White Paper on Digital Content in Spain 2008

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White Paper on Digital Content in Spain 2008

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Forward

Digital content is playing an increasingly important role in stimulating and developing modern economies and societies. The digital content industry, a sector that has been growing steadily in recent years both in Spain and the rest of the world, has been attracting enormous interest from the population as a whole and particularly from entrepreneurs and other agents (creators, producers, editors, distribution companies, aggregators and operators), both because of the industry's short term growth potential and the enormous impact it has on citizens' habits and attitudes to leisure, work and daily life in general.

In Spain, where nearly two thirds of the population already access digital content, new ways of using and marketing network content are creating new business opportunities and social initiatives hitherto beyond the scope of traditional models. This new wide-ranging outlook for digital culture continues to open up new spaces for communication and transfer of information that are directly transposed into greater wealth and well-being for all citizens.

Aware of this importance, enterprises all over the world are adapting their business logic to what has become a new paradigm for the exchange of information, service offerings and customer relations. At the same time, governments and public institutions need to set their sights on creating the suitable conditions for the development of these new services linked to the digital content revolution. In this context, digital content is an extremely important strategic, economic and social asset for the Spanish government both due to its ability to create wealth in a knowledge economy context and as an agent for the development of the Information Society. For this reason the Avanza Plan includes specific measures for promoting initiatives that facilitate the development of the digital content industry in Spain. By the end of the 2007-2009 period alone more than €1 billion will have been spent on this particular objective of the Avanza Plan. Furthermore, Avanza includes measures that have enabled Spain to take a giant leap forward in fields such as digital education, healthcare and public services in the past three years. Finally, it is equally important to create a framework of co-operation, collaboration and communication that will enable in-depth analysis of the current situation in the digital content industry and can be used as an aid to develop new business models.

The aim of this *White Paper on Digital Content* is to provide enterprises, institutions and citizens with a reference tool and an opportunity to reflect on the current situation and future prospects of each sector of the digital content industry in Spain. The Paper will no doubt be a valuable source of objective information for all interested agents, and will be continued with future editions.

01 • Introduction

Context

In the current context of convergence and digitisation of the content industry, we need to reflect on the importance of digital content, both from the perspective of its contribution towards the creation of wealth and jobs within the Spanish economy, and its role as the driving force for the development of the Information Society in Spain and in the rest of the world.

In light of the strategic importance of the digital content industry, *the White Paper on Digital Content in Spain, 2008* has been drawn up on the initiative of the Ministry of Industry, Tourism and Commerce. The Ministry hopes this White Paper will become a source of objective information for enterprises, associations, public administrations and other agents with an interest in digital content.

Within the overall framework of the industry's current transition process towards full digitisation of its commercial services, this report analyses the content industry as a whole (not only the digital side), as it is essential to understand the initial situation in order to adequately comprehend the transformation processes of the sectors involved

One of the most significant factors in this context is the growing importance of digital content created by citizens, enterprises, public administrations and educational institutions, all of which make a fundamental contribution to the development of the Information Society. The Paper analyses this subject and highlights its importance in the section dealing with *what has been called the Networked Society*.

Objectives

The White Paper has three main objectives:

First, to provide all the different agents involved in the digital content sector in Spain with an analysis of the current situation and provide them with objective and reliable information on which to base their strategic decisions. This objective is particularly important in an environment in which disparity and, at times, lack of homogenous methods and sources give rise to debates regarding the data and analyses used.

The second objective of the document is to identify digital content trends in Spain, using as a benchmark the international best practices of the main, comparable EU countries and other relevant countries. This comparison has enabled us to identify both the strong points and the areas with scope for improvement within the digital content industry in Spain, together with the success stories from other countries that can be satisfactorily extrapolated to Spain.

Lastly, the document contains an outline of the main challenges facing the digital content industry, reinforcing the Administration's support of the industry.

Structure

The lack of aggregate data for the digital industry in Spain has conditioned the approach and structure given to this White Paper. For this reason, the main sectors producing digital content in Spain have been analysed individually to enable their quantification and achieve a better understanding of the specific features of each sector.

The sectors dealt with in this White Paper are the following:
- Video games
- Music
- Audio-visual
- Publishing
- Advertising
- Films
- Networked Society

The document seeks to establish a relationship between the sectors in order to provide an integrated, comprehensive view of the digital content industry in Spain.

The analyses of all the sectors dealt with in the White Paper have been given a similar structure and include the following sections:

- Description of the sector. This section describes the scope and boundaries of each sector. Each link assessed in the value chain is described and the main agents involved in each of these are identified.

- Market situation. This section provides an analysis of the current supply and demand situation in the sector and describes its evolution over recent years. A specific mention is made regarding the level of participation of Spanish agents in the supply and demand of digital content.

