesser degree, via video game consoles. They also prefer electronic on-demand video formats for TV, short-form and movies. (See Figure 9.)

Young viewers have made the biggest change, watching less than 50% of their programming on traditional TV. Their viewing habits paint a vivid picture of a new kind of TV viewer:

- ~30% is on-demand viewing on TV;
- ~10% is time-shifted (using a PVR);
- ~5%-10% is spent on the Web watching on-demand video content;
- ~5% is on mobile devices (vs. TV or PC).

Figure 9: Video consumption behaviour of average household



Note: Excludes box office and DVD; on-demand includes TV on-demand via PC, movie VOD via PC, mobile TV and UGC



Mass-market audiences also watch more on-demand TV. Traditional TV watching drops by one-third. Older viewers time-shift about 15% to 20% of their TV shows, while another 15% to 20% is provided by TV on-demand services.

The most likely driver of such a dramatic change is very rapid rollout of the technology infrastructure, accompanied by a step change in competition as telcos and “over the top” players enter the market in large numbers. This would have to be based on high confidence levels based on strong, early adoption of services or regulation favourable to infrastructure investment.

#### Business models

If accelerated growth rates are the measure, then “Next generation” is the most favourable scenario for the industry. Overall, viewers are watching more TV, movies and emerging forms of video content, with a corresponding increase in revenue flows into the industry (from consumers and advertisers). With more viewers using a variety of new media to watch video content, content creators enjoy increased profits.

But traditional business models are impacted. The explosion in programming choices results in a fragmented audience, making it harder for established broadcasters to hold onto their market share. Internet content aggregators are among the winners. They are able to bypass traditional TV providers such as cable and satellite TV and deal directly with consumers.

Among distributors, IPTV battles with established pay-TV services for subscribers; in some audience segments, both lose out to Internet content aggregators. However, traditional models are able to share in industry growth. Pay-TV operators are able to grow on-demand services and are able to offset some loss of subscribers with new fees for the public Internet players that use their network infrastructure.

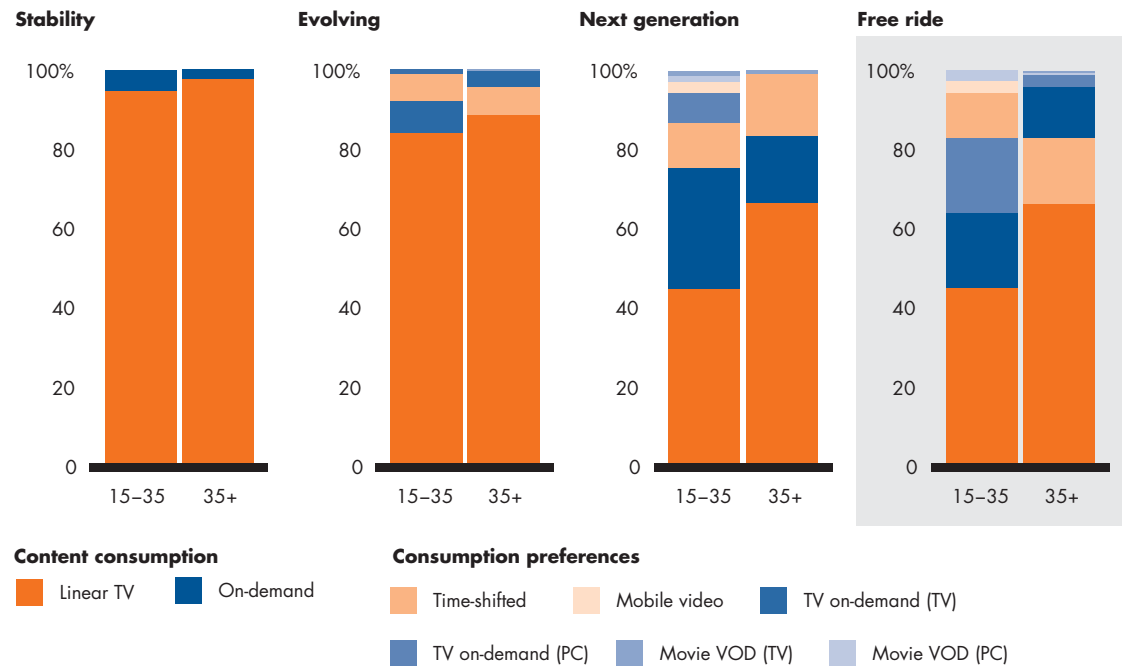
#### Free ride

##### Consumer behaviour

Similar to the “Next generation” scenario, “Free ride” assumes a major shift to on-demand and Internet-based viewing. (See Figure 10.)

The key difference in consumer behaviour from “Next generation” is that the level of illegal file sharing—piracy—increases as viable digital rights management (DRM) solutions are not found and the behaviour becomes more acceptable in the mass market. That in itself leads to a greater incidence of Internet-based viewing, as younger viewers in particular opt for “free” content obtained illegally online rather than pay for content on TV-based platforms.

Figure 10: Video consumption behaviour of average household



Note: Excludes box office and DVD; on-demand includes TV on-demand via PC, movie VOD via PC, mobile TV and UGC

Other forces of change that could drive more on-demand usage to the public Internet (as opposed to TV-based platforms) include:

- Stronger consumer preference for the video over the public Internet than assumed in other scenarios (and seen today);
- Active favouring of distribution over the public Internet by content providers and/or active and preemptive transfer of advertising spending to the Internet;
- This itself could be linked to major investments by “over the top” players, for example, in video search technology or global content exclusives;
- Regulation and policy could also play a role—for example, net neutrality regulation would not alone create “Free ride” but could contribute;
- Equally, a contributing driver will be the fact that players will make up-front investments in the development of distribution networks in advance of new business models being tested.

## Business models

New business models gain share while traditional models are only marginally profitable. Content creators get burned, having taken the risk of making more content available online, only to see piracy rise dramatically. Unlike the “Next generation” scenario, a portion of traditional pay-TV business is effectively unbundled—the ability to offer packages of TV channels for a fee is challenged by public Internet competitors that have succeeded in disintermediating traditional pay-TV distributors and established direct customer relationships. Equally, the new Internet-based competitors struggle to deliver returns because of piracy.

To accommodate the massive increase in Internet traffic due to video over the Internet, network owners’ only real lever for managing network quality and performance is increased capacity. However, unable to capture adequate returns from video traffic themselves, network owners have reduced incentives for further investment. In this scenario, we envision an outcome where infrastructure owners are unable to capture a return. This could be the result of aggressive competitive behaviour by any group of players. Alternatively, it could be driven by regulation: for example, if the regulator prevented network infrastructure owners from being able to charge public Internet video players for use of the network and forced them to sell unbundled local loop (ULL) at cost of capital. (See Figure 11.)

## d / Likely outcomes (Europe overall)

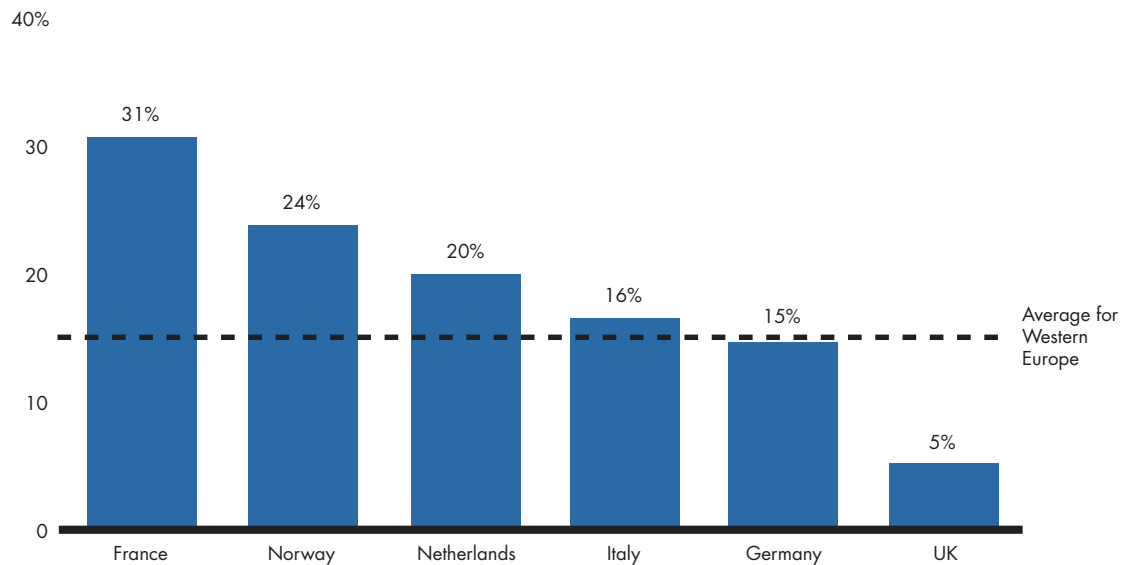
In our view, based on emerging and anticipated market trends, “Evolving” is the most likely scenario through to 2012. However, these trends and changes are not reversible and over the longer term both “Next generation” and Internet “Free ride” are possible, depending on the behaviour of market players and the evolution of policy in this area.

Many factors support this short-term conclusion, but four of them are critical. These specifically relate to the changes in consumption behaviour and corresponding business model outcomes associated with the rise (or otherwise) of Internet-based “over the top” video. This is the key difference between the scenarios described above.

1. Watching TV is very different from surfing the Internet—it’s a “lean back” vs. “lean forward” experience—and there is little evidence that Internet usage is cannibalising TV viewing today.

Over the past five years, Internet use has grown very rapidly in Europe. However, daily TV viewing continues to grow between 1% to 2% annually in most markets. Consumers are using the Internet primarily for browsing/search, email, messaging and chat, not for watching TV.

Figure 11: Unbundled local loop share of country broadband connections varies across Europe

**Unbundled local loop lines as a portion of broadband connections, 2006**

Source: Merrill Lynch 2006

Many consumers have experimented with video over the Internet—for example, 36% in Belgium, 46% in the Netherlands and 66% in the UK say they watch video on the Internet once a month—but few are using it regularly (every day), only 5% or less in most markets. Data from the US suggest that those who regularly view Internet video content are mostly watching different content from what they watch on TV. Other than clips from newscasts, the largest categories are movie previews, user-generated content and music videos.

2. In the next five years, alternative ways to view video content will make real progress in terms of viability for the consumer. However, it will take time to catch up with the “lean back” experience of traditional TV. In particular, TV-based VOD will likely offer a superior experience to Internet-based VOD for most or all of the period.

A key factor in the pace of change—especially for watching TV programming on-demand over the public Internet—is the relative quality of the experience. While Internet video quality will improve dramatically, it is unlikely to be able to compete on equal terms with TV VOD platforms.

- **Availability:** TV VOD will be more widely available than Internet video solutions: For example, in the Netherlands more than 80% of households will be TV VOD enabled while only ~20% will have “home hubs”;
- **Quality:** At least in the short term, TV VOD will work more effectively and be better adapted to high-quality, high-definition pictures. Mass-market streaming on the Web faces significant technical problems. These can be resolved, but they require investment to solve bottlenecks in the infrastructure—and it is not clear who will invest;
- **Convenience:** TV VOD will be more convenient—there will be no need to watch shows on PCs or install new technology devices to transfer content from the PC onto the TV;
- **Range of content/commercial models:** Traditional TV players should be able to match newer players in terms of content availability and innovative commercial models. The potential exceptions are in personalisation/targeted advertising, and search functionality (in a world of unlimited shelf space, traditional programming guides will not be sufficient).

### 3. Youth behaviour is changing, with viewing shifting towards new models, but the impact will be limited in the period through to 2012.

Today’s youth audience has very different viewing preferences from prior generations. For example, they are twice as likely as mass-market viewers to have used Internet VOD or YouTube.

However, teenage TV viewing is still growing. In the US, TV viewing for the 12- to 17-year-old segment was up 3% in 2006 over 2005. In addition, while some preferences—particularly for on-demand viewing—will continue into adulthood, other preferences may change with their lifestyles. For example, instead of watching inferior-quality video content illegally from the Internet, as they age, they’re likely to start paying for higher quality and video that’s legally obtained.

Meanwhile, viewers over 35 still will represent ~60% of the population in most European markets in 2012, with another ~20% of the population living in households where the older generation makes many decisions about video content services.

### 4. In the short term, content creators are likely to experiment with all channels to get their content to customers. However, they are unlikely to actively promote the development of Internet-based on-demand platforms at the expense of TV-based platforms.

Each group of content creators and owners (for example, major US studios vs. European sports rights organisations) has a different set of issues regarding distribution of content over the Internet. These issues are explored in more detail in the next section.

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

- There is a real fear of piracy outside the “closed systems” offered by pay-TV operators. Distribution over the public Internet without adequate copyright protection represents a riskier proposition;
- Traditional TV platforms represent a major, established revenue stream for content creators while public Internet distribution is still relatively unproven. Actively seeking to replace TV viewing with Internet viewing would require trading off secure vs. uncertain revenue streams;
- As described above, TV VOD is expected to offer a superior viewing experience over the short to medium term;
- 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.

## e / National market differences

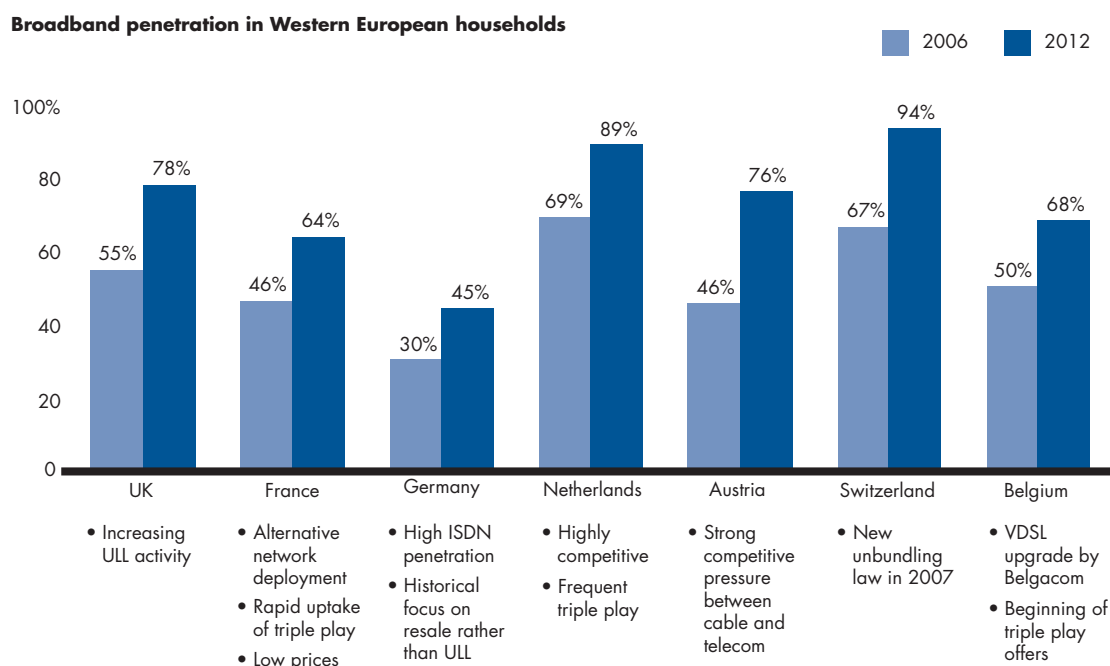
While the overall picture for Europe points to the “Evolving” scenario as the most likely one in 2012, there will be substantial differences in outcomes across individual markets. These differences will be dictated by how the forces of change—consumers, advertisers, market participants, technology and regulation—develop and vary across markets in the time frame.

To take into account the differences across markets whilst still assessing the overall picture for Europe, we conducted a detailed evaluation of five countries. This detailed evaluation was combined with a high-level assessment of a further 24 countries. We then compared similarities and differences across all 29 countries.

**Based on our analysis, the primary differences expected across European markets in 2012 will include the following:**

**Consumers:** With respect to video content, we expect key differences in total (relative) level of video content consumption (particularly in movies), and to some degree, differences in the size of the language pool (which has some impact on availability of local content and language-specific content). For a given level of enablement, we do not expect major differences in consumption preferences (level of on-demand behaviour).

Figure 12: Broadband to reach 60%+ of households in most Western European countries by 2012, with significant variations



Source: Merrill Lynch 2006, 2012 based on extrapolation of 2008–2010 data

**Advertisers:** This is about the size, growth and dynamics of the market to support video content. That support can come in either traditional (TV) or new (Internet, and within TV, multichannel) forms. Major differences are likely to include the relative size and growth of the display ad market in each market, TV’s and Internet’s share of that market, and within TV, the relative growth of multichannel vs. free-to-air (FTA) TV.

**Market participants:** Relevant key differences across markets will include the level of penetration of IPTV as an alternative form of pay-TV distribution, and the relative size and influence of large, vertically integrated national players such as public service broadcasters.

**Technology:** Key differences in technology enablement of consumers across Europe will be in broadband penetration and average bandwidth, penetration of multichannel TV platforms (e.g., two-way digital TV), PVR penetration and mobile wideband (3G) penetration. (See Figure 12.)

Based on an assessment of the development of the forces described above, European markets fall into one of six key clusters:

- “UK/Ireland”
- “Southern” —including France, Spain, Portugal and Italy
- “Connected” —including Netherlands, Switzerland and Belgium
- “Nordic” —including Sweden, Denmark and Finland
- “Germanic” —including Germany and Austria
- “Central and Eastern Europe (CEE)” —including Hungary, Bulgaria, Poland, Romania and the Czech Republic

Bearing in mind differences in the forces of change in 2012 and the definitions of the scenarios described earlier in this document, the most likely scenarios (or range of scenarios) for each of the clusters also differs accordingly.

Considering the differences across European markets, what emerges for Europe overall is a range, from “Stability” to “Next generation” but with most countries clustering around the “Evolving” outcome.



## Forces of change

No one factor is driving the transformation of the European video content market. Instead, there are **five main forces of change**, including consumer behaviour, technology innovation, the behaviour of market participants and advertiser choices as well as government regulation and policy decisions.

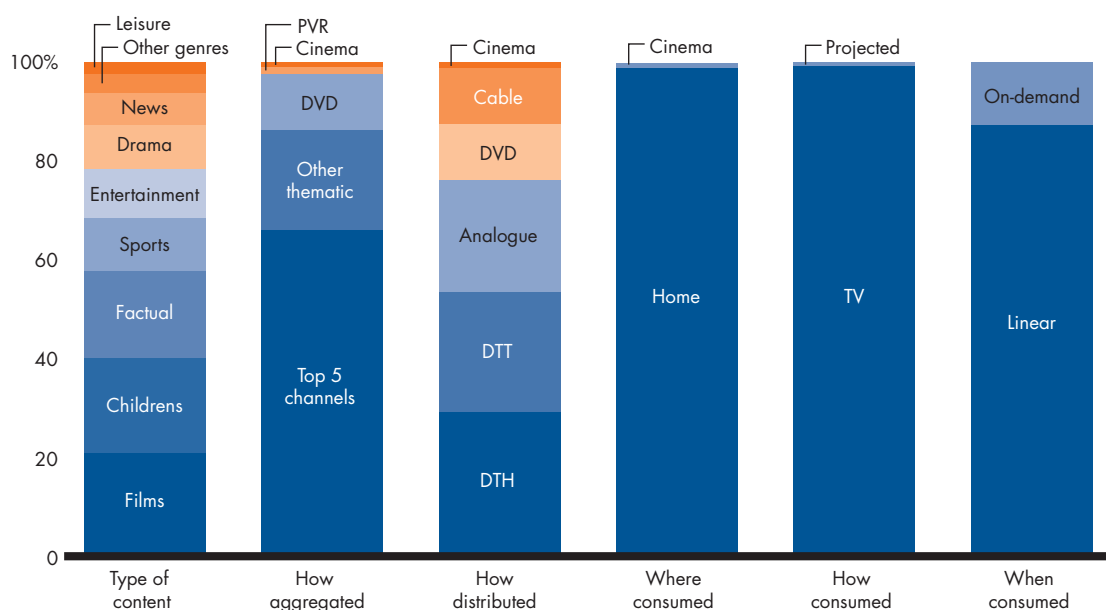
Our analysis of the forces of changes starts with the **consumer**. Today, there are two relatively distinct sets of needs that are relevant to the discussion:

- “Lean back”—essentially today’s TV or living room experience. The consumer is a relaxed spectator, often in company (with family or friends) and interacts with content primarily through channel selection;
- “Lean forward”—primarily the PC or games console experience. The consumer is an active participant, browsing, searching or playing. He or she is often physically alone (even if networking or communicating with others).

The evidence below will show that the majority of video content consumption today is, and is likely to remain, “lean back” in nature. However, “lean forward” video consumption (on the PC) is increasing; and more importantly there is strong latent demand for more choice in the “lean back” experience. Many consumers want to watch *what* they want, *when* they want on their living room TVs—and when given the chance, they do. (See Figure 13.)

Figure 13: Video consumption is currently dominated by linear TV, consumed at home

### UK time spent consuming video, 2005–2006



Note: “Type of content” excludes home video usage  
Source: Informa, Screen Digest, Ofcom (2005–2006)

A critical enabler of this will be **technology**. Advances in the speed and availability of broadband Internet connections will bring new competition to the provision of “lean back” services. Telcos are already beginning to replicate the cable or satellite pay-TV experience with IPTV. “Over the top” public Internet players are already serving a “lean forward” audience prepared to watch content on the PC. Soon they will also be able to replicate the “lean back” experience. This requires technical problems in the Internet infrastructure to be resolved, as well as adoption of “home hubs” to transfer video from a PC to a TV.

The success or failure of these new **market participants** depends on their ability to serve new consumer needs. It will be a challenge to replicate today’s “lean back” experience and to keep up as pay-TV operators (satellite, cable, digital terrestrial) roll out high-definition services. A better proposition will need to offer more choice through well-developed on-demand services. New entrants are looking to supplement this with a better user interface and more personalisation. Traditional TV aggregators and distributors need to raise their game to ensure their propositions are not overtaken. Content creators, while benefiting from greater competition downstream, are working to resolve issues around monetising their content: dealing with piracy and trading off secure vs. uncertain revenue streams.

Decisions made by **advertisers** about how to allocate spending across different media could also be a force for change. Will they pro-actively reallocate spending to media with higher potential for targeting and personalisation, but which are unproven? Or will they follow audiences reactively?

Finally, decisions made on **regulation and policy** can act as a force of change in their own right.

## a / Consumer

### Overall media consumption is increasing

Overall media consumption is rising, a reflection of the EU’s general economic health. Out of total consumer spending, the amount spent on media continues to grow—from 2.5% in 2001 to about 2.9% in 2006 in Europe.<sup>2</sup> Industry observers attribute the increase to financial prosperity, the availability of more media offerings and “softer” factors, such as consumer attitudes about spending.

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<sup>2</sup> Media consumption expenditures include box office, home video, public TV and radio license fees, recorded music, TV subscription spending, Internet access spending, video games, magazines, newspapers, consumer books and sports according to PricewaterhouseCoopers, consumer expenditures from Euromonitor.

This trend is expected to continue. Over the next few years, Europe is expected to see its gross domestic product increase by more than 4% annually, and the European economy's fundamentals appear sound. Demographics also are steady across Europe, with no major population shifts expected over the next five years.

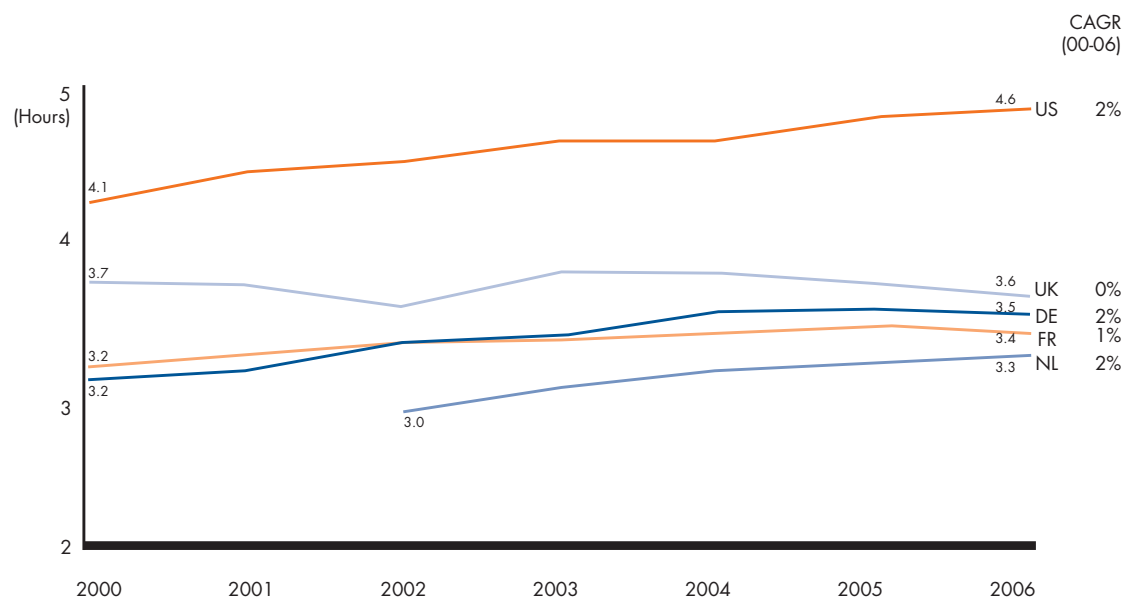
### TV viewing is increasing

The single largest type of video content consumed today is TV. On average, Europeans watch around 3.4 hours of TV per day, or more than 20 hours each week. 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.

While TV viewing across Europe has been steadily increasing, there are exceptions: In the UK and France, viewing is flat or slightly declining, averaged over the period from 2000 to 2006. (See Figure 14.)

Figure 14: Overall TV viewing is holding up

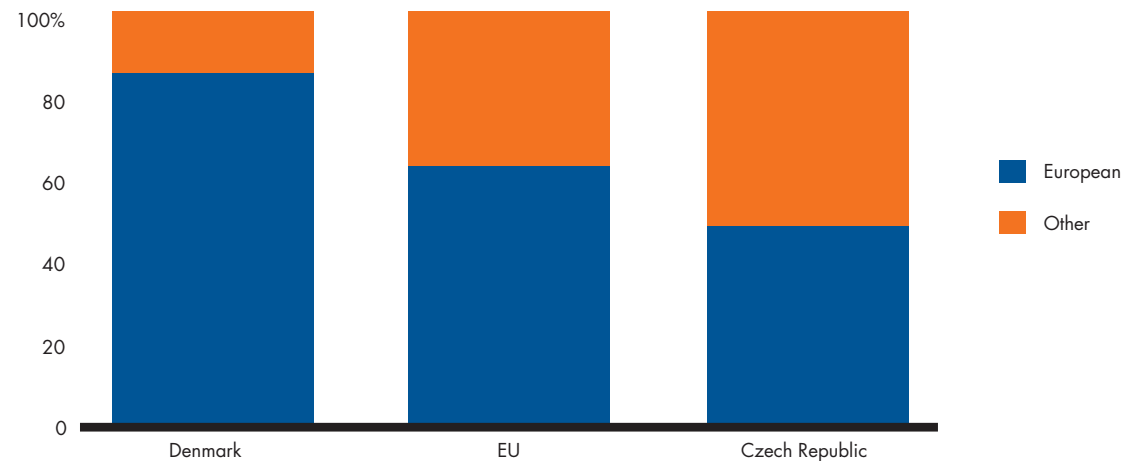
#### Daily TV viewing



Note: Individuals aged 4+ [UK], 3+ [Ger], 6+ [NL], 4+ [France]; UK data is average of Nov.-Nov. monthly viewing; US is Sept.-Sept.; NL tracking methodology and institution changed in 2002

Source: Médiamétrie [France]; BARB [UK]; Nielsen Media Research [US]; Kijkonderzoek [NL]; AGF/GfK [DE]

Figure 15: European TV broadcasting led by European productions



Note: Domestic & other includes co-productions; Germany, UK: % of gross revenue; Switzerland, NL: % of admissions  
Source: MEDIA Salles

What kinds of programming are Europeans watching? More than 60%<sup>3</sup> originated in Europe, but the numbers vary by country. For example, more than 85% of all Danish broadcasts are European vs. approximately 50% in the Czech Republic. (See Figure 15.)

### From scheduled to on-demand TV

Most TV viewing in Europe today is “lean back” in nature—viewers watch shows at the times scheduled by broadcasters. They sit back and enjoy what is proposed to them. The primary activity is choosing among the channels—or using voting buttons and telephone voting in interactive shows. Over time, however, viewers are developing new preferences. In the future, consumers increasingly will be more active and selective, the result of technology that allows them to determine when and where they watch TV.

Time-shifting—the ability to decide when to watch favourite shows instead of following the schedule—is an example of on-demand viewing. It is made possible by two digital innovations—the personal video recorder (PVR) and video on demand (VOD) services.

PVRs are still relatively new in Europe. They were first introduced on a large scale by BSkyB in the UK in 2001 under the service known as Sky+. Typically, a pay-TV operator

<sup>3</sup> European Commission press release, August 22, 2006

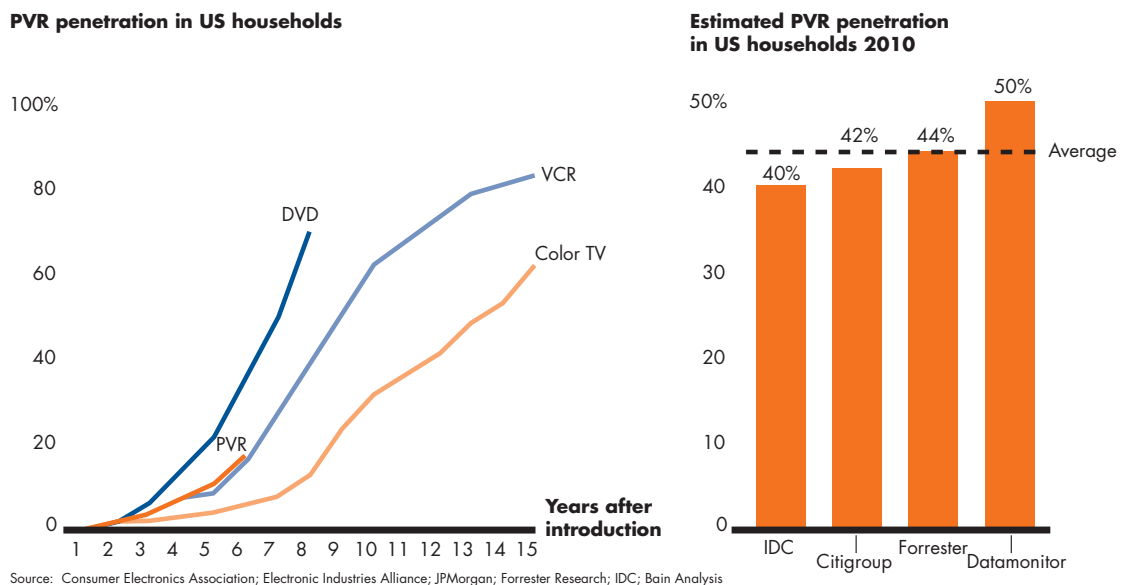
supplies PVRs as part of a premium digital set-top box, although consumers can purchase PVRs at electronics stores, alone or packaged with a digital terrestrial television (DTT) set-top box purchase.

Today, there are about 3 million PVRs in Europe, with the majority—2 million—in the UK, making the UK the European leader with ~10% penetration<sup>4</sup> of all households. Throughout the rest of Europe, PVRs are currently in less than 1% of all households.

PVRs have been available in the US for several years and penetration is much higher, with 26.2% of all US households now using digital video recorders (DVRs), as they are also known in the US. The technology was introduced in 1999 and popularised with the arrival of the first Philips/TiVo device, which was essentially a digital replacement for video home system (VHS) recorders. Over time, the major pay-TV operators also have rolled out DVRs.

The quick adoption of DVRs by US consumers illustrates how viewing habits change when the technology is available, when pay-TV operators are ready to provide the service, and when subsidies or other pricing deals make this new option attractive to customers. That said, compared with other technologies, PVRs are following a relatively predictable adoption curve. (See Figure 16.)

Figure 16: In the US, PVR has followed VCR penetration and is expected to reach ~44% of households in 2010



<sup>4</sup> Datamonitor

**Just how much of their viewing are consumers time-shifting using PVRs?** In PVR-enabled homes, there is a wide range of shifting. In the UK, viewers currently time-shift between 12% and 20%<sup>5</sup> of their total viewing. The numbers are much higher in the US, where early adopters are using digital video recorders to time-shift 30% to 40% of their viewing.

Our research shows that the extent of PVR use also is influenced by *what's* being watched. Dramas and documentaries are the most frequently PVR-recorded programmes by European viewers. To avoid missing an episode of a dramatic series, they used their PVRs to watch it at a later date or time. Sporting events on TV are among the least time-shifted programmes—people prefer to watch sports live, instead of several hours or days later when the outcome is known. News and weather—content that quickly becomes outdated and is readily available on news and weather channels—is the least popular PVR choice.

**The other method of watching shows when viewers want is video on demand (VOD).** Viewers select the content they want to watch from a menu displayed on their TV screens and can begin watching it immediately. Today, less than 8% of all European homes have access to true VOD (as opposed to a version of VOD—“near video on demand”, or nVOD—where content is reshown at regular intervals, often on a pay-per view basis). For traditional TV watchers to use VOD, typically they'll need either digital cable or IPTV technology—and providers that offer a VOD service. Given the pace of rollout of digital cable and the relatively new introduction of IPTV, video on demand for traditional European TV consumers is in its infancy.

There's another way viewers can receive VOD—on their computers via the public Internet. Consumers need a broadband connection and access to an Internet VOD service. With Internet VOD, viewers can download TV programming, and if there's a home network, the program can be routed to the family TV. Consumer use of Internet VOD—and the impact on traditional TV watching—is described in more detail below.

Based on viewing patterns in the UK and the US, most TV VOD-enabled homes have tried the service, with some 60% to 70% testing it out within the first six months. But after that initial period, viewer behaviour varies, depending on whether the VOD service is free or requires a subscription or a fee for each viewing. Paid VOD typically offers new-release movies and special events such as major sports competitions, while free VOD usually consists of “catch-up TV” services—access to favourite shows that were missed at their regularly scheduled times.

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<sup>5</sup> “PVRs Revisited”, The Briefing, Starcom, October 2006

The US experience suggests that the majority (more than 60%) of VOD viewing is the free type and most of this is “catch-up TV”. Viewers are using VOD as another form of time-shifting, similar to the way they use personal video recorders (but without needing to think ahead and schedule recordings). The number of times a household views a free VOD programme varies greatly, from one time a month to as many as 12 times in some markets. For VOD services where users have to pay, use consistently drops to about once per month.

Consumers are also gaining the ability to watch their favourite programmes where they want to. The industry refers to this as “place-shifting”—for example, being able to watch TV programmes on a mobile phone or via the Internet while away from home. Today, 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.

Place-shifting also includes changing the location of where you watch video at home. For example, a programme downloaded via the Internet could be routed from the PC to the TV. Several technologies have recently arrived on the market that allow consumers to shift viewing locations via home networks such as SlingMedia’s SlingCatcher and Apple TV. In addition, the latest generation of games consoles offer the ability to access Internet content directly off the TV without a PC link. But it is still too early to gauge consumer demand for this type of place-shifting. (See section on “home hubs” below for further information on the rollout of this new technology.)