- Analysis of international best practices and main trends. This section analyses the markets in the main comparable EU countries in order to understand Spain's relative position and identify and understand success stories in other countries that can be applied in Spain.

- Identified challenges and opportunities. This section includes a market analysis and a review of future trends and successful ventures in other countries. The analysis has allowed us to outline a series of challenges and opportunities that represent a starting point for reflecting on possible measures for strengthening the digital content industry in Spain.

The structure of the chapter on Networked Societies varies slightly from this pattern, given the lack of financially quantifiable supply and demand, as most of the digital content in this sector is free.

Finally, the conclusions section summarises the most outstanding points and gives an overall vision of the White Paper.

General situation of the digital content industry in Spain

In recent years the global evolution of the industries responsible for creating digital content has been positive. The industry, taking into account the sales figures of the sectors analysed in this study, recorded an annual growth rate of 4.5% during the 2003-2007 period, although each sector followed a very heterogeneous path (based on data released by PricewaterhouseCoopers - Global Entertainment & Media Outlook 2008-2012).

The evolution of the industry in Spain was also positive, with an average annual growth rate of 4% between 2003 and 2007 (see figure 1.2). Furthermore, the aforementioned evolution towards a progressively digitised industry augers irreversible growth of the supply and consumption of digital content.

This trend provides a great opportunity for the Spanish industry in the future, with significant growth forecasted for digital-based businesses over the next few years in most sectors, as this Paper will show.

Nevertheless, the evolutionary trend of each sector of the digital content industry is different, as each has specific features and characteristics not shared with other sectors and, therefore, a very different situation and future outlook. All of this has made it necessary to analyse the situation of each on an individual basis.

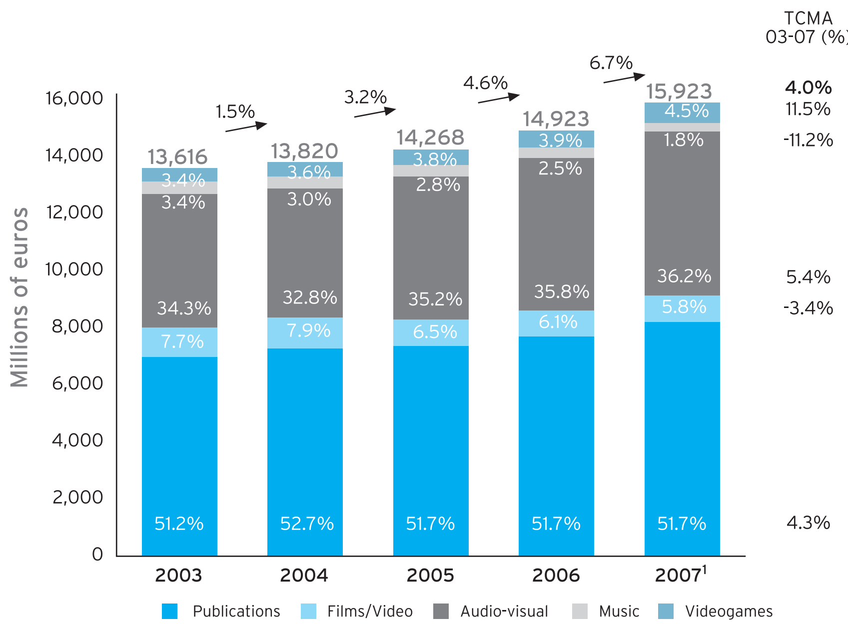
Figure 1.1. Industries generating digital content in the rest of the world: evolution of sales, 2003-2007

	Billing 2003 (M$)	Billing 2004 (M$)	Billing 2005 (M$)	Billing 2006 (M$)	Billing 2007 (M$)	TCMA 03-07 %
Music	36,228	36,526	35,765	34,861	33,437	-2.0%
Films/Video	78,351	83,954	81,661	83,781	85,904	2.3%
Videogames	23,667	26,869	28,395	32,954	41,948	15.4%
Publications[1]	340,612	351,206	364,397	370,581	379,314	2.7%
Audio-visual[2]	294,873	321,387	340,110	363,173	383,150	6.8%
Total	773,371	819,942	850,328	885,350	923,753	4.5%

[1] Including newspaper, books and magazines
[2] Including television (including advertising) and radio

Source: "Global Entertainment & Media Outlook: 2008-2012" by PricewaterhouseCoopers (2008)

Figure 1.2. Industries generating digital content in Spain: evolution of sales , 2003-2007 (€M and % of total)



[1] Due to the absence of official data, estimates for 2007 publication sales based on previous growth rates and industry forecast.