## Movie consumption is steady

Movie watching is in the throes of reinvention. Today, there are multiple ways to watch movies. The old-fashioned way—at cinemas—is still popular, but box office revenues have started a gradual decline (3% on average from 2004 to 2006).<sup>6</sup>

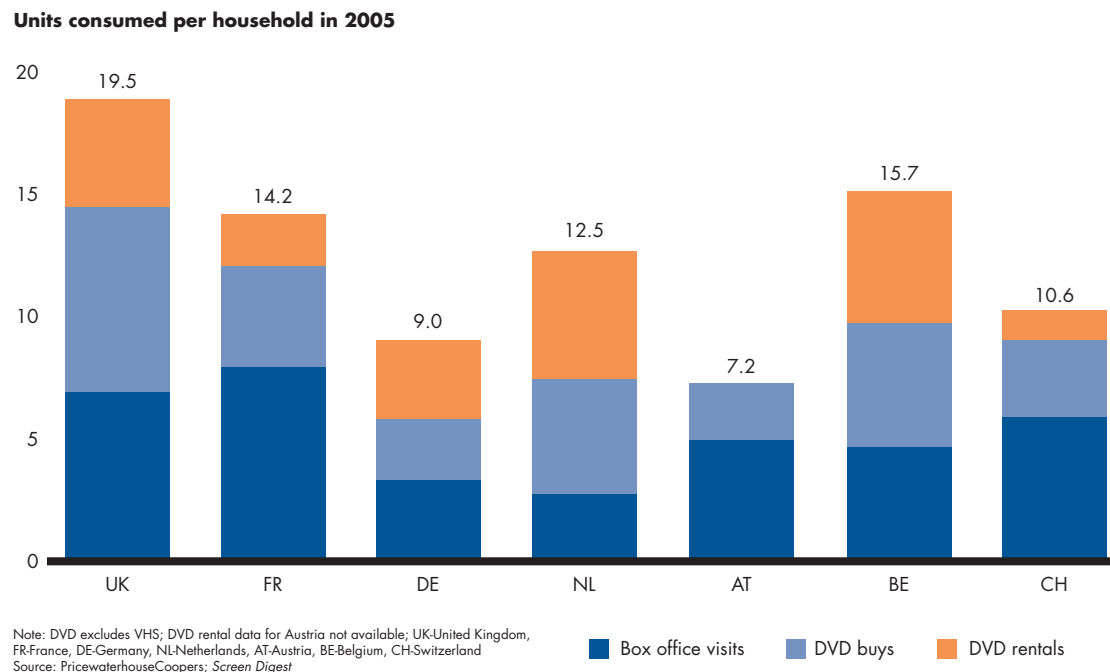
The most popular choice is watching movies at home, selected from collections of purchased DVDs or by renting movies from a local video retailer. After a period of very rapid growth from 2001–2004, this has now levelled off.

Meanwhile, revenue from on-demand viewing on TV platforms (pay-per-view or PPV) and from movies streamed or downloaded over the Internet is growing rapidly. However, these emerging formats account for only about 5% of total movie spending. In the same period, revenue from movies on pay-TV and FTA TV has also bounced back after a period of moderate decline. (See Figure 17.)

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<sup>6</sup> *Screen Digest*, October 2006

Figure 17: Household unit media consumption varies by country



### Internet consumption has yet to impact traditional TV and movies

As the video content industry prepares for future change, a key question is: How will the Internet impact TV and movie viewing patterns? Internet use is increasing at a rapid pace of 10% to 20% annually across European markets, enabled by the arrival of broadband connections in homes. With people spending more time on the Internet, many industry observers point out that this will reduce traditional TV and movie viewing, particularly among Internet-savvy young users. If this happens, what can established media players expect of the future? Will the youth segment continue their viewing habits as adults? Or, as they become older and wealthier, will they go out and buy a wide-screen TV and watch traditional television?

There is no shortage of qualitative surveys pointing to a decline of TV viewing among *some* Internet users. In the US, 40% of online users surveyed by Piper Jaffray reported watching less TV. A BBC/ICM poll found similar results in the UK, with 40% of regular online video users saying they are watching less TV.

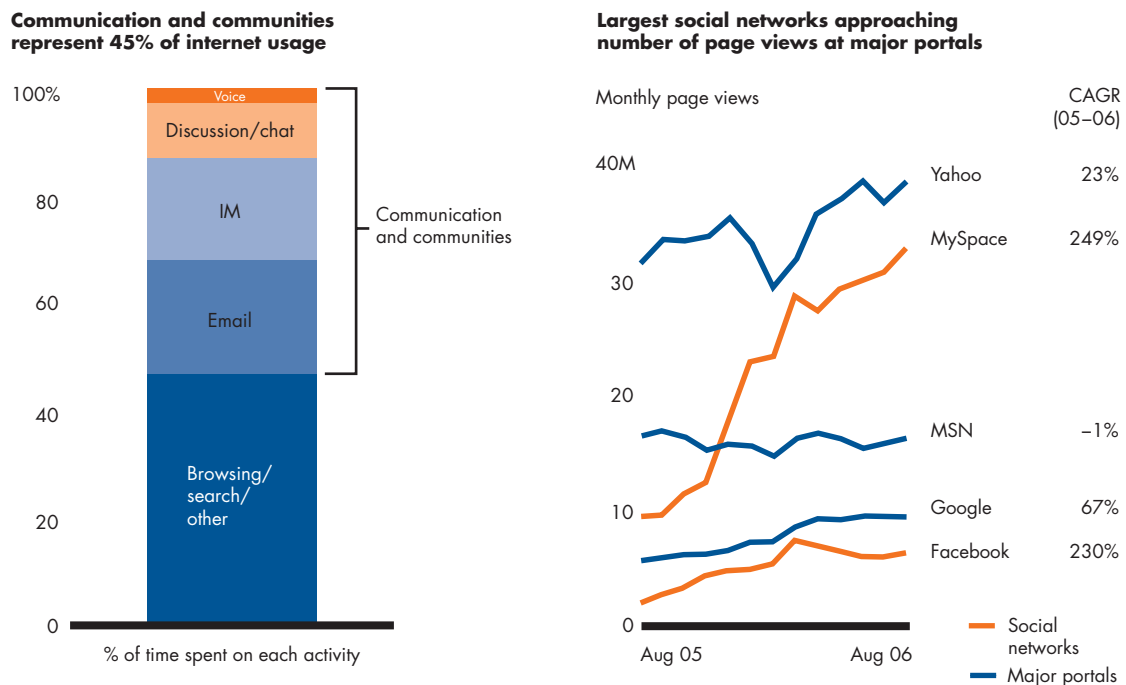
However, there's limited hard quantitative evidence that the Internet actually reduces TV viewing. In markets such as the Netherlands where broadband is widely available, TV watching has grown by about 2% annually, even among young viewers, while at the same time Internet use has exploded, growing by more than 50%. As described earlier, continuing growth in TV viewing is common across most European markets—in the worst case, France is slightly declining.



The Internet’s growth is having a much greater impact on other media, such as print. One explanation is that viewers are becoming adept at media multitasking, particularly among young consumers. Another factor is *how* the Internet is being used. Research on how people are using the Internet found that about half of the time, US consumers go online to browse and search for news and information. They also are looking for social experiences—emailing, messaging, chat and social networks accounts for the rest of their time—activities that don’t directly substitute for TV viewing.<sup>7</sup> The numbers confirm the growing importance of websites such as MySpace and Facebook. While these sites are tremendously popular, they offer very different experiences from relaxing in front of the TV or an evening at the cinema. (See Figure 18.)

Nevertheless, as the Internet gains traction as an entertainment medium, the question remains: Will it become a substitute (direct or indirect) for TV and movie watching, and how and when will this happen?

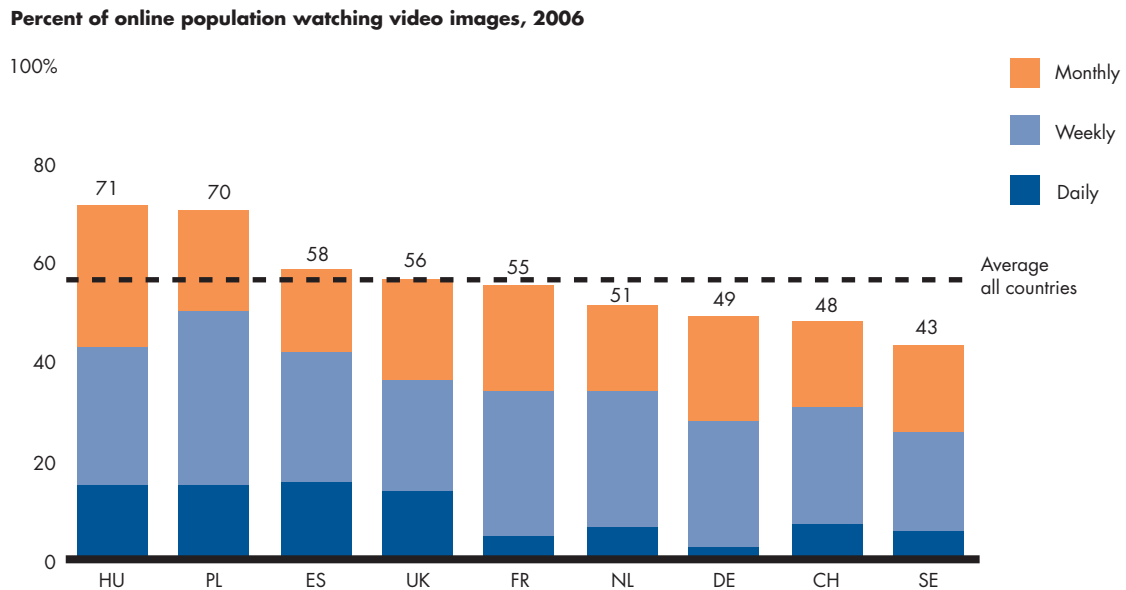
Figure 18: In the US, communication and communities represent the bulk of Internet usage



Source: Morgan Stanley from comScore Media Matrix data, based on average minutes per visitor by category (2005).  
 Note: Browsing/Other includes general web surfing activity not listed in other categories.

<sup>7</sup> “Internet Trends”, Morgan Stanley, October 2005 (including data from comScore Media Matrix, August 2005)

Figure 19: ~60% of the European online population watch video images online at least monthly



Note: All countries additionally includes Belgium, Italy, Romania, Slovakia, Denmark  
 Source: InSites survey of 41,000 Internet users across 14 countries in November 2006

## The emergence of Internet video

Internet video is quickly becoming a mainstream service, 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. 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. (See Figure 19.)

**When they do watch, what are they watching?** Primarily, short formats such as news stories, music video clips, movie trailers and user-generated content. There is little hard data for Europe, but industry participants we talked with found that the average **time per day spent watching video online is less than five minutes**. User data in the US seems to confirm this. According to a survey conducted by Piper Jaffray, shorter formats—news, user-generated content, music and movie previews—accounted for about 70% of Internet video viewing. A recent survey by Advertising.com found that the most effective online video ads last 15 seconds, about half the duration of a typical TV ad.

While longer Internet video formats haven't caught on yet, they experienced a strong boost in 2006 when leading US broadcasters (ABC, Fox, CBS, NBC) decided to put a significant amount of TV content online, including hit series such as *Desperate Housewives* and *CSI*. European broadcasters are expected to follow suit and make some of their content available online, offering exclusive previews and "catch-up" TV services. Channel 4 in the UK and TF1 in France have already started streaming and downloads.

While it is too early to draw conclusions about whether audiences will tune into longer online programming, market players we interviewed found that longer shows are watched sporadically, not on a regular basis. For example, in the US, NBC reported that 78% of viewers who use its rewind on-demand service had done so only to catch up on one episode of a programme that they'd missed.

One opportunity may be for niche video programming where a content manager such as FishFever.com can reach niche audiences across multiple markets. One business development executive for an online service saw tremendous opportunities for sports and ethnic programming. In his words, "If users can get a show from their home country online, there will be an audience. The Internet can create an opportunity to reach small, passionate groups on a global basis." It is worth noting, however, that this opportunity is also open to other distributors (such as satellite) in a given national market.

### Young adults behave differently, but only a part of this behaviour will continue as they age.

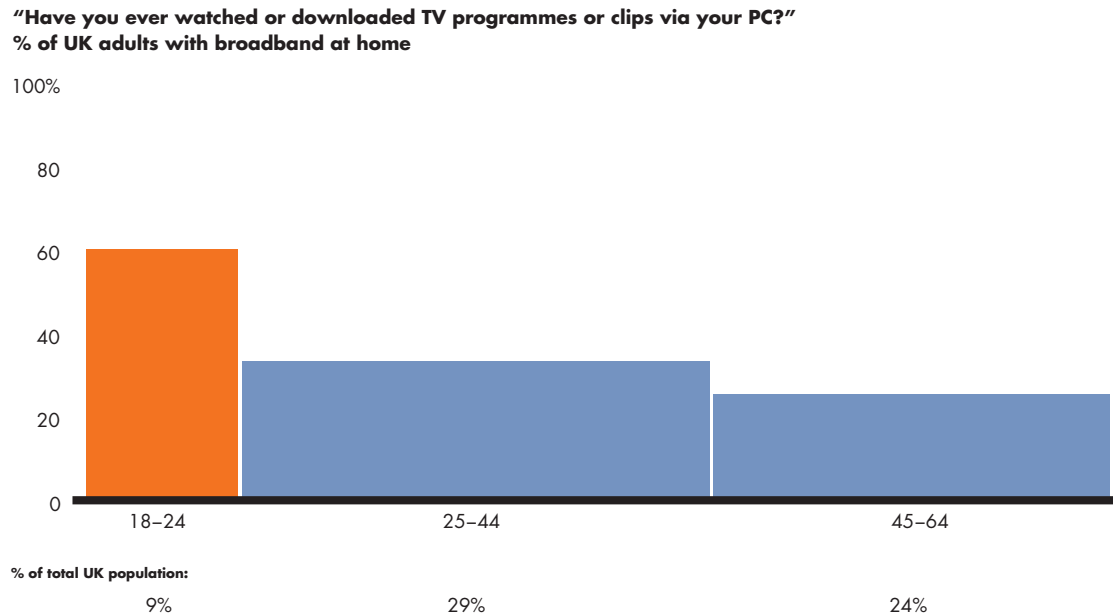
Media viewing habits online vary greatly between younger and older users. Young viewers are more tech-savvy, they consume different programming and they use the media itself differently. They're more than twice as likely as older viewers to have used video-sharing websites like YouTube. What's unclear is whether these preferences will persist as the younger generation ages. Will their influence result in broad changes in mass-market viewing behaviour?

Right now, young Internet users have three major characteristics:

**15- to 34-year-olds are more tech-savvy.** They've grown up with technology, and they're much more willing to adopt innovations, especially as applications and devices become more user-friendly. Expect this trend to continue as they grow older.

**15- to 34-year-olds also consume more on-demand and interactive media than older adults.** They play more video 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. A handful of consumer surveys found that young people believe they are watching less TV as a result.

Figure 20: Younger viewers are twice as likely to watch video content on their computer



Source: Ofcom October 2006

Could those habits change over time? As they get older and busier, today’s younger generation may have less time for Internet emailing, instant messaging and video gaming. Also, the computer won’t always have to double as their TV set. As one major US broadcast executive observed, “Younger viewers are spending a lot of time watching video on the Internet. They know that it is not high quality, but it is practical for them because they can watch TV in their own world, in their bedroom. As they start working and own their own TV set, they will revert to watching television on a TV.” (See Figure 20.)

**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 socialize more online. Will these habits continue? While it is likely that they’ll stay connected to communities, the focus may shift. Instead of using dating sites, they may eventually log off the Internet and spend more time with their families and friends.

So, while it appears that young adults are revolutionizing media viewing habits, we think it is likely that that this younger generation will have mixed habits. As they age, they’ll spend less time on their PCs and more time enjoying video media programming in their living rooms, very likely watching on a large, high-quality display.

Of all the trends we see, only one may be lasting—video on demand. As new digital technology arrives on the market, we see more people adopting on-demand behaviour and at faster rates. But this will not necessarily be on PCs or the public Internet: There will be several competing on-demand services.

### Piracy: a major concern for the video content industry

In an age of high-speed Internet connections, consumer piracy of video content is a serious problem—and growing. Piracy—and other unauthorized activities—takes many forms, from consumers viewing copyrighted material illegally placed on a user-generated content site, illegally burning a DVD copy or buying a counterfeit DVD. With the increase in Internet bandwidth, which has improved video quality and speed, and technologies that make it easy to exchange content, piracy is common. Viewers often have PCs equipped with CD and DVD burners, and it is easy to trade illegal audio and video files over online networks.

Numerous studies commissioned by associations representing media content rights owners document the extent of piracy. The Motion Picture Association estimates that in 2005, its European members lost nearly €2 billion in revenues to piracy. Downloading and bootlegging each account for 40%, with 20% in revenues lost due to private illegal copying.<sup>8</sup> According to the British Video Association, 6% of all UK adults have downloaded a movie or TV series illegally, and they download an average of 15 titles per year.<sup>9</sup> In Germany, market researcher GfK Group found that in the first half of 2005, ~3% of Germans downloaded nearly 12 million movies. And, ~8% of the population burned more than 55 million movies on DVDs, a number that surpasses total DVD sales in Germany for the same period, and about 5 million less than movie box office ticket sales.<sup>10</sup>

File-sharing in Europe is pervasive, reflecting the popularity of peer-to-peer networks. Half of the users of BitTorrent, the popular entertainment download network, are reportedly Europeans.<sup>11</sup> As consumer video piracy grows online, players in the video content market should heed lessons learned by their counterparts in the music industry, which has contended with piracy for years. Instead of delaying action, video content makers, aggregators and distributors need to act quickly and develop solutions to curb illegal copying of movie DVDs, TV programming and other Internet video content. A more detailed discussion of digital rights management can be found in the “Technology” section.

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8 “The Cost of Movie Piracy”, MPA and L.E.K., 2006

9 “Digital copyright theft and the British film industry”. BSAC film conference presentation; March 9, 2006

10 FFA Brennerstudie 2005, GfK Group, January, 2006; piracy data based on first half of 2005

11 Parallel and Distributed Systems Group, Delft University of Technology, 2007

Consumers' media viewing habits are in flux, and that poses the question: What will the near future look like? It is too early to reach definitive conclusions, but some trends are emerging.

First, over time Internet-delivered TV shows, movies, news and other video content may begin eroding traditional TV and movie audiences. But for now, they are holding their own. Over the next five years, TV viewing may not continue increasing at the same pace, but we don't expect a major decline.

Second, while many viewing habits are still in transition, one preference is clear—on-demand TV is growing in popularity. How quickly will on-demand TV evolve? As we stated earlier, the answer depends on how fast new consumer preferences are made possible by technological innovations and services.

## b / Technology

From a technology perspective, Europe is now rapidly transitioning into the digital television age. By 2012, all traditional TV broadcasts in Western Europe will be digital, with governments switching off their analogue terrestrial services beginning in 2007. At the same time, cable is undergoing a digital upgrade of its own, and a host of new video distribution services are taking shape.

The digital convergence story is playing out differently by market. This primarily depends on the pace of rollout of the different digital video technologies.

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. The Netherlands will lead with 93% penetration. On the other hand, Switzerland, Austria and Belgium are expected to have only about 65% penetration. In Eastern Europe, digital availability will be inconsistent, with 50% of Polish households going digital and only about 25% in Romania. In the digital race, Eastern Europe will lag behind Western Europe countries by four to six years.

Meanwhile, the quality of digital video delivered over the Internet, while still inferior to TV, is improving. The question is how fast will alternative Internet-based video services catch on? Will they threaten traditional broadcasters' mass audiences? A critical enabler will be convergence: in this case, the long-awaited marriage of TV with the PC. For Internet-based services to compete with traditional "lean back" TV offerings, consumers will need to be able to move video seamlessly off their PCs and onto their TVs. Right now, they face a number of obstacles. Most important: The Internet itself is unable to handle large mass viewing audiences, and video quality is inferior to broadcast TV.

A host of devices and new offerings are trying to address these issues, but a quick resolution isn't likely. For convergence to work, the video content industry must work to fit the many disparate pieces together. And consumers must be sold on the benefits. Pay-TV operators are already facing the challenge of educating customers about the advantages of upgraded digital services, including high-definition TV. It may be even harder to sell them on the benefits of accessing video content in entirely new ways.

### Digital video competition

As more European homes gain broadband connections, new video distribution services are emerging to compete for audiences with established TV, cable and satellite broadcasters. Improved quality of digital video and faster downloading speeds are making the Internet a viable alternative.

There are two types of emerging Internet-based competitors:

- Telcos offering IPTV services via proprietary networks;
- Public Internet-based aggregators providing access to video online.

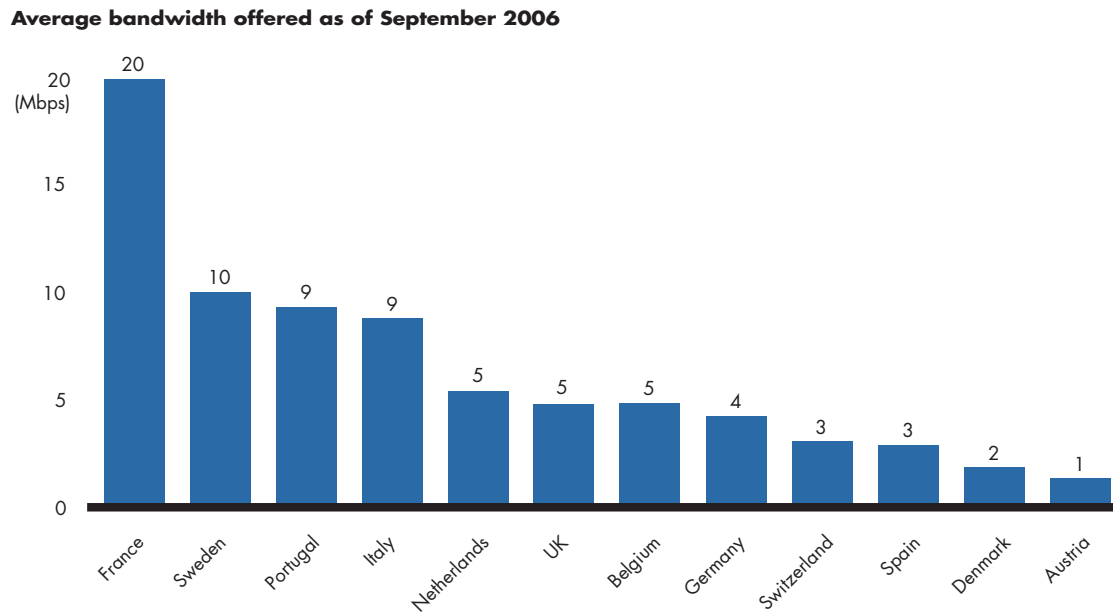
Throughout Europe, established telcos like BT or France Telecom are rolling out IPTV offerings, delivered through DSL connections instead of cable or satellite. The IPTV concept is simple—whoever provides the broadband connection to the Internet also provides the video service with basic and premium TV.

Public Internet-based content aggregators such as Joost and MediaZone piggyback their services “over the top” of existing Internet connections. While MediaZone charges either a subscription or on-demand fee, Joost offers programming free to viewers and is supported by advertising or direct payments. Users can download video content or watch streaming video programming.

### A key enabler for both IPTV and “over the top” —the rollout of broadband

A closer look at Internet-based TV services reveals one key reason why they are not yet serious competitors to traditional TV distribution. Just delivering digital video over an Internet connection isn't enough. There are large variations in the quality of broadband connections in homes, and hence the quality—and speed—of video downloading and streaming “live” TV. These variations impact the competitiveness of both IPTV and public Internet services for mass audiences.

Figure 21: Average broadband bandwidths vary across European markets



Note: Calculated as simple average of max broadband bandwidth available per ISP; highest bandwidth also varies: e.g., in Netherlands cable now offers 20mbps  
Source: JPMorgan

For example, high-definition TV requires bandwidth of at least 16 Mbps for viewers to record one stream while watching another. France is the leader in DSL bandwidth with Internet service providers (ISPs) offering up to 20 Mbps. However, *average* broadband bandwidth on DSL is limited to between 1 and 8 Mbps across most of Europe. Over the next five years, these rates are expected to double, allowing the launch of IPTV services in most countries, but they still won't be sufficient for mass-market viewing of high-definition TV broadcasts over IPTV. At present, it takes about an hour for a consumer with a 2-Mbps DSL connection to download a full-length movie, but that is cut to just 15 minutes on a 10-Mbps DSL connection—and five minutes by using a peer-to-peer service such as BitTorrent. (See Figure 21.)

Studies of the UK market show how much and how fast demand for greater bandwidth is growing. Peak bandwidth requirements in 2012 could range from 13.5 Mbps to 22.9 Mbps depending on household size.<sup>12</sup> In a July 2006 presentation on its broadband plans, BSkyB suggested that it expected bandwidth demand “to double approximately every five years”.<sup>13</sup>

<sup>12</sup> “Predicting UK future bandwidth requirements”, Broadband Stakeholder Group, May 2006

<sup>13</sup> Sky Broadband for Sky customers presentation, BSkyB, July 18, 2006



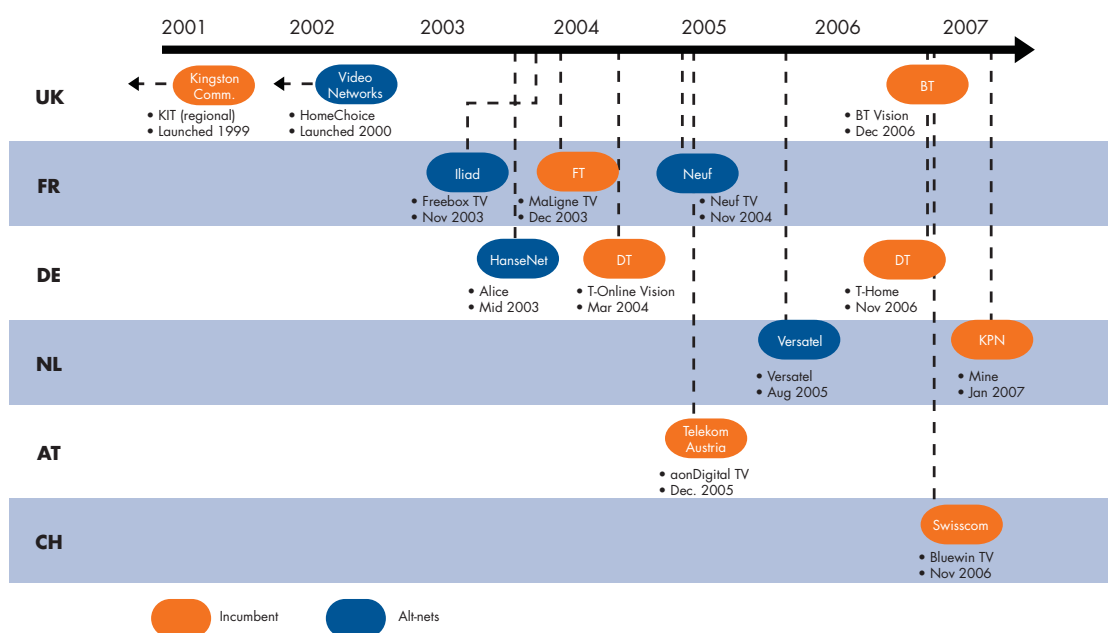
Consumers will enjoy better video quality and download speeds when ISPs invest in improvements, from launching much faster DSL (VDSL) to rolling out fiber to the home (FTTH). The competition is heating up. When Iliad, with one of the leading broadband ISPs in France, started a fiber rollout, other key players (including Orange and Neuf Cegetel) quickly followed.

Given these basic limitations, why are new Internet-based services viewed as such a strong force of change? As well as providing an alternative to current “lean back” TV services, they are expected to accelerate the availability of new viewing choices that are empowering consumers, such as time- and place-shifting. For IPTV services, offering VOD will be a key selling point, while public Internet services will only offer programming on-demand. This will force established pay-TV providers to speed up their own deployment of on-demand services.

### IPTV arrives in homes

Across Europe, established telcos and new competitors are launching IPTV services that typically offer a large package of TV channels, and often include premium channels and VOD. Customers are frequently offered IPTV as part of a triple-play—TV, Internet and telephone for one price. It is no surprise that areas with the fastest growth of broadband also have the most IPTV customers. (See Figure 22.)

Figure 22: The number of IPTV providers has grown rapidly across Europe



Even so, the IPTV market is in its infancy: Only about 3.8% of all Western European households have IPTV. France, Spain and Italy have the majority of the estimated 6.3 million total IPTV subscribers. They are the only markets with significant levels of penetration—9.7%, 5.3% and 5.2% of households, respectively—by the end of 2007. Compared to Western Europe, the Eastern European numbers are far lower.<sup>14</sup>

Future growth of IPTV hinges on not one, but multiple factors: development of IPTV technology, local competition, customer demand for advanced features enabled by IPTV, and the price for IPTV service. Even IPTV's most ardent proponents acknowledge that it is not a mature technology. In particular, it is very sensitive to IP traffic disruption (delays and jitter) and errors, with customers' screens occasionally freezing. But telcos providing IPTV are expected to focus on upgrades that make IPTV a true competitor for even the most demanding TV customers.

By 2012, analysts expect IPTV will have emerged as a competitive TV service, reaching ~7% of all European households. Again, Western European viewers with better broadband connections will lead, with IPTV reaching only about 1% of Eastern European viewers.<sup>15</sup>

### "Over the top" services compete for video content viewing

While IPTV providers work on overcoming obstacles to winning new subscribers, those providing video over the public Internet face their own limitations in winning away viewers from mainstream TV.

There are three natural limitations to "over the top" providers offering the same proposition as current TV services: the quality of the consumer experience, problems with the (still-emerging) technology and cost.

### Consumer experience

The most important reason that mass audiences aren't tuning into the public Internet today is the overall **consumer experience**. Although some consumers are prepared to watch on their PCs, the vast majority want to replicate their existing "lean back" experience—the comfort and quality of watching video content on their TVs.

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<sup>14</sup> Forecast: IPTV Subscribers and Service Revenue, Western Europe, 2004–2010; Gartner Dataquest, August 2006

<sup>15</sup> Bain & Company analysis based on forecast from Informa, PricewaterhouseCoopers 2006

## Home hubs

Few people have the necessary PC-to-TV networking devices to transfer Internet content onto their TVs. When these devices become more popular, the video delivered over the public Internet could become a serious competitor. “The real killer will be the ease with which video can be got around the house,” explained a digital media executive for the BBC. “More and more PCs can be plugged into the TV now. In 2008, wireless technology will take off in the home, and that’s when watching video over the Internet will become mainstream.”

The industry is keeping a close eye on how consumers respond to the arrival of the home hub, a solution viewed as 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. However, the market has gotten off to a slow start. For example, in the US, Parks Associates estimates that digital media adapters (for both music and video) will be in just 7% of US homes by the end of 2007.

Leading consumer electronics manufacturers and upstarts are introducing home hubs at lower prices—between \$200 and \$400, such as Sony’s BRAVIA Internet Video Link (IVL), NETGEAR’s Digital Entertainer HD, Sling Media’s SlingCatcher and Apple TV.

However, there’s a catch. In some cases, viewers can download or watch content only from designated business partners. For example, Sony’s BRAVIA IVL features content only from AOL, Yahoo and Sony Pictures Entertainment. By restricting viewing, providers are trying to prevent piracy and ensure quality service. As a result, the percentage of Western European homes using home hubs or multimedia networks to stream Internet video to their TVs is expected to remain low, reaching an estimated 9% of households by 2012<sup>16</sup> with significant variations across European countries. (See Figure 23.)

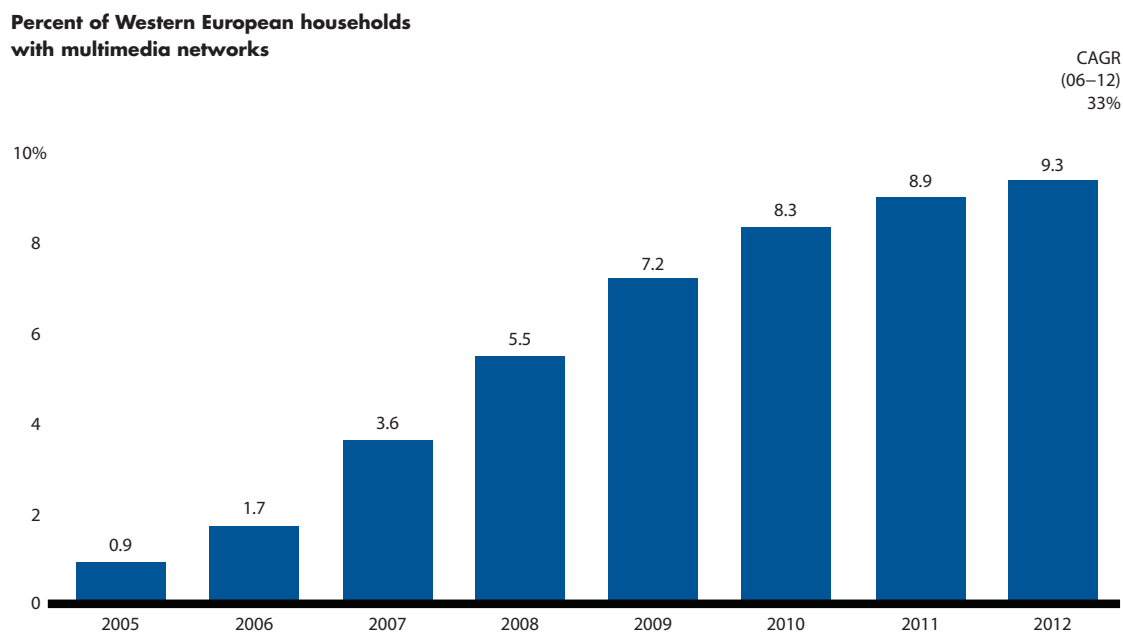
## Content portability and digital rights management

Consumers want to move video from not only PCs to the TV, but also from mobile phones, iPods and digital cameras to swap files and share the videos they create with friends. This requires uniform standards for encoding and protecting the content. Most industry analysts believe that encoding standards such as MPEG, Real and DivX will continue to evolve, and compatibility is likely to improve.

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<sup>16</sup> Bain & Company analysis based on IDC forecast for multimedia networks penetration in Western Europe

Figure 23: ~9% of households are expected to have multimedia networks (e.g., home hubs) by 2012



Source: IDC December 2006; Merrill Lynch September 2006; Bain Analysis

The industry term for standards used to protect the content is digital rights management (DRM). Without the security protection, content providers and distributors are hesitant to make prime-time TV shows, hit movies and other premium programming widely available. The complexity of managing protection (digital rights) for video content can be significant, often combining technical, commercial and legal issues. For example, what happens when consumers who have downloaded video content onto their hard disk want to upgrade their computers? Do they have unlimited rights to burn hard copies, or at the other extreme, should they have to pay for every copy?

Because of this complexity, DRM standards today appear to be increasingly tied to specific business models, based on noncompatible proprietary standards, including Windows Media, Apple FairPlay and RealNetworks Helix. Often, this means consumers are restricted to playing back content on the device through which it was purchased. Many industry participants believe the proprietary nature of DRM will continue for some time, leading to “islands” of digital video content that are not easily portable across devices.

Unless there is a change in strategy among content owners or hardware manufacturers develop the devices that use multiple DRM standards, consumers will have limited options for viewing video.

In the audio market, there have been some indications of such a change. Music company EMI recently agreed to offer DRM-free audio tracks, albums and music videos, launching the offer in April 2007 through Apple's iTunes Store. EMI indicated that the DRM-free single tracks would be higher quality at a slightly higher price, compared with the existing DRM-coded tracks.<sup>17</sup> That said, even if the music industry moves to more DRM-free offers, it is not clear that the video industry will do the same anytime soon. The majority of music sold on CDs today is actually DRM-free, so consumers have always had the ability to copy the songs onto other formats ("rip a CD" in industry lingo). It has been primarily the digital tracks that have had DRM protection. Mainstream video content on DVDs is not sold DRM-free, so a change in this practice might be much more significant to the video industry.

### Making it easy to find content

Anyone who has spent time sorting through hundreds of TV channels, searching for a show or movie, understands the power of an easy user interface. As consumers have more options about what to watch and when, the user interface becomes critical, for both traditional digital television and emerging Internet-based TV. The director of content aggregation for a European cable operator made this prediction: "It is very difficult to strike the right balance between overloading the interface and displaying too little content. [The player] who gets the GUI [graphical user interface] right will win the infrastructure war."

Everyone from "over the top" providers to PVR makers and IPTV providers is working on a gold-standard user interface. On the IPTV side, operators are claiming their product delivers a "new TV experience". They're employing one of two strategies in search of an industry-defining interface: building interfaces in-house using open-source components (in France, Iliad is free), or leveraging solutions developed by leading software vendors and consumer electronics companies (as many service providers have done with Microsoft).

There's more at stake than just helping viewers quickly find programming. A well-designed graphical user interface will allow individual brands to stand out. "Studies have shown that a visual branded interface environment actually increases usage. This already works well with HomeChoice in the UK, for example," explained the director of business development for a German multichannel operator. An Internet-based parallel in the audio content world is Apple's iTunes user interface.

At some point in the future, TV and Internet interfaces will converge, requiring traditional pay-TV operators to integrate Internet formats and applications in their own interfaces. To move the entire digital TV industry forward, the various players will have to partner on creating integrated interfaces, just as they need to partner on developing industry standards to solve the content portability issue.