Source: ONTSI based on various sources (see detailed analysis by sector)

Figure 1.3. Industries generating digital content in Spain: evolution of sales, 2003-2007 (€M)

	Billing 2003 (M€)	Billing 2004 (M€)	Billing 2005 (M€)	Billing 2006 (M€)	Billing 2007 (M€)
Video games[1]	465	500	537	576	719
Films/Video[2]	1,052	1,096	927	911	916
TV/Radio	4,677	4,532	5,028	5,346	5,767
Music	457	406	399	368	284
Publications	6,965	7,286	7,377	7,722	8,237[3]
Total	13,616	13,820	14,268	14,923	15,923

[1] Does not include hardware.
[2] Including box-office takings and sale and rental of films.
[3] Due to the absence of official data, estimates for 2007 publication sales based on previous growth rates and industry forecasts

Source: ONTSI based on various sources (see detailed analysis by sector)

As will be seen further on, the digital content industry in Spain is dominated, for the most part, by large foreign multinational companies (for example, in video games and music). Furthermore, there is currently an element of uncertainty in the international industry with regard to future digital business models, due to changes in use and consumption patterns that, up until now, have not been accompanied by a corresponding adjustment of the digital business models.

The combination of all these factors advocates, therefore, a reflection on the situation and future prospects of each sector within the digital content industry in Spain, a reflection carried out in the manner already described in this *White Paper on Digital Content in Spain, 2008*.

02

Video games sector

- There is strong demand for video games in Spain; it is the fourth biggest market in Europe, with sales of €1.454 billion including hardware (735) and software (719). Growth in the sector in the period 2002 to 2007 was on average above 11% and this figure is expected to increase to 13% for the period 2006 to 2012.

- The number of development companies has increased from about ten in 2005 to over 100 in July 2008. Even though 29 of these produced over 137 titles, their revenue only represented a little more than 5% of total software sales in the sector.

- Growth expectations for Spain are on a par with those for Europe (13%) and the rest of the world (13%). Within the sector, online video games will experience highest growth, almost tripling revenue between 2006 and 2012.

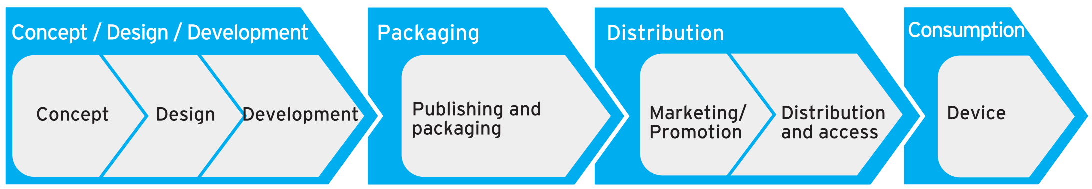
- It is noteworthy that Madrid has been chosen by one of largest multinationals in the video games sector (Electronic Arts) as the headquarters of its European Development Services Centre, ahead of cities such as London, Prague or Warsaw, creating over 200 jobs in the process.

2.1. DESCRIPTION OF THE SECTOR

The value chain provides a good picture of how the sector works and of the main actors that comprise it; it has therefore been used as an instrument to analyse the video games sector:

Once this plan has been drawn up, the realisation phase, implementing the design plan, is initiated. The main task to be carried out under the design plan are programming and encoding, animation and 3D design, and sound, voice and music recording. Finally, the last stage in this phase are the trials.

Figure 2.1. Video games sector value chain



Source: ONTSI

The video games sector value chain is subdivided into two major blocks of activities: on one hand, design and production and, on the other, packaging and distribution. The agents for each block may or may not be integrated.

The first block begins with the conception of the product, whether it is a video game for console/PC, a game for mobiles in download mode or an online game.

During the conception phase, three fundamental aspects of the video game are defined: the genre, the creative aspects and the blueprint. After the conception phase comes the design phase, during which the art design (story, sound, interface, graphics, etc.), mechanics and programming are carried out. This phase concludes with the planning for the realisation of each of the aspects relating to the general design of the product; a design plan is drawn up for this purpose.

The main agents involved in this first block are:

- Video game production and development studios.
- Implementation outsourcing studios.
- Specialist animation and 3D design studios.
- Studios or production companies specialising in voice and sound recording.

Once the product has been developed, the work of the distributors begins with the packaging phase; here, translations have to be done and rights formalities carried out, in addition to physical medium production, where appropriate, for distribution. Complementing the distribution process, marketing and promotion of the game is carried out. These activities are key as regards the success and consumption of the video game.

2.2. SITUATION OF THE VIDEO GAMES MARKET

2.2.1. Introduction

The appearance of the next generation consoles on the market in 2006 gave rise to a considerable increase of sales throughout Europe in 2007, both in software and in hardware. In order to faithfully reflect this new situation, which will set subsequent trends, growth in 2007, which is key for the sector, has been included within the period of study.

Companies that do not have video games as their core business, even though they may participate in specific aspects of production, have been excluded from this study.