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<sup>17</sup> EMI Group press release, April 2007

## Technology

Services using the public Internet to deliver streaming video face many of the same **technology** issues involved with IPTV. However, the public Internet also experiences traffic jams because of lack of capacity in the infrastructure.

Internet architecture was designed to deliver data services, not standard TV to mass audiences. If too many viewers watch streaming video at the same time, quality of service could be substantially reduced, as data traffic exceeds capacity. As a result, there are limits on streaming live sporting events because of the large audiences they attract. It is also difficult to stream movies and other long-form content, so viewers resort to downloads. Currently, streaming is used primarily for short formats such as news clips or short user-generated videos.

To circumvent interruptions in streaming, content delivery networks (CDNs) such as Limelight Networks or Akamai serve as intermediaries. But even the video streamed by Akamai and other CDNs isn't up to broadcast-TV standards. They can't control what happens to streaming video once it reaches the public Internet. They also have limited capacity. In a January 2007 interview, Akamai's vice president of digital media explained that 1 million online viewers, each pulling down a 400-kilobit-per-second video stream, would eat up about 33% more bandwidth than Akamai's global network currently serves on peak days.<sup>18</sup> CDNs, therefore, can handle only small audiences. To date, the largest TV events on the public Internet have been streamed to live audiences of 250,000 to 500,000 viewers, compared to 1 to 10 million viewers for traditional prime-time TV broadcasts in Western Europe. For example, live streaming video of the NCAA championships by CBS in 2006 had 268,000 viewers at any given time, less than 2% of the basketball championship's 17.5 million traditional TV viewers during the final game.<sup>19</sup>

"We are currently lacking the tools to ensure quality of service and performance for video over public IP networks," says the former CEO of an Internet equipment manufacturer. "This problem will not be solved tomorrow, as ISPs have no incentive to prioritize IP streams that compete with their own services."

Two bandwidth-conserving technologies are being utilised to work around (but not resolve in the long term) bottlenecks on the public Internet:

**Internet protocol (IP) multicasting.** This bandwidth-conserving technology reduces distribution loads by delivering a single stream of information to thousands of users. But deploying the technology on a large scale is complex, and as a result, it is currently used on a limited basis. We do not expect this to be employed at scale in the next five years.

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<sup>18</sup> "Broadband Video Girds for Growth", Multichannel News, January 8, 2007

<sup>19</sup> The Programming Insider newsletter, MediaWeek, April 2006

**Peer-to-peer (P2P) technology.** The reputation of P2Ps has suffered because of their association with illegal file sharing. However, increasingly they are the distribution technology of choice for legitimate downloading and streaming of video content. In the UK, Sky, Channel 4 and the BBC use P2P for their Internet video on demand services. P2P is much more cost-efficient and flexible than the traditional client-server distribution model. Instead of relying on central servers or routers, they harness the power, storage space and bandwidth of users. As users of a P2P video content site grow, so does its combined distribution capacity. That said, P2Ps are not a “silver bullet” solution for delivering video to mass audiences. They also have limited distribution capacity, especially for users trying to upload video files to the Internet. And, downloading can cause disruptions on users’ computers. In addition, heavy P2P traffic affects Internet access for all Internet consumers. P2Ps already represent more than 60% of all ISP traffic<sup>20</sup>—which means a significant increase in their use could put a strain on infrastructure owners that do not directly benefit from the services. As a result, more and more broadband service packages impose caps on user activity.

## Cost

The cost of providing streaming video on the public Internet is high, and the larger the audience, the higher the costs. The reason: Streaming video is a one-to-one business, requiring dedicated server capacity for each viewer for as long as the video is being streamed. Industry experts expect this cost to come down as providers gain more experience and improve the technology. They predict that streaming costs will drop by 40% over the next five years. For example, in the UK, the typical price tag would decrease from the current €1-1.5 (bandwidth costs per viewer for a two-hour movie) to €0.03 by 2012.<sup>21</sup> At that price, the cost of delivering an average household’s monthly TV service could be competitive with existing pay-TV subscription rates.

## Mobile TV

The industry is rapidly building the infrastructure to support a new age of video-enabled cell phones and other mobile multimedia innovations. Analysts predict that by 2012 more than 75% of all Western European mobile customers will be using more advanced 3G wireless networks and a third of them will be on ultrafast high-speed packet data access, with 1.5 Mbps speeds.

<sup>20</sup> CacheLogic 2006

<sup>21</sup> Bain & Company analysis based on information from the British Screen Advisory Council, IDC and interviews

In principle, mobile TV should be a major winner, benefiting from both wireless networks and falling tariffs. The general industry wisdom is that 3G wireless networks will be used for niche content and video on demand, while broadcast mobile TV (DVBH) is necessary for cost-effective deployment for mass markets.

But do viewers want to watch TV on small handheld devices? In some respects the “use case” is unclear. Portable handheld TVs made by consumer electronics firms have met with limited success historically. The question is, Will adding TV capabilities to the ubiquitous mobile phone encourage people to watch TV on their daily commute and other “on-the-run” situations?

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,<sup>22</sup> while Virgin Mobile TV has had only limited success with just 10,000 users.<sup>23</sup> 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.<sup>24</sup> However, from this relatively slow start, analysts forecast mobile video and TV will reach more than 30% of mobile users by 2012.<sup>25</sup>

## c / Market players

Understanding the market players—how they make money today and what strategic challenges they face—is essential for assessing the future prospects of the European video content market.

### Content creators—cautious experimentation

Video content consumed in Europe is largely created by one of three categories of businesses: European producers of TV and film; non-European TV and film producers, specifically the major US studios; and sports rights organisations. (See Figure 24.)

### European producers

Within the European producer category, there are a number of different business models. The category includes the in-house production arms of the largest domestic broadcasters, publicly funded and commercial, such as the BBC and ITV in the UK, or TF1 in France, and

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<sup>22</sup> “Content everywhere”, France Telecom Investor Day, December 2007

<sup>23</sup> “Mobile TV fails to sell despite ad campaign”, *Guardian*, January 17, 2007

<sup>24</sup> Company announcements, analyst reports March 2007

<sup>25</sup> Bain & Company analysis for 2012 based on Gartner and Ovum forecasts for 2010



Figure 24: Who are content creators in Europe?

	US majors & independents	European-based content producers	European sport organizations
<b>Content type:</b>	<ul style="list-style-type: none"> <li>• Movies</li> <li>• Drama/TV series</li> </ul>	<ul style="list-style-type: none"> <li>• Movies</li> <li>• Drama/TV series</li> </ul>	<ul style="list-style-type: none"> <li>• Sport events</li> </ul>
<b>Value chain position:</b>	<ul style="list-style-type: none"> <li>• Creation</li> <li>• Aggregation (multi-channel)</li> </ul>	<ul style="list-style-type: none"> <li>• Creation</li> <li>• Aggregation (broadcasters)</li> </ul>	<ul style="list-style-type: none"> <li>• Creation</li> <li>• Distribution (exhibition)</li> </ul>
<b>Structure:</b>	<ul style="list-style-type: none"> <li>• Six "majors" represent 70% of US box office</li> <li>• Four "mini-majors" representing a further 17%</li> </ul>	<ul style="list-style-type: none"> <li>• Includes TV broadcaster in-house production arms</li> <li>• Fragmented independent sector</li> </ul>	<ul style="list-style-type: none"> <li>• Sell rights directly or via agents</li> </ul>
<b>Key players:</b>	<ul style="list-style-type: none"> <li>• Warner/Time Warner</li> <li>• 20th Century Fox/News</li> <li>• Sony/Columbia</li> <li>• Universal/NBC</li> <li>• Paramount/Viacom</li> <li>• Disney</li> </ul>	<ul style="list-style-type: none"> <li>• Studio Canal (movies)</li> <li>• Pathé Films (movies)</li> <li>• Lagardere (TV in Fr)</li> <li>• Shed (TV in UK)</li> <li>• Endemol (TV in Europe overall)</li> </ul>	<ul style="list-style-type: none"> <li>• UEFA</li> <li>• FIFA</li> <li>• Football teams</li> <li>• Formula 1</li> </ul>

Note: Mini-majors include DreamWorks, New Line Cinema, Lionsgate and Dimension/Miramax; US box office market share from Jan 1 to Dec 4, 2005

smaller domestically focused independent production houses like Shed Productions in the UK or local film studios such as Studio Canal in France. Finally, it also includes larger, independent production houses with significant pan-European or international distribution, such as Endemol and FremantleMedia (a division of RTL Group, owned by media conglomerate Bertelsmann).

The in-house European producers and smaller independent producers have traditionally made money by selling TV rights to public broadcasters. Commissions from European broadcasters account for the majority of their revenues—for example, in the UK, this represents ~80% of their revenues.

As viewers increasingly opt for multichannel TV, traditional public and commercial TV broadcasters are launching digital channels of their own. The BBC in the UK now has more than eight digital channels, and in the Netherlands, the top three broadcasters have plans for as many as 25 digital channels. To feed these new digital channels, broadcasters are shifting investment to new types of content geared specifically for multichannel audiences (BBC Four and UKTV in the UK). The need is urgent. Between 2000 and 2004, viewers dropped by about 8% for the largest broadcasters, with wide variations across markets.

The production arms of public service broadcasters, like the BBC or ARTE in France/Germany, have been leaders in digitising their content and making it available on the Internet, mobile phones and other distribution systems. Publicly funded producers can take advantage of Internet opportunities without the risk of losing advertisers. They also have a strong incentive for putting content online—a core mission of public broadcasting is reaching as many viewers as possible with its programming.

Commercial production houses, both in-house and independent, aren't rushing to the Internet. The reasons include restrictive agreements on content rights between production companies and public broadcasters. In addition, producers:

- Often lack the skills and capacity to handle multiple content aggregation and distribution platforms;
- Have not yet established a strong business model for selling content rights in the new world of Internet TV;
- Are unclear about whether putting content online is worth the cost of digitising old programming;
- Are turning their attention to international opportunities, including distributing existing libraries abroad, and developing programmes specifically for international broadcast customers.

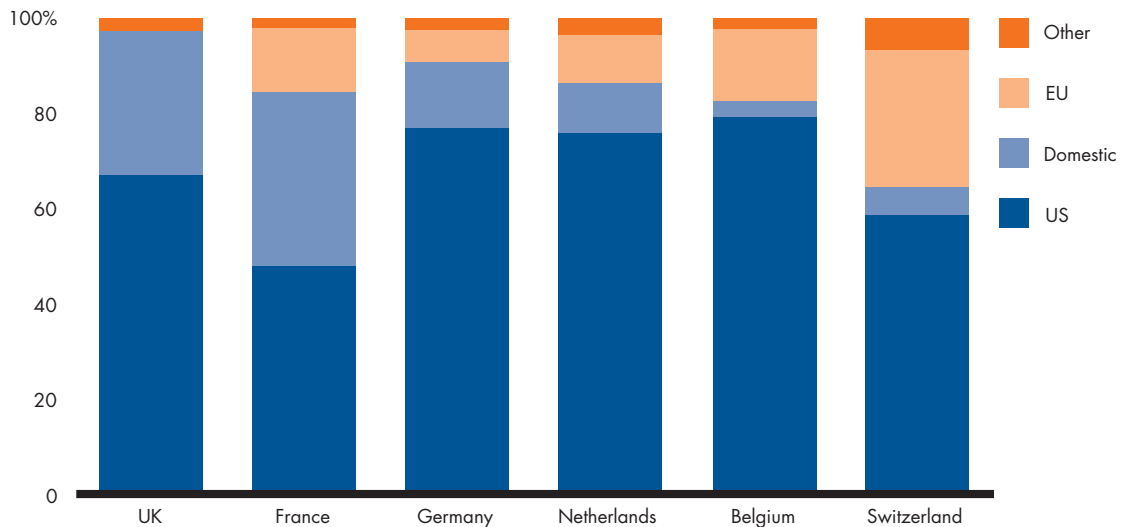
International TV producers such as Endemol or FremantleMedia have been more aggressive in pursuing new growth markets. They have successfully introduced formats such as reality shows like the *Idol* series and placed content—both current hits and older shows—on multiple content platforms.

## US film studios

Major **US film studios** are global leaders in content creation, with their well-capitalised studios producing TV and movie content for the US market, as well as successfully exporting it to audiences in Europe and around the world. (See Figure 25.)

Home videos have been a huge driver of profits, with European video retail sales and rentals for 2006 totalling about 60% of studios' €12.3 billion in movie revenue. Profit margins equal 80% of the retail price. But with DVD sales declining, the lucrative home video market is threatened. Between 2001 and 2004, home video grew by more than 20% annually, but sales were flat between 2004 and 2006. In some European countries, sales in 2006 declined at double-digit rates. (See Figure 26.)

Figure 25: Western Europe box office dominated by US productions

**Box office share by origin 2005**

Note: Domestic & other includes co-productions; Germany, UK: % of gross revenue; Switzerland, NL: % of admissions  
Source: MEDIA Salles

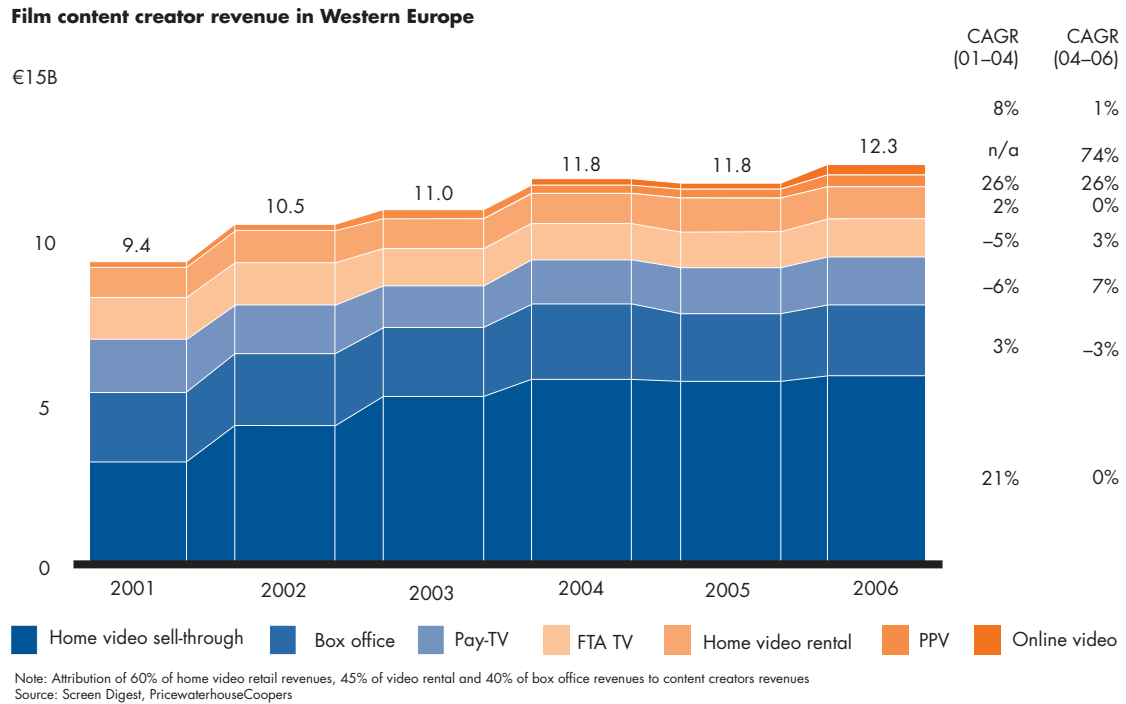
Studios are seeking new ways to replace the lost revenue, including video on demand distribution and leveraging their film libraries of old titles.

In spite of the urgency, studios are reluctant to move quickly into digital media. For one thing, consumer demand for online, mobile and other new media is unproven. Studios also are aware that success in digital markets could hurt established business relationships. For example, a studio might make a new release available directly to Internet consumers for downloading. But this allows consumers to bypass DVD retailers and video on demand services offered by pay-TV operators. Making older movies available online also impacts pay-TV operators, since those releases are a key part of premium movie packages.

Each year, pay-TV operators are estimated to pay billions of euros in programming costs and fees to the big studios. But the benefits of the relationship go further. Studios place high value on the services provided by the operator, allowing studios to focus on producing great content while pay-TV operators take care of customers.

As studios review their digital opportunities, they must consider another risk: that of uncontrolled and illegal distribution of their content. Studios not only lose revenues because viewers watch for free, they also are at risk of losing control over the timing of movie releases. To generate maximum revenue, studios carefully stagger the day and date that movies are released on DVDs and for video on demand.

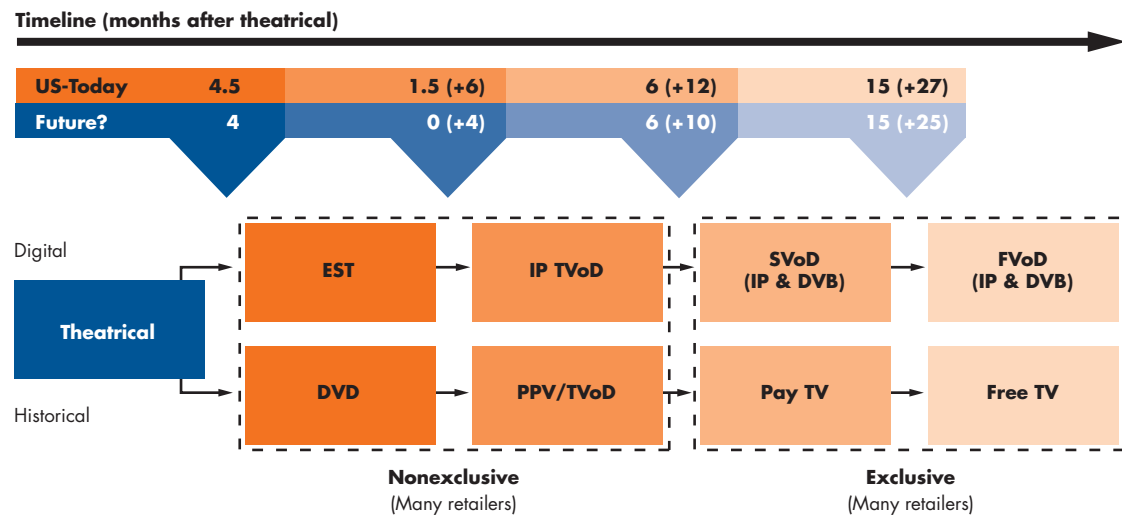
Figure 26: Home video has historically driven film studio growth and margin, but is now flattening



With digital distribution, including electronic sales to online consumers, studios have more difficulty controlling the release schedule. Once the content is available in electronic form, users can distribute copies through illegal file sharing. In 2005, the worldwide motion picture industry including foreign and domestic producers, distributors, theatres, video stores and pay-per-view providers lost roughly £13 billion to piracy. In the UK, an estimated 6% of adults engaged in online digital piracy in 2005, costing the industry approximately £94 million.

Studios appear to be taking different approaches to “nonexclusive” and “exclusive” release windows. The nonexclusive windows are the ones that immediately follow theatrical release—DVD rental/retail, and pay-per-view/transaction VOD (tVOD). They are considered nonexclusive since, for any given market, the title is made available to numerous retailers and outlets. The exclusive windows follow later, and are effectively those made available to pay-TV operators, then FTA broadcasters. (See Figure 27.)

Figure 27: Key developments—film—likely future windowing system



There are three emerging trends for the nonexclusive windows. The first is that these windows are compressing, with the amount of time following theatrical release getting shorter and shorter. In the UK, for example, these windows were about 12 months nearer to theatrical release in 2006, compared with their timing in 2001.

The second is that, given the developments in digital distribution, the DVD window is beginning to align with the tVOD window, and an electronic sell-through (EST) window, as appeared alongside the DVD window. In the UK, for example, the VOD window has been shrinking to within 60 days of the DVD movie release. In the US, there's been a general move towards same "day and date" release of the DVD and video on demand. Also in the US, Wal-Mart, which represents ~40% of DVD sales there, agreed to a deal with studios so that the timing of the electronic release occurs at the same time as the physical (DVD) release.

For consumers, this creates additional convenience and choice. In essence, when buying or renting a film, the consumer will have the choice of either a physical or electronic format. The price and availability of the film will not be distinguished by its physical or electronic format.

These changes are also being accompanied by a "sharper" discounting curve for DVDs, where the reduction in price for a given title is likely to be reduced much faster than in previous years. In making these changes, studios hope to maximise the return on their theatrical marketing spending and curb the incentives for digital piracy.

Studios have also introduced subscription VOD and free VOD rights alongside the pay-TV and FTA-exclusive windows, respectively. For the most part, the studios appear to be preserving the structure of the exclusive windows. More than likely this is due to the factors described above—that is, the huge value that studios place on the relationship with their traditional pay-TV operator and FTA broadcasting partners.

## Sports rights organisations

Sports organisations (including Premier League, UEFA Champions League Formula 1, Rugby Football Union) make money through a mix of content rights (including video rights), gate receipts, sponsorship and merchandising.

Those rights cover a wide range—live broadcast, near-live, clips, highlights and extended highlights, and involve business deals with an array of broadcasters and distributors, including traditional network TV, pay-TV, online, on-demand, DVDs, mobile and radio. Like all other content creators, owners of sports rights are faced with the paradox: They want to exploit new market opportunities, but those opportunities could hurt existing revenue sources.

Factors include:

- Increasing demand for the most popular sports programs, which drives up the price of buying the broadcasting rights;
- Rights holders that want to generate new revenue by putting content on new media like the Internet and mobile phones;
- Using multichannel TV and the Internet to reach larger audiences for niche sports content.

With more multimedia distributors in the marketplace, the top sporting events are the subject of bidding wars, allowing sports organisations to sell broadcast distributors exclusive rights. The result: Rights owners make higher profits while profits for the distributors are reduced.

At the same time, rights owners are tapping the Internet and mobile devices as new revenue producers. Two recent deals illustrate this trend: Orange has exclusive mobile rights in Europe to news and highlights of the 2007 Rugby World Cup and Willow. TV won the rights to stream Cricket's ICC World Cup in several countries. With numerous distribution methods available, rights owners also are able to offer niche programming over digital TV's multiple channels—viewers can watch seniors' golf tours, the IRB Rugby World Cup or *Watersports World*.

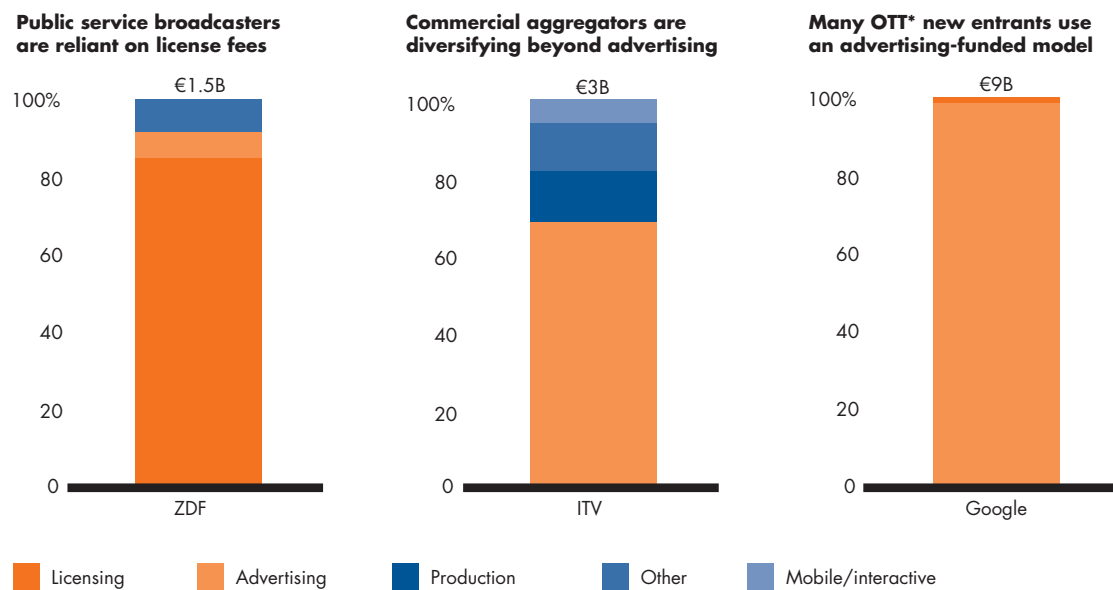
While sports rights organisations can demand top dollar for the most sought-after events, they must consider whether selling exclusive rights to established broadcasters is worth losing the opportunity to sell those rights to others, including emerging Internet and mobile broadcasters, which potentially have even broader reach.

### Content aggregators

Content aggregators come in various shapes and sizes. As their numbers and types grow, so does the competition. Just like content creators, established TV content aggregators are under pressure from emerging digital players. Traditional aggregators of video content include established free TV broadcasters, both public and commercial, and providers of multichannel programming. The newest competitors are Internet content aggregators, with players like Google and Yahoo offering video content.

Traditional sources of revenue—advertising and public funding—continue to increase as demand for video media grows. And so have fees paid for carriage by cable and satellite pay-TV operators based on the number of subscribers who view a channel. (See Figure 28.)

Figure 28: Public service broadcasters are reliant on licence fees, while commercial aggregators are diversifying beyond advertising



\*Over the top  
 Note: ZDF – German public service broadcaster, 2005; ITV Plc 2006 estimate; Google 2006  
 Source: Company websites; Credit Suisse December 2006

While income for content aggregators overall is on the rise, increased competition has benefited some aggregators while reducing audiences and revenue for others. The growth of multichannel pay-TV and the proliferation of channels in most European markets have fragmented audiences. Traditional free TV broadcasters have lost viewers to multichannel services, and the loss of viewers has cost them advertising revenue, the main revenue source for commercial networks. Their answer is to launch digital channels of their own.

Even for multichannel aggregators, such as theme channels that heavily rely on subscriber fees, the continuing fragmentation of audiences as well as the arrival of new media delivery systems are putting pressure on the amount cable and satellite operators are willing to pay per subscriber. In some European markets, we expect these per-subscriber-based carriage fees to fall even more as the multichannel market reaches saturation. The pressure has not been felt equally. Those popular theme channels with strong brands, such as MTV, are considered “must see” TV. Pay-TV operators like cable and satellite providers are in a weaker bargaining position with these strong brand channels.

Virtually all traditional content aggregators are starting to make their programming available online as a way to maintain and even grow audiences. They are also rapidly moving into the mobile market, offering mobile phone users the chance to download hit TV shows for a fee. (See Figure 29.)

Figure 29: Example of commercial aggregator strategies

	Channel 4	ITV	MTV
<b>Offer:</b>	<ul style="list-style-type: none"> <li>Majority of Channel 4 programming is free to view via online simulcast</li> <li>Rights restrictions prevents broadcast of some content; e.g., <i>Desperate Housewives</i></li> <li>Extensive range of PPV available, including 28 day catch-up</li> </ul>	<ul style="list-style-type: none"> <li>ITV1 and ITV play are available via mobile in partnership with 3 in the UK</li> <li>Most films not included due to rights restrictions</li> <li>£5 per month subscription, or £1.50 per day</li> </ul>	<ul style="list-style-type: none"> <li>New online channel branded MTV Overdrive</li> <li>Free genre-driven music video channels</li> <li>Advertising funded</li> <li>Skip-resistant advertisements</li> <li>Available in the US, UK, Germany, The Netherlands</li> </ul>
<b>Strategy:</b>	<ul style="list-style-type: none"> <li>Leverage simulcasting to drive traffic, leading to PPV benefits</li> <li>Exploit VOD via partners e.g., ntl:Telewest, BT</li> </ul>	<ul style="list-style-type: none"> <li>Assessing potential new revenue streams for FTA content</li> </ul>	<ul style="list-style-type: none"> <li>Extend reach in target audience to drive advertising revenues</li> </ul>

Source: Company websites



The biggest threat to the existing way of doing business comes from large Internet content aggregators. Today, they earn very little, if anything, from the video content that they package. However, by leveraging sophisticated search technology, Google in particular threatens to become an imposing competitor. By early 2008, Google's ad revenue in the UK will be more than that of ITV1, the UK's largest TV channel.

Search technology enables these large Internet aggregators to access and organize vast repositories of information for users. Powerful search engines personalise results by carefully tracking user information. The winners are not just consumers. The rich user data offers invaluable consumer insights for advertisers, guiding ad campaign strategies and spending.

## Content distributors

Video content distributors are under the most intense competition. In most markets across Europe, TV is now reaching more homes than ever before, but new digital competitors are pursuing their customers.

Pay-TV distributors like cable and satellite face a new digital distributor with a similar business model—IPTV. IPTV reaches only an estimated 3.8% of all Western European households.<sup>26</sup> However, while their market reach is small, IPTV providers already are disrupting the TV distribution marketplace. Telcos are investing heavily to acquire the rights—sometimes exclusive ones—to hit programming. They're using IPTV to try and hold onto their customers, offering broadband Internet access along with telephone-based services.

While it is too early to say if this strategy will succeed, it is already forcing established pay-TV operators to spend more for premium rights, reducing their profitability. How are pay-TV operators fighting back? They're offering similar services of their own, which include:

- Diversifying into broadband and offering triple and quadruple plays, such as BSkyB's purchase of Easynet in the UK;
- Improving traditional pay-TV through improved video services like HDTV and VOD, and expanding channel selections through digital cable or satellite.

“Over the top” Internet players that provide video content pose a serious long-term threat. Currently, pay-TV generates income by offering customers a basic package of channels, and they pay more for premium channels like MTV or Sky Movies. If quality TV can be provided over the Internet, then pay-TV subscribers may switch, at least for part of their service package. Will Internet TV providers also charge more for premium content? If not, then pay-TV's two-tiered payment model may unravel.

<sup>26</sup> Forecast: IPTV Subscribers and Service Revenue, Western Europe, 2004–2010, Gartner Dataquest, August 2006

The movie distribution is another business model in flux. As video sales slow down, retailers must figure out ways to compete with digital delivery services, including video on demand over TV or the Internet. Large retailers like Tesco in the UK are looking at ways to enhance the product, such as high-definition DVDs with improved video quality. They also are getting into the electronic distribution business. In the US, Wal-Mart, the world's largest retailer with 40% of all US DVD sales, introduced an electronic movie delivery service.

### An evolving balance of power

In such a shifting marketplace, which players have the power? In today's evolving digital world, the old cliché is true—content is king. The reason: Content creators have the most influence over what content consumers purchase. Their power is reflected by their profitability.

This is particularly true in the case of top-rated TV programmes, the most popular sports events and hit DVD movie rentals—“must see” content with the most viewers and the bulk of the revenue. In cable TV households, it is not uncommon that the top three or four channels capture 80% of all viewing. Even within a given channel, the difference in audience levels between the most popular shows and other programming can be a factor of more than 100 to 1.

Research conducted by Ofcom and OFT in the UK suggests that between 23% and 55%<sup>27</sup> of viewers purchase pay-TV packages expressly because of the availability of sporting events like Premier League football games. As a result, competition for rights has driven up the price of pay-TV subscriptions.

With consumers paying disproportionately for quality content, and the rights to distribute that content going to the highest bidder, those who develop and own that content hold the power. This influence is increased by the new levels of competition “downstream” in aggregation and distribution.

To protect their assets, content creators have controlled distribution of their content in a variety of ways, including copyrights, distribution channels, exclusive distribution arrangements, digital rights and minimum guarantees.

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<sup>27</sup> Ofcom and OFT reported that more than 60% of Premier League fans who subscribe to SkySports say that Premier League football was the reason they subscribed. Ofcom and OFT further indicated that fans represented about a quarter of the UK population. “Premier League Football”, Ofcom and Human Capital, 2005

Digital distribution is threatening each of these traditional methods. First, digital distribution opens the door to piracy of video content. Second, the enforcement of copyrights, channels and exclusivity becomes very difficult once content is distributed on the public Internet or mobile digital devices. From a practical perspective, making content available to only certain individuals or countries can be more complex. In addition, the distinction between different release windows is confusing to consumers who see a physical DVD rental and a digital VOD rental as interchangeable. Third, in the short term, digital distribution systems may lack a large enough audience to provide even minimum payments to content creators.

Content creators view the arrival of digital as both an opportunity and threat. They must figure out how to introduce their content on new digital services without hurting traditional sources of revenue. Content creators are:

- Introducing new or higher pricing to offset loss of other sources of income—directly charging consumers £1.13 per TV episode for the electronic download of *Lost* offsets the potential loss of ad revenue and carriage fees;
- Repurposing content for new distribution outlets—watching *Desperate Housewives* on a small iPod screen isn't the same as watching it on TV;
- Making less popular and older content available for digital media services—over 80% of films in European VOD libraries were released prior to 2002;
- Using new business models such as distributing directly to consumers and revenue sharing—splitting VOD revenue 50-50, like the arrangement that Pact, the UK production trade association, has with both the BBC and Channel 4 in the UK.

While content creators might have the greatest influence over what consumers buy directly, aggregators, especially commercial broadcasters, have a major impact on other key market factors like advertising revenues.

Broadcasters that also produce content have enormous influence on what domestic programming is created and distributed. In most European markets, they fund more than 80% of domestic video content production. Second, commercial broadcasters are key intermediaries between consumers and advertisers. They are in a unique position to increase advertising value. Their mass audiences reach across traditional TV and multichannel pay-TV services, and they have invaluable insights into advertiser needs and audience viewing behaviour. Third, state-funded broadcasters have funding that's not subject to commercial pressures, although not exempt from public and political pressures.

Content aggregators have traditionally relied on numerous methods to preserve their relative power in the marketplace, including:

- Using their reach with national audiences, in both FTA broadcast and multichannel (the latter due to “must carry” rules);
- Building strong brands, based on leadership in each national TV market;
- Investing in valuable relationships with advertisers, built over many years;
- Leveraging control of funding and rights for the majority of domestic TV content production.

But just like content creators, digital distribution is undermining the marketplace controls that traditional broadcasters have relied on. The most potentially damaging change is the loss of viewers to multichannel and digital platforms. While they still retain their leadership in most areas, public and commercial broadcasters face an increasingly crowded market. And, as the audience fragments, their long-standing relationship with major advertisers is changing—fewer viewers mean broadcasters have to lower advertising rates, and advertisers are splitting budgets among old and new media. Also, traditional video content rights don’t clearly cover online and other new media distribution vehicles. Finally, in the long term the advent of other formats such as user-generated content and aggregation models like YouTube calls into question whether traditional aggregation business models still will be relevant.

**Large commercial broadcasters**, as well as those with a combination of advertising and state funds, have three strategies:

- Preserving their audience by creating digital channels;
- Developing direct distribution capabilities for new media;
- Securing digital and online rights agreements for their content, using broadcasters’ existing relationships with broadcast TV production houses and domestic independent producers.

**Public service broadcasters** are working to ensure that they meet public charter requirements. This means fulfilling their obligation to make quality domestic content available to as many citizens as possible. To reach a broader audience, they are heavily investing in digital distribution. This ambitious project includes creating digital theme channels; digitising their extensive libraries; developing on-demand, Web and mobile distribution platforms; and innovating advanced video search features so that viewers can find their content.

In spite of all the marketplace shifts, content creators and aggregators are likely to retain their power, especially given increasing competition among distributors. Second, while traditional content creators and aggregators have the most influence and power today, their influential positions make them more conservative about putting content online and pursuing other digital distribution opportunities. A major question is how fast digital VOD services will catch on and who will develop and control the distribution vehicles. Commercial VOD models are in their infancy. At some point, the industry will turn the corner. Either traditional broadcasters will capture the market by giving consumers the choices they want and developing the required technology, or other competitors, especially emerging Internet players, will seize the moment.

## d / Advertisers

Historically, advertising has grown in tandem with the economy, fuelled by the growth of the gross domestic product and corporate profits. But this pattern is changing as advertisers' choices become more complicated. They must decide how much and where to spend limited ad budgets. Even after deciding the right allocation to TV overall, they now have to contend with a whole new range of potential "spots"—digital thematic channels, Web search, user-generated content sites, mobile TV—the list goes on.

Traditional media advertising is expected to continue its steady growth since 2000, increasing at 3% to 6% a year through 2012. These display ads include all forms of graphic advertising, including TV commercials, pictures and brand logos. Advertising in Eastern Europe is growing the fastest—an estimated 9% annually.