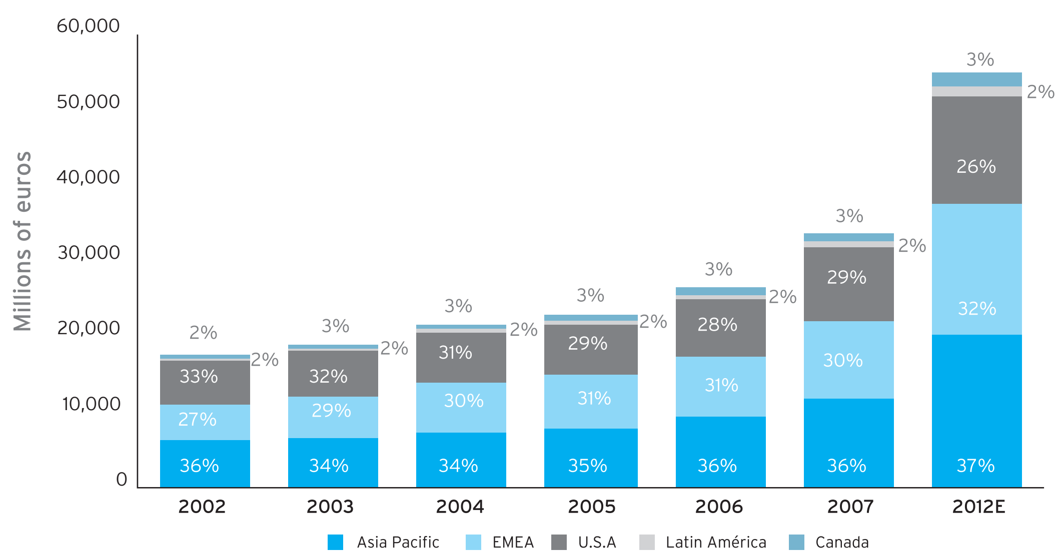
2.2.2. World and European demand

The following section provides a study and analysis of both the Spanish and international video games markets.

The world and European video games markets are both immersed in a phase of strong growth. During the period 2002-2007, the European and world-wide growth rates were 15% and 14%, respectively. For the 2006-2012 period, this tendency is expected to place Europe on a par with world growth, which is forecast at 13%.

The following figure shows world-wide sales for the video games market, broken down by geographical area:

Figure 2.2. World-wide sales for video games: evolution 2002-2012E (€M)



Source: ONTSI (national observatory for telecommunications and the information society) and "Global Entertainment and Media Outlook: 2008-2012" by PricewaterhouseCoopers (2008)

At world level, the Asian market is the largest one, followed by EMEA (Europe, the Middle East and Africa) and the USA. During the period 2002-2007, the sector experienced average growth of over 16% in the EMEA zone, although for the next few years a slight slowdown is expected with the growth rate dropping to a little over 13% for the period 2006-2012.

With regard to the forecast for the world market for the period 2006-2012, areas displaying above-average growth will be EMEA and the Asia-Pacific zone, with rates of 14% compared to the expected growth rate of 11% for the USA.

The situation of the European video games market (software only) is shown in detail below (see figure 2.3).

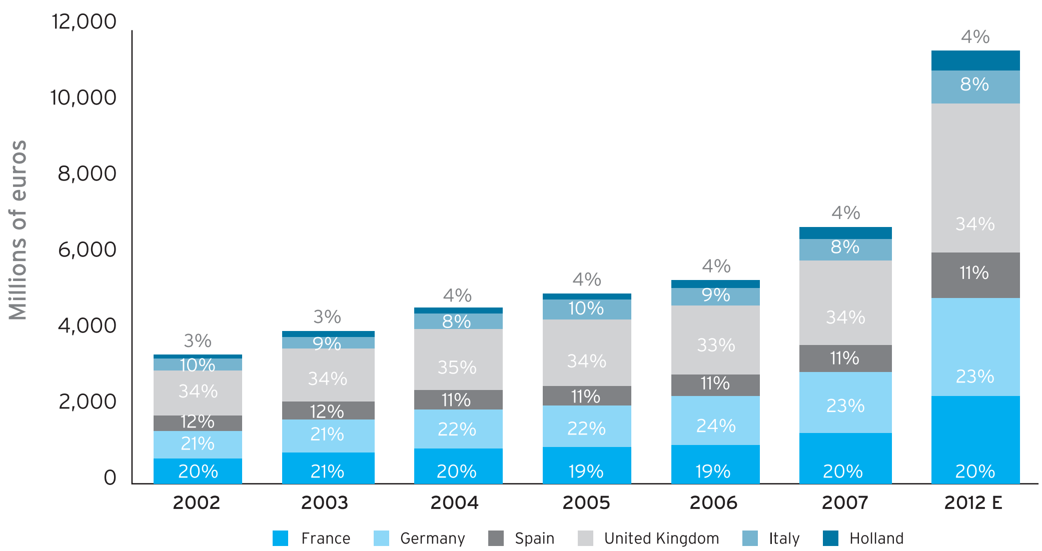
In Europe, the markets with the highest total sales are the UK, Germany and France, followed by the Spanish market in fourth place. In the 2002-2007 period growth in the European games market has been constant - around 15% - and the growth trend for the period 2006-2012 is expected to exceed 13%.