TV advertising follows a general rule: The higher the gross domestic product and corporate profits, the more advertisers spend. In the short term, leading advertisers expect little will change. Long-term advertising market growth may be a different story. Advertisers have considered shifting spending from heavy media buys to store promotions and in-store TV commercials. The UK has seen a drop in ad spending for the period from 2004 through estimates for 2006, due to higher energy costs, poor corporate profit growth, and a faster shift to non-media spending.<sup>28</sup> The UK is the only European market where TV ad spending is expected to drop—when costs rise, advertising spending is one of the first budget items to be cut.

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<sup>28</sup> "UK Advertising: Cutting through the confusion", UBS, October 2006

Across the rest of Europe, TV's share of the ad budget varies, from 20% to 76%, with an average of 41%. The growth of multichannel advertising is spurring the rapid growth of TV advertising overall, with the multichannel ad segment growing 5% to 15% faster than traditional TV throughout Europe.

### Three risks for TV advertising

Despite continued growth, the future of the TV advertising market is uncertain for three major reasons. If **younger viewers watch less TV**, then advertisers may move their ad spending to the Internet. TV and radio broadcasters have anticipated this trend, leading them to move more of their content online and to branch out into new online ventures. For example, Skyrock, a lead radio broadcaster in the 15- to 24-year-old market, has built the largest blogging community in Europe.

The second risk to TV advertising is a new viewer option: the **ability to skip ads when watching programs recorded on PVRs**. We believe that this risk is real, but it is often exaggerated by industry observers. Fewer than 15% of European viewers with PVRs in their homes actually time-shift their shows, which means that time-shifting isn't a serious threat yet to TV advertising. By 2010, we estimate that only ~1–4% of all European TV advertising will be skipped as a result of PVR recording. And there are ways to offset ad-skipping, including product placement—the art of prominently placing product brands on TV shows.

The third and principal risk is the **surge of Internet advertising**, which has grown in Europe by more than 30% annually since 2000. Internet ads are cutting into the traditional display advertising market—particularly in printed media. But there's an even more significant impact: Internet advertising is helping to pay for Internet viewing audiences, with the majority of ads placed on Internet search pages. By the end of 2006, Internet advertising accounted for 4% to 14% of all traditional media advertising across Western Europe. The United Kingdom leads Western Europe—and the world—with Internet ad spending totalling 14%, and projections of 20% to 30% of the display ad market by 2012.

So how does Internet advertising affect TV broadcasters? There is **no clear evidence that Internet advertising is cutting into TV ad budgets**. So far, Internet ads have been used for direct marketing, complementing TV ad campaigns. The big loser is print media, with newspapers losing critical classified ad revenue.

TV is still considered the superior medium for branding products and services because it reaches large audiences. In fact, there is a perception that TV branding campaigns can have a crossover effect, getting online consumers to click on search ads. That perception may not hold up. In the UK, some major advertisers are starting to use the Internet as a primary medium for branding campaigns—instead of TV. If the trend continues and spreads throughout Europe, established TV broadcasters will be at risk of losing ad revenue.

As Google and Yahoo and other online content aggregators enter the market, they are major beneficiaries, as more advertisers increase spending on Internet search pages. In the UK, Google's UK revenues grew at 83% in 2006 and by 2008, the numbers are expected to surpass ad revenue for the UK's largest commercial TV channel, ITV1.

**New video advertising formats are emerging and growing fast, spurred by interactive features** both on TV and the Internet. Interactive digital TV (IDTV) advertising refers to “red button” ads. When users press on the remote's red button, consumers find themselves on a brand's site. In the UK, viewers who press the red button are spending about two minutes on brand sites. IDTV advertising revenues are growing at ~30% per year. But it remains a minute portion of the total TV advertising pie. By the end of 2007, interactive TV advertising revenues are projected to total under £30 million—accounting for less than 1% of all the TV advertising market in the UK. As a leading advertising agency recently put it, “Opinion is divided on whether this is a technological dead-end which has already reached its limited potential, or a channel whose value we are only just beginning to exploit.”<sup>29</sup>

Another trend is the growing use of video in Internet ads, which come in two varieties, both used about equally: rich media ads and ads that are placed before or after a video—known as pre-roll/post-roll ads.<sup>30</sup> By 2011, they are expected to represent up to 14% of online media advertising in the US. YouTube and other major sites for user-generated content still generally avoid streaming video ads, but US network sites regularly use video ads on their VOD offers, promoting “catch-up” TV shows. With most Internet users unwilling to pay for video programming,<sup>31</sup> online video ads may prove to be an essential revenue source for providers, fuelling further growth of the Internet ad market.<sup>32</sup>

In the end, the reality is that advertisers will seek to promote their brand and products in whatever medium offers them the best return on their investment. This starts with having the best reach—for some advertisers, like major consumer goods companies, this means reaching as many people as possible. TV today still provides the best medium for achieving this. However, companies trying to target a narrower consumer segment may find that other media are more effective, especially the Internet.

The Internet currently doesn't replace TV, but it does offer the potential for more focused advertising. Internet-based content aggregators can provide detailed consumer search and use data, information that allows advertisers to target specific markets better. Advertisers will be willing to pay for this, especially if content aggregators can also provide more accurate reporting on which, when and how consumers have viewed the ads.

<sup>29</sup> TNYN UK, GroupM, November 2006

<sup>30</sup> Pre-roll and post-roll ads are connected to other online video viewing before or after a number of film sequences are shown.

<sup>31</sup> *Online Video Advertising: Leveraging the YouTube Effect*, JupiterResearch, October 3, 2006

<sup>32</sup> *Online Video in Europe: Strategies for Necessary Integration*, JupiterResearch, May 30, 2006

Moreover, even if the Internet itself is unlikely to replace TV as a medium, the changes at work in Internet advertising are still expected to have an impact on the future of TV advertising. The innovation in online advertising—for example, Google’s improved measurement, and more targeted and personalised search-based advertising—are likely to shape how advertisers, content aggregators and content distributors think about video advertising going forward. Emerging players like Joost, though still in development, have already begun to incorporate these techniques into a Web-based TV service. Whether or not new models like Joost succeed, traditional players like broadcasters and pay-TV operators will need to think through how they can increase the effectiveness of their measurement systems and deliver much more targeted audiences for advertisers.

## e / Regulation and policy

### Bird’s-eye view on public policy impact on market development

Traditionally, European policy objectives in video content have been to:

- Grow the European industry through enhancing its competitiveness;
- Preserve European cultural expression and heritage in video content works.

The diversity in culture and language in Europe has, at the same time, become a challenge to the competitiveness of the European video content industry. Many observers argue that, in pure economic terms, the different language and cultural areas have evolved into natural barriers to achieving the necessary scale (in production, distribution and reach) to be competitive on a global scale.

Through regulatory intervention, the EU has effectively reduced the impact of these natural barriers by preventing additional legal constraints:

- The 1989 “*Television Without Frontiers*” directive created an internal market for television content. This was done by setting minimum standards for content rules, as well as for the rules on the insertion of the TV advertising that is required to fund content and channels. Based on the country of origin principle, programmes that complied with the rules of the originating member state should be able to travel freely across the EU.
- The European Commission’s “*i2010*” initiative called for modernisation of EU policy instruments to encourage the development of the digital economy and, *inter alia*, the production of European content. The latest revision of the television directive

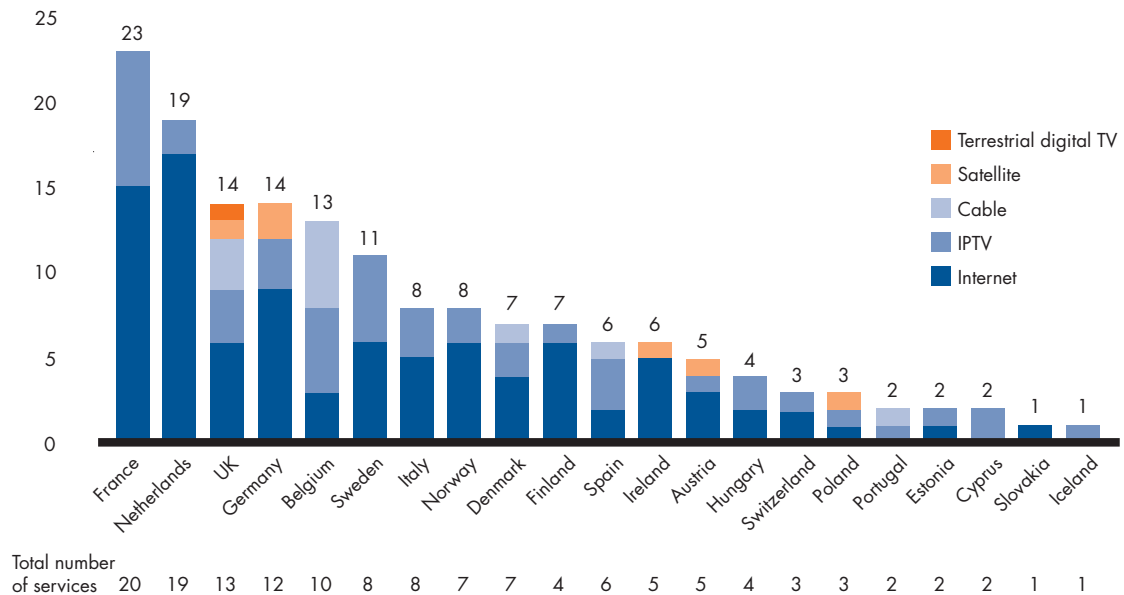


therefore extended its scope to cover all “audiovisual media services”: This definition includes linear and on-demand (TV-like<sup>33</sup>) content, as well as all content distribution platforms. The extension of scope is an important step towards achieving the i2010 objectives. The rationale is that production of European content is made commercially more viable by creating more scale and reach for European content through new digital content formats.

The 2007 European Commission communication on “*Content Online*” aims to provide the basis for a comprehensive policy framework. Its objectives are to stimulate content owners to make their content available for digital distribution and to encourage new business models.

Figure 30: Example of commercial aggregator strategies

Number of VOD services by country and network type, 2006



Note: Some services may be available across multiple networks, but are only counted once in the total; some services may be available across multiple countries; excludes free services, video clips and adult services  
 Source: NPA Conseil; European Audiovisual Observatory

<sup>33</sup> “TV-like” means excluding, *inter alia*, user-generated content and activities that are primarily noneconomic and that are not in competition with television broadcasting.

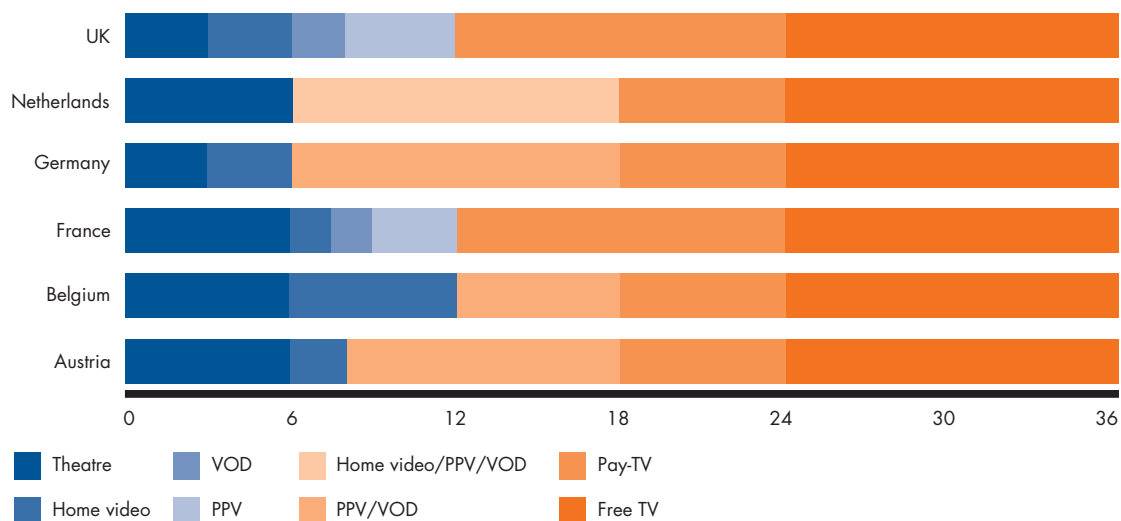
## Importance (and challenges) of digital on demand

One of the most challenging issues involves stimulating digital on demand business models in Europe. The European video consumer displays a gradual but irreversible trend towards consuming content in a non linear, on-demand fashion. “By the end of 2006, more than 150 video on demand (VOD) services were operational in 24 European countries, provided over various different networks.” France, the Netherlands and the United Kingdom stand out as leaders in terms of the number of services offered.<sup>34</sup> (See Figure 30.)

Access to video on demand content rights and critical mass in the rollout of VOD platforms will become major assets for competing digital content distribution networks. Technology enablement will play a decisive part in the intensifying competition for the European VOD customer.

Figure 31: Release windows are becoming more condensed, particularly in the UK and France

### Release windows—months from theatrical release, 2005



Note: German pay-TV window can start at 12 months in some instances; UK VOD window can start just 2 months after home video  
 Source: Screen Digest May 2005; NPA Conseil May 2006

<sup>34</sup> Direction du développement des médias/European Audiovisual Observatory/NPA Conseil, “La Vidéo à La Demande”, May 2007

European content creators are generally positive that VOD can open up incremental revenues for them, for example, through the monetisation of “long-tail” content. This is often positioned as VOD access over the Internet. However, as described elsewhere in this report, VOD over TV platforms is likely to be a more important distribution mechanism in the next five years.

Despite the revenue potential of new forms of digital distribution, content owners are still hesitant to make their content available for VOD (particularly Internet VOD) on a significant scale, mainly due to piracy risks. They are also proceeding carefully to avoid cannibalising existing, proven revenue streams from DVD sales and “electronic sell through”. Nevertheless, over the short term, content owners will need to make decisions on a number of aspects critical to the development of the market:

- Definition of new digital content rights (in particular VOD rights as a separate right from other distribution rights);
- Granting licenses, leveraging various degrees of exclusivity;
- How and when to adapt release windows.

As described in the “market participants” section, major content producers use release windows to stagger the distribution of movies and TV programming to different audiences. The spacing between releases for DVDs and VOD is growing shorter, as producers attempt to limit the loss of revenues from piracy. Even so, VOD release windows are still very divergent across the EU. “*Day-to-date*” releases (VOD rights released simultaneously with DVD release) are still the exception, with only some Scandinavian countries having a number of such negotiated agreements in place at the end of 2006.<sup>35</sup> Some observers argue that the development of the European VOD market would be accelerated by having a more homogeneous VOD release window structure. Certainly more “day-to-date” releases would accelerate the adoption of VOD services, but content owners will need to trade off the potential loss of revenue from DVD sales and rental, and the risk of piracy. (See Figure 31.)

Finally, there is a strong argument that clear definition of copyrights for new digital content products is key to accelerating introduction of innovative content services. It will remove insecurities and legal exposure for content aggregators and distributors relating to products where otherwise the copyright situation has been hard to determine. This is particularly true for products that border between linear and on-demand services (such as net-based time-shift TV).

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<sup>35</sup> Direction du développement des médias/European Audiovisual Observatory/NPA Conseil, “La Vidéo à La Demande”, May 2007

## Themes for policy and regulation

There are a number of themes and questions to consider for policymakers and regulators:

1. How to create *scale for VOD products* and supporting access to distribution and free circulation?
2. Whether *cross-border content licensing* opportunities can be increased by reducing complexity in copyrights clearance systems?
3. Whether and how to *reflect shifting competitive balance* in the content value chain in market structure regulations?
4. How to *increase confidence* and *secure distribution* environments?

### 1. How to create scale for VOD products and supporting access to distribution and free circulation?

Under the 2007 “*Audiovisual Media Services without frontiers*” directive, a level playing field in content regulation is created to stimulate production and aggregation of European content and channels for distribution over platforms like satellite, cable, (digital) terrestrial, IPTV and mobile TV. Harmonised light touch content rules are applicable to on-demand content, and cross-border on-demand products can benefit from the country of origin principle. Under the directive, media service providers may benefit from an exemption to the exclusive rights of broadcasters owning the rights to content of “high public interest” and include “short extracts” of this content in their linear programmes, as well as make these programmes available in an on-demand mode afterwards. In order to protect the intellectual property rights of the original rights owner, this possibility is restricted to the on-demand supply of the identical television broadcast programme by the same media service provider, so it may not be used to create new on-demand business models based on short extracts.

Under the same directive, producers of European works may receive regulated support facilitating access of their content to VOD catalogues and electronic programming guides (EPGs), as well as benefit from regulated allocation of VOD aggregators’ revenues to production, or rights acquisition, of European content. This is based on the assumption that on-demand services have the potential to partially replace linear services as well as the assumption that emerging VOD platforms can contribute significantly to the promotion of European works. If this results in significantly higher costs borne by content aggregators, however, it may have the effect of constraining their investments in VOD business platforms.

## 2. Whether cross-border content licensing opportunities can be increased by reducing complexity in copyrights clearance systems?

With the increase in European-wide content bouquets, the issue of cross-border acquisition of content and the clearing of copyrights has become important.

The existing copyright regime does not adequately reflect the demand for, and supply of, an ever-increasing number of international channels and content modes (analogue, digital, free TV, pay-TV, on-demand). The current copyright clearance system, with an array of national copyright collecting societies, could pose a major hurdle to the efficient acquisition of content rights for cross-border networks. Consequently, it may impede the development of European-wide content offers.<sup>36</sup> This also concerns emerging cross-border VOD services. Examples mainly concern VOD services in European countries with overlapping language areas, such as German or English speaking territories.

Figure 32: Examples of cross-border VOD services

Austria	Belgium	Denmark	Finland
<ul style="list-style-type: none"> <li>In2Movies (Germany)</li> <li>Premiere Direkt (Germany)</li> <li>Premiere Videothek online (Germany)</li> </ul>	<ul style="list-style-type: none"> <li>DirectMovie (Netherlands)</li> </ul>	<ul style="list-style-type: none"> <li>Live Networks (Sweden)</li> <li>SF Anytime (Sweden)</li> <li>CDON.com (Sweden)</li> </ul>	<ul style="list-style-type: none"> <li>Live Networks (Sweden)</li> <li>SF Anytime (Sweden)</li> <li>film2home (Sweden)</li> </ul>
Ireland	Netherlands	Norway	Sweden
<ul style="list-style-type: none"> <li>Sky (UK)</li> <li>4oD (UK)</li> <li>fivedownload (UK)</li> <li>LOVEFiLM (UK)</li> <li>World Cinema Online (UK)</li> </ul>	<ul style="list-style-type: none"> <li>7 Days (Belgium)</li> </ul>	<ul style="list-style-type: none"> <li>Live Networks (Sweden)</li> <li>SF Anytime (Sweden)</li> <li>CDON.com (Sweden)</li> <li>film2home (Sweden)</li> </ul>	<ul style="list-style-type: none"> <li>In2Movies (Germany)</li> </ul>

Source: NPA Conseil

<sup>36</sup> "Economic Impact of Copyright for Cable Operators in Europe", Solon Management Consulting 2006

More efficient and platform-neutral copyright management systems would facilitate cross-border distribution for European content owners, leading to greater reach and consequently to unlocking incremental revenue streams from new licensing opportunities. (See Figure 32.)