As can be seen in figure 2.4, there was an increase in sales of over 44% for hardware in all European countries during 2007.

International market: segmentation by platform

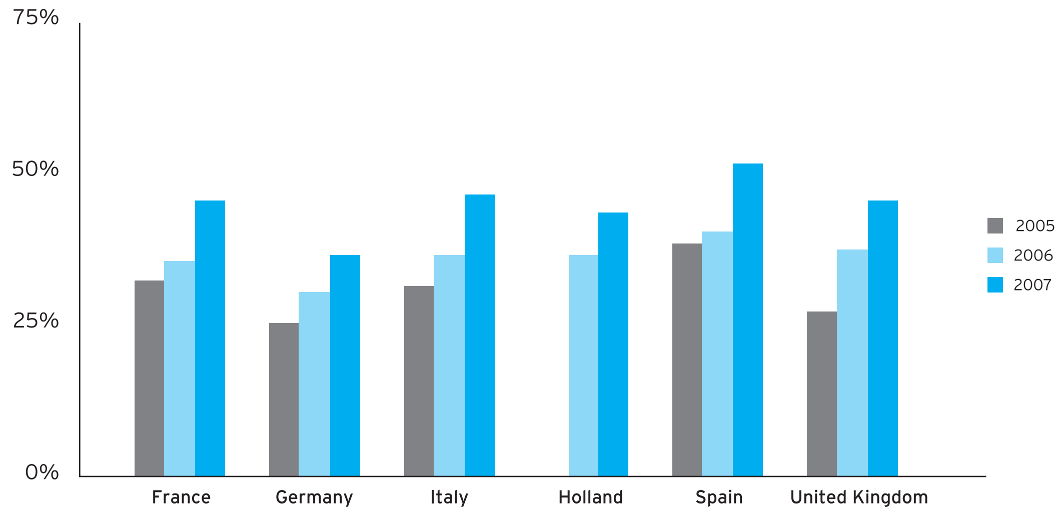
Segmenting the European video games market by platform type, the video game console is by far the most widely used platform (the "console" category includes *off-line* games that may be played on any kind of video game console).

Figure 2.3. European sales for video games: evolution 2002-2012E (€M)



Source: ONTSI, "Resumen anual del sector de videojuegos año 2007" (annual report on video games sector 2007) published by the Asociación Española de Distribuidores y Editores de Software de Entretenimiento (ADESE) and "Global Entertainment and Media Outlook: 2008-2012" by PricewaterhouseCoopers (2008)

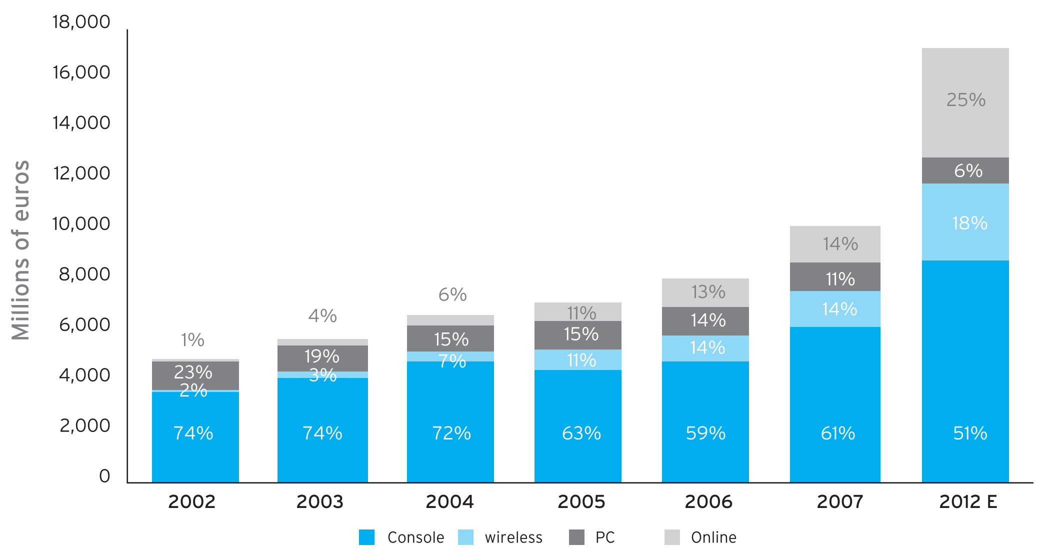
Figure 2.4. European video games market. Hardware sales compared to the total investment in hardware and software