One solution is the creation of an umbrella European rights agreement, instead of market-by-market pacts. Satellite operators are benefiting from the country of origin principle under the SatCab Directive. This allows a one-stop-shop acquisition of all relevant copyrights without the need to secure additional national licenses within the receiving countries. It reflects the way satellite has traditionally operated via broadcasting content from one central playout centre across the whole of Europe. One option would be extending this to all distribution platforms, regardless of whether they distribute centrally or have playout centres in the individual countries within their service area. If combined with all-rights-included packages<sup>37</sup> and central licensing,<sup>38</sup> this could substantially improve transparency and efficiency in rights clearance.

### 3. Whether and how to reflect shifting competitive balance in the content value chain in market structure regulations?

With the revision of the *Electronic Communications Regulatory Framework* and through application of *competition law*, regulators have an important role in fostering effective competition between (distribution) infrastructures and in avoiding restrictive market structures preventing market entry. The European content industry is likely to benefit from more distribution platforms entering the market. Infrastructure competition should accelerate investments in customer enablement on the back of next-generation networks with higher bandwidths and the roll out of innovative digital platforms enabling VOD.

#### Increased scope for market entry and competition

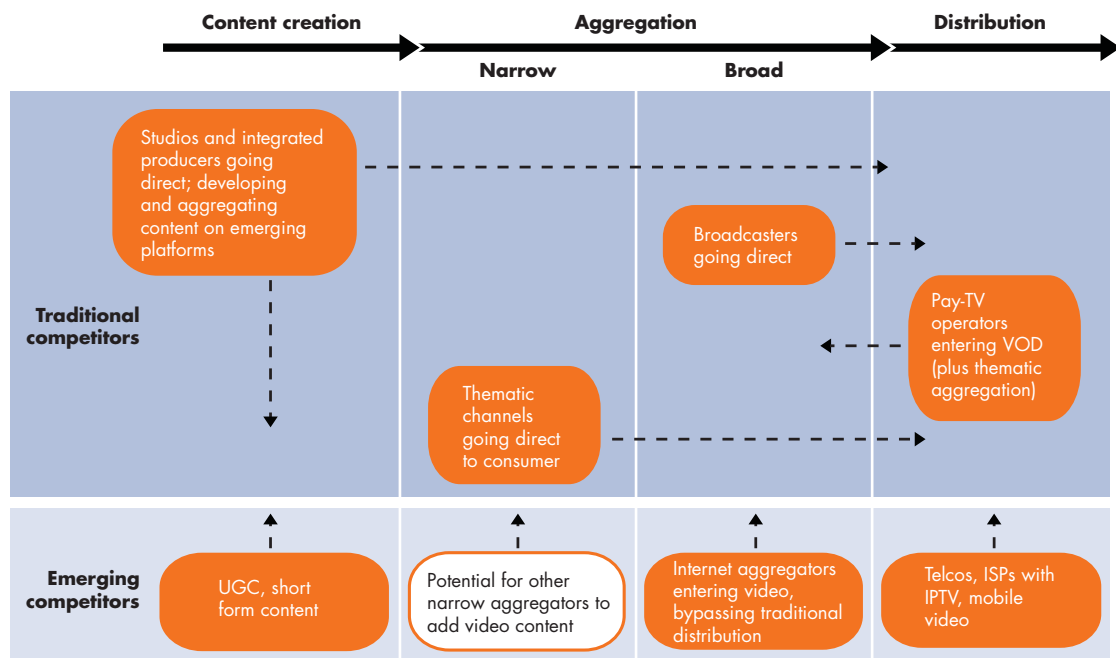
Traditional video content industry players are entering previously uncharted territory and deploying activities across the value chain, by vertically integrating, engaging in strategic partnerships, or going-it-alone in experiments with new Internet-based distribution technologies like legal P2P. Distributors are entering into aggregation and content production while aggregators are entering into distribution and creators establishing direct end-user selling relationships. (See Figure 33.)

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<sup>37</sup> All-rights-included packages are acquired only from broadcasters that have previously licensed all rights from the relevant content creators.

<sup>38</sup> Agreements regarding the usage of any copyrights would ideally be negotiated with one single collecting society. In the current situation, there is competition among national collecting societies.

Figure 33: Increasing scope for market entry and new roles for existing players



Meanwhile, there are multiple new entrants in the industry. Telcos are entering the video content distribution business with their IPTV offerings while new “over the top” (OTT) players (non-infrastructure-based Internet companies) are also entering the content value chain. OTT players use the public Internet as their distribution channel, providing an aggregation service either for commercial or for user-generated content. They will have the biggest opportunity to gain market share in countries where DTV penetration lags significantly high-speed broadband penetration. (See Figure 34.)

### More power to the content owner

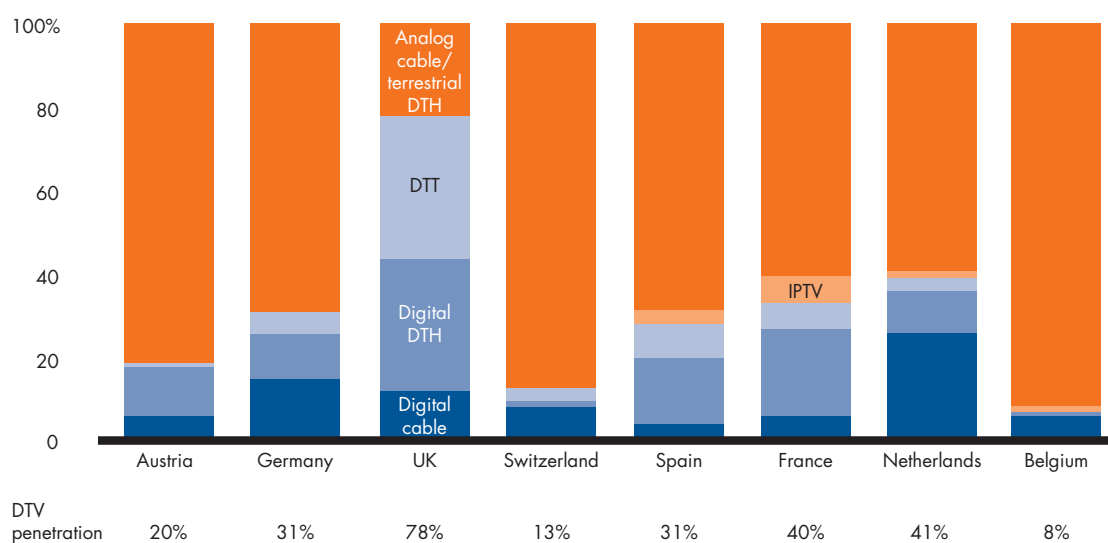
Distribution capacity has risen due to the arrival of new IPTV platforms, analogue to digital migration of traditional platforms like cable, as well as due to government-led analogue switch-off of terrestrial distribution across the EU. Digital distribution capacity exceeds the number of channels on offer—quite a remarkable change to the scarcity of the analogue age. As a result, content owners find themselves in increasingly stronger negotiating positions vs. distribution platforms that are all bidding for their content. This is reflected, for example, in the dramatic increase in the price of exclusive premium sports rights. Specifically in a cable context, there is a significant decrease in fees paid by broadcasters for cable distribution of their TV channels. Moreover, public service broadcasters and local public channels are still able to rely on “must carry” regulations for carriage on cable.

The arrival of IPTV, or even the prospect of it, is already having a profound impact on distributor-content provider relationships by increasing competition in wholesale broadcast transmission. For example, in the Netherlands, independent producer Endemol struck an exclusive content deal for access to KPN's VOD platform. In addition VG Media, representing the German private commercial channels owned by RTL Group and ProSieben/SatEins, agreed to a higher-than-expected price with KPN in exchange for KPN receiving "Most Favoured Nation" status, which prevents other contracting parties from receiving better terms. The increased competition for the content, as would be expected, drove up the prices for all platforms.

This example shows that, particularly as broadcasters and content producers begin to exploit subscription-based business models, there is a trend to regard digital distribution platforms as substitutes. Meanwhile, many telcos entering the video market are prepared to compete financially to secure attractive content for their IPTV offers even when their platforms are in start-up phase.

Figure 34: Western European markets exhibit different levels of DTV penetration and platform mix

**Platform penetration of TV households 2006**



Source: Informa (2006)



#### 4. How to increase confidence and secure distribution environments?

The European video content industry, as well as the European video consumer, is in a migration phase towards a digital content mass market. A key obstacle for mass-market supply of digital content is fear of piracy.

Fostering secure distribution environments (in the form of DRM systems for the public Internet, or set-top box systems) carries a number of inherent risks in the current phase of market evolution. These DRM systems provide the highest protection against unauthorised use in closed, non-interoperable environments. At the same time, these DRM systems tend to limit portability of content, meaning that consumers may not be able to play downloaded content on all their various in-home and portable devices.

To mitigate this situation, some content owners are resorting to intermediary solutions by designing more sophisticated DRM systems allowing for a single copy of a protected work for each device in the home (PC download, portable device, physical DVD). Others are experimenting with removing DRM altogether (for example, EMI in the music industry). Finally, cross-industry cooperation among hardware manufacturers, content owners and distributors towards full interoperability solutions is continuing. At the same time, however, competition between closed platforms is intensifying.

Stimulating transparency to allow DRM users to see for themselves the possibilities associated with each platform offers one way forward. Such an approach could help strike a balance between right holder protection through DRM systems and consumer choice in the current phase of market development.

The other critical dimension to the piracy issue obviously relates to the behaviours and motivations of consumers themselves. Content rights holders generally call on public authorities to cosponsor educational campaigns to raise awareness. As this report shows, teenage viewers, in particular, are likely to change their consumption patterns to some extent when they reach mass-market age. In adulthood, these consumers are likely to start paying for higher-quality video that is legally obtained vs. watching inferior-quality content obtained illegally.

In parallel, market players can play a more active role. European film producers argue that successful rollout of online VOD services will be instrumental in reducing the impact of digital piracy on the film business. Shortening the release window for VOD services may be one way to reduce the motivation of consumers to access content via illegal P2P sites, because the content would be available through legitimate channels sooner.<sup>39</sup>

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<sup>39</sup> European Charter for the Development and the Take-Up of Film Online, May 2006

## Implications for the future

A company's individual strategy for success in this evolving marketplace will vary, depending on its geographic location, industry segment and position in the market. Generally, though, traditional players will need to raise their game to compete—in particular, to adapt to a world with a limitless variety of media content and multiple content delivery platforms. Conversely, emerging competitors will need to think through carefully what they bring to the mass market and how to differentiate themselves from established competitors.

As the video content market changes, the three major categories of players—content creators, aggregators and distributors—must reconsider how they do business and who they choose as partners. In addition, they will each need to address some common industry concerns, such as developing universally accepted copyright protection software standards. To resolve key issues like piracy that threaten future growth, industry players will have to work together and find solutions that benefit both the consumer and the industry.

### Content creators

For content creators, the challenge is to stay focused on improving content quality and serving their target audiences. They'll need to explore a new sales model—selling directly to consumers over the Internet—and develop an ability to put their content on all media platforms while maintaining established, low-risk moneymaking outlets. While the priorities are clear, content creators are expected to be cautious. There are opportunities for the staggered release of content on different media platforms—such as making already-aired TV shows available on websites and mobile devices—but content creators will want proof that there's substantial viewer interest in new formats.

- Traditional US film studios have to balance a complex equation. They must replace declining DVD sales, but as studios begin using new channels and formats, and going directly to customers, they face a number of risks. There's the potential of harming their relationships with pay-TV operators and the large retailers that sell or rent DVDs. Another is the potential threat of further digital piracy of videos when they're sold electronically. Content owners will have to be careful to ensure that well-established distribution vehicles are not undermined in the rush to make new ones viable. In the long term, this caution is in the best interest of consumers, encouraging continued investment by content makers in high-quality content;
- European content creators are in a somewhat different situation, even though the challenges they face are similar. The issue of staggered releases on different media platforms is just as relevant. Content creators with a long history of producing

content for established free-TV broadcasters, including in-house producers and independents, are already shifting their production investment to subscriber-based digital channels. They've been hesitant to place content on emerging media outlets, including Internet sites, partly due to the relative complexity of making the shift, as well as worries that they'll lose some of their traditional customers. Other independent producers have tried to grow their business through low-cost, internationally appealing formats like reality TV, and they're among the most active producers eager to exploit their content rights across multiple media platforms;

- Sports organisations, such as the major European football associations, with a large share of premium content, are benefiting from increased competition among distributors. The result is a jump in the price of buying sports rights, especially heavily watched championship matches. In the long term, however, sports content owners also will have an incentive to profit by offering sports programming directly, and making content available to Internet TV audiences and on other platforms. If cross-platform opportunities don't materialise, sports content owners may continue restricting access to programming to keep prices high.

## Content aggregators

Content aggregators must learn how to compete in the VOD market, where empowered consumers will increasingly watch their favourite shows when they want, not when broadcasters schedule them. A key to success will be making it easy for viewers to find their programmes amid hundreds of choices. At the same time, they must continue offering quality programming to build audience loyalty.

- The stakes are especially high for *mass-market content aggregators* such as TV broadcasters (and new Internet-based competitors such as Google/YouTube). Providing easy navigation and search tools will be critical. They also must learn how to generate and analyse customer data so that they can deliver personalised content, both for consumers and advertisers. Personalising content will be a major battleground, with many players competing for new on-demand opportunities;
- Meanwhile, *niche content aggregators* such as single-theme TV channels like MTV and niche Internet sites offering video will need strategies for "owning" their target audiences across multiple platforms—for example, using mobile devices with Internet access to make content easily available to customers on the move. Viewers trying to sort through a veritable jungle of choices will gravitate towards niche channels and websites with a reputation for quality. To stand out in a crowded field, they must have access to popular content (including user-generated material) and have multi-platform capability.

## Distributors

Content distributors will have to be both adept operators and innovators. They must continue operating existing services efficiently, while creating new ones, especially VOD. Otherwise, established distributors will find it hard to compete against emerging distribution alternatives. The key will be innovating services and products based on compelling content, and technology that improves the customer experience at an attractive price. Just like content aggregators, distributors will learn that a competitive VOD offering is a powerful vehicle for retaining customers. In fact, if they play their cards right, they'll have an edge over market upstarts.

Traditional distributors have long-standing relationships with content creators and strong existing customer bases, and they are technologically capable of delivering a similar or better customer experience. However, Internet-based content aggregators entering the distribution space are better equipped to take advantage of the most lucrative new opportunities—offerings tailored to satisfy customer preferences as well as the needs of advertisers that want targeted capabilities. By mining their databases for insights about viewers' tastes and habits, Internet content aggregators like Google can roll out services that further empower—and please—consumers. Meanwhile, when it comes to paying for exclusive content rights, new distribution players like telcos offering IPTV and major Internet content aggregators must carefully weigh the business case. Exclusivity may be worth the price only for those with the largest audience.

## Regulators and policymakers

European regulators and policymakers are charged with overseeing an evolving media market filled with both opportunity and uncertainty. They must sort through a maze of issues and competing interests to determine the best way to protect the rights of the consumer and all players while encouraging the industry's growth. This complex task requires standing back and weighing the far-reaching implications of new policies and regulations on the video content marketplace.

The EC's initiatives on film and content online are attracting attention from policymakers and regulators towards the objective of creating favourable conditions for content to be made available for online digital distribution. The new Audiovisual Media Services directive will eliminate unnecessary barriers to the free circulation of linear and on-demand content by harmonising content rules.

This, however, presupposes that content owners have decided to make their content available in the first place. Nontransparent, national, copyrights clearance systems and the problem of online piracy seem to be the biggest obstacles preventing content owners from embracing digital business models on a large scale.

The other key factor is that mass-market demand for digital content is slow to emerge, despite the current hype. Content owners are therefore careful not to cannibalise proven revenue generators like pay-TV or DVD sales. Consumers display a much more conservative attitude towards paying for digital content services, particular online content services. Nevertheless, there is a clear trend towards consuming more content on-demand. However, this is not restricted to online—as described in depth in this report, TV-based VOD platforms (satellite, cable, IPTV, DTT, FTTH) are likely to be just as important, if not more important, than the Internet.

Policymakers aiming to increase consumer welfare and choice while fostering sustainable growth in the European video content industry will face as always multiple trade-offs.

For example:

1. Trade-offs between removing restrictions on the sharing and use of content to encourage “democratisation” vs. exposing copyright holders (and the creators of content) to abuse, through illegal sharing and copying;
2. Trade-offs between stimulating alternative platforms and networks for distributing content vs. maintaining incentives for the players that currently provide most of the investment in technology enablement;
3. Trade-offs between using regulation/deregulation to promote maximum choice of content for the consumer (“unbundling” distribution from aggregation) vs. allowing consumers and industry players to capture value of integrated propositions;
4. Trade-offs between stimulating high-quality local programming, potentially for small audiences, vs. ensuring that providers of this programming do not become subsidised “monopolies”.

5. More broadly, regulators face trade-offs between intervening in issues relating to the development of new business models vs. allowing market forces to resolve them. Some important questions in this arena include:
- How to create scale for VOD products and support their access to distribution?
  - Whether cross-border content licensing opportunities can be increased by reducing complexity in copyrights clearance systems?
  - Whether and how to adjust regulation to reflect shifting competitive balance in the content value chain?
  - How to increase confidence in digital rights management systems, so that consumers have flexibility to use content they acquire in different ways, and owners have the security they seek to protect their investments?

Bain & Company has been commissioned to undertake an objective analysis of the key trends in Europe's digital media market. The results of this study may hold insights for many of the key players in this evolving industry, as they try to plan for developments over the next five years, anticipate the role of regulatory authorities and structure their investments accordingly.