Source: ONTSI and "Resumen anual del sector de videojuegos año 2007" published by ADESE

Another significant trend that can be observed in figure 2.5 is that online games (accessed on the Internet by means of any consumer platform) and games for mobiles ("wireless"- games to download and play on the mobile telephone) are the two highest growth areas. The development of

Figure 2.5. Segmentation by platform of the EMEA video games market. Evolution 2002-2012 (€M)



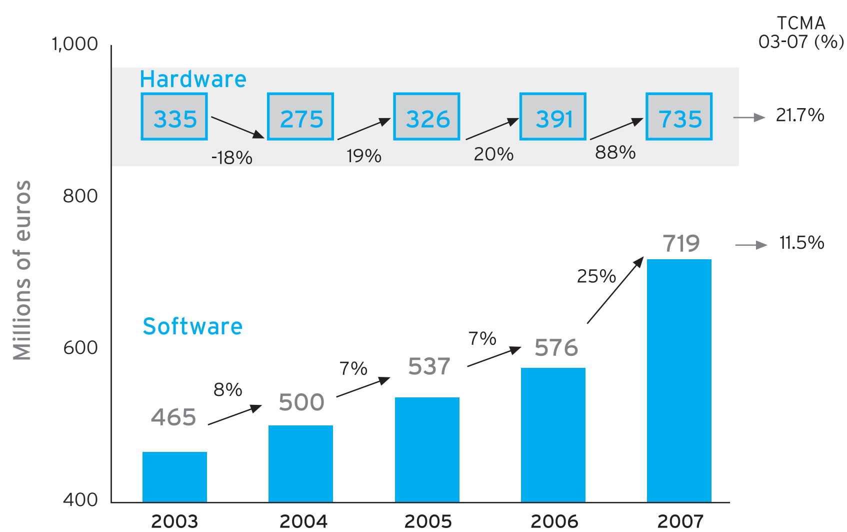
Source: ONTSI (national observatory for telecommunications and the information society) and "Global Entertainment and Media Outlook: 2008-2012" by PricewaterhouseCoopers (2008) broadband, both fixed (ADSL, etc.) and mobile (GPRS, UMTS, etc.) in the coming years is a key factor for market growth based on these platforms. In the period 2006-2012, the growth in online and mobile platforms, combined with the dominant position that the console already enjoys, means that video games for PC's (games exclusively for PC's) will be the platform that declines most in relative importance compared with the others, although the total sales will be maintained in absolute terms. It should be noted, however, that the PC as a platform for the consumption of video games also plays a part in online games.

2.2.3. Demand in the Spanish market

Having analysed the situation and trends of the international market, the sector in Spain is analysed below. As we stated above, the Spanish video games market is the fourth largest in terms of investment in the EMEA zone with €719 million in software in 2007, representing an increase of 25% compared to 2006. Including software and hardware, Spanish video games market sales in 2007 was €1.454 billion (according to ADESE, the Spanish association of entertainment software manufacturers). Over 50% of that figure corresponds to revenue from hardware (€735 million), which had spectacular growth in 2007, virtually doubling 2006's sales. The main factors that explain this striking growth in 2007 in the video games hardware market are:

- The commercial launch of new next generation consoles.
- The growth and diffusion of high-technology portable consoles.
- The entry of new demographic segments into the video games market (adults, women and girls, etc.).
- The obsolescence and associated renewal cycle of the stock of consoles in existence prior to 2007.

Figure 2.6. Sales in the video games sector in Spain in €M



Source: ONTSI and "Resumen anual del sector de videojuegos año 2007"
Published by "Asociación Española de Distribuidores y Editores de Software de Entretenimiento" (ADESE)

Though the video games hardware market is, by definition, outside the scope of this study of digital content, a brief description of this sector is, however, necessary in order to provide a context for the video games software market.

In terms of sales, Spain is the fourth biggest European market; its average growth for the period 2002-2007 was 12%, and for the period 2006-2012 it is expected to reach the world average of 13%. Expected growth will be even greater in the online games and games for mobiles sector, which reflects the trend in other markets.

The market is dominated by the distribution of international products (around 93%), with some generally small-scale domestic studios that account for a little over 5% of the Spanish market; these latter specialise in the games for mobiles sector. In other words, domestic production of video games is small in terms of volume, in spite of the fact that Spain is a major market in terms of demand.

Figure 2.7. Top 10 video games companies by sales in €M

Company	Sales 2007 (€M)
Nintendo*	13,330
Sony Computer Entertainment*	8,715
Activision Blizzard	2,280
Electronics Arts	2,022
Ubisoft	928
Take Two	893
THQ	672
Bandai Namco	312
Atari	91
Microsoft Games Studios*	ND

* Includes revenue for hardware sales

Source: Companies' annual accounts

2.2.4. International Offering

Among the major players world-wide, it can be clearly seen that the leaders in the sector are the large American, Japanese and French multinational studios.

Among the top 10 companies world-wide in 2007, 5 companies were from the USA, 3 from France and 2 from Japan. The three representatives of the main video games console manufacturers (Microsoft Game Studios, Nintendo and Sony Computer Entertainment) are situated among them.

It is important to point out that in 2008 the company Activision Blizzard was founded; this is a merger between the Vivendi Universal group and Activision Group, thus creating the leading video games development company world-wide with sales of €2.280 bn (although Nintendo and Sony rank higher because they include revenue from hardware in their total sales figures).

In general, the blockbuster model prevails, whereby the industry organises itself to deal with the large investment requirements of developing a product (video game) for which success is not assured. As happens in other sectors, diversification of risk helps to mitigate the effect of investments channelled to unsuccessful titles. There is a critical size that needs to be exceeded in order to be able to produce a sufficiently large number of video games so that the successes make up for the commercial failures.

It must also be borne in mind that the major companies in the sector are integrated vertically; that is, they are present in many or all of the phases of the value chain. This is due to the companies' need to reach the aforementioned critical size in order to undertake projects of the scope required by the market.

2.2.5. Spanish market offerings

The domestic video games market, with sales of €719 million, is clearly dominated (approximately 95%) by international studios.

The majority of Spanish companies are small, very new, and their core activity is developing ad hoc video games for marketing campaigns, as well as video games for mobiles. Medium size companies, in addition to carrying out previously commissioned work, almost always undertake one or two projects at a time and almost exclusively for a single platform; if the project is a success, it is usually exported to the different platforms. It is also common for them to develop some parts of a video game commissioned by a third party. Only the largest companies are developing multiplatform games.

Owing to the importance of training talented people within this sector, Spanish universities are endeavouring to encourage postgraduate studies in the development of video games.

These measures are similar to public schemes implemented in countries such as the UK, the leader in the European video games sector, where the Universities of Hull, Bradford and Sheffield Hallam have come together to create a postgraduate course oriented towards those who seek to make a career as video game programmers.

The sector is supporting specialist trade fairs, as events that facilitate knowledge transfer and meetings between domestic and international companies. On these lines, Gamelab (4th edition of the international get-togethers within the Electronic Entertainment industry) and the Video Game Developers Conference were held in Valencia in 2008.

We list below the principal development studios and distribution companies present in Spain.

Figure 2.8. List of the principal development studios present in the Spanish market according to operating revenue in €M

Development studies	Operating revenue 2006 (€M)
Pyro Studios	14.0
Fx-interactive	11.5
Virtual Toys	1.7
Gaelco	1.4
Revistronic	1.4
Digital Leyends	1

Source: ONTSI

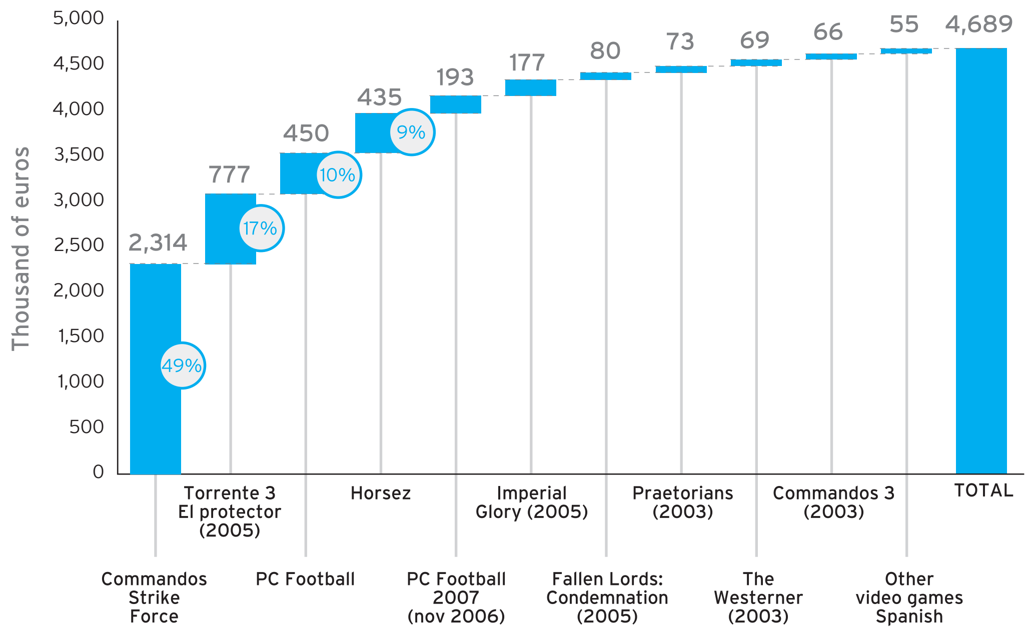
In Spain, the market is dominated by the subsidiaries of the multinational distribution companies, while domestic production activity is concentrated in a very small number of studios.

In 2006 only 6 studios achieved over €1 million in sales, and of these only Pyro and Fx-interactive topped 10 million; between them, they accounted for 73% of the market in domestic sales (the first 6 represent 89%).

A list of the principal Spanish companies devoted to the development of video games is included as an appendix to this chapter, based on the data obtained when conducting the present study.

Looking at the group of studios that concentrated most of the Spanish-produced video game sales in 2006, it can be seen that two of them (Pyro Studios and Gaelco Multimedia) base a large part of their sales success on the development of sequels to their most successful video games *(Commandos* and *PC Football)*.

Figure 2.9. Segmentation by title of Spanish video games production in 2006 (€ thousands)



Source: ONTSI and GFK

2.2.6. International market: key factors

The video games market displays traits characteristic of oligopolies insofar as the three main video games console manufacturers (Sony, Microsoft and Nintendo) control the awarding of licences for the production of games for their platforms.

Furthermore, this characteristic becomes even more marked by the fact that video game production costs are on the rise as increasingly greater technical and audio-visual quality is being demanded. Nevertheless, it should be noted that the cost of producing sequels is significantly lower due to the reuse of components and technological developments from previous versions.

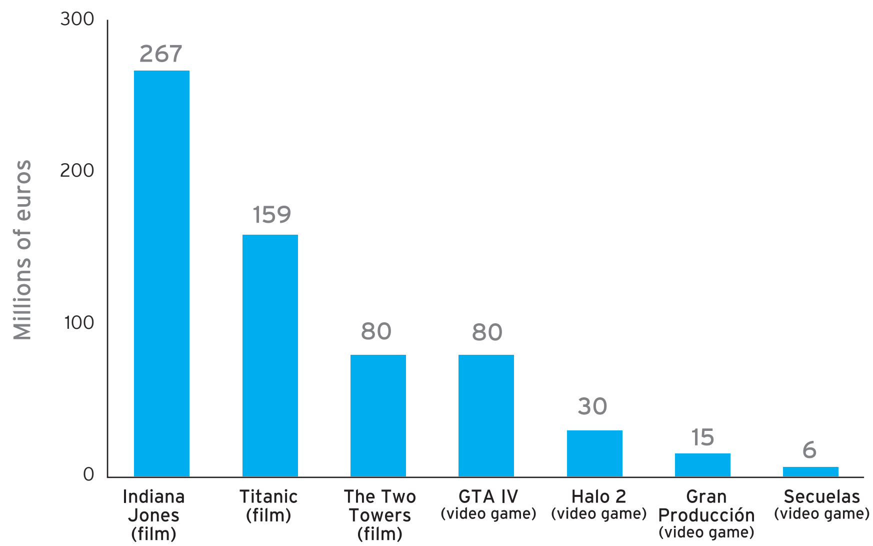
As an example, Figure 2.10 shows the average development cost of a video game for the major multinational studios.

To date, the average cost of a video game for large studios was around €10-€15 million; which is about halfway between the most expensive video game created up to 2008 (*Halo* 2, for €30 million) and small productions. In contrast, the costs of producing sequels are much lower and average out at between €3 and €6 million, which represents an average saving of 60% in production costs, and can even reach as much as 90%.

Current superproductions in the video games sector make these numbers seem small by comparison; in the case of *Grand Theft Auto IV* by the company Rockstar, total costs amounted to €80 million and the development phase lasted four years, similar to major film productions.

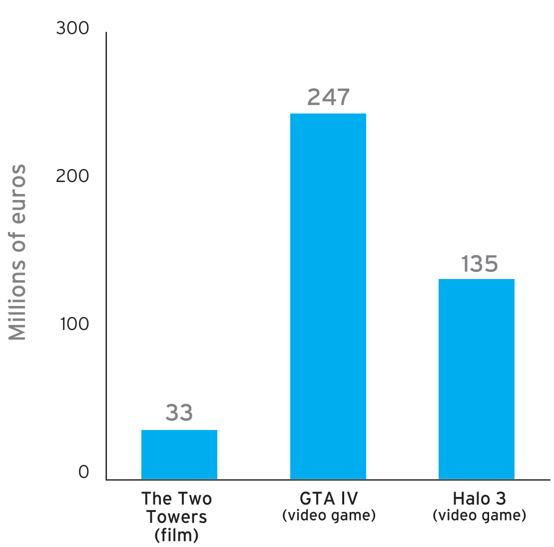
These results demonstrate the extremely favourable response by consumers to products that take

Figure 2.10. Comparison of development costs of hit video games and films in €M



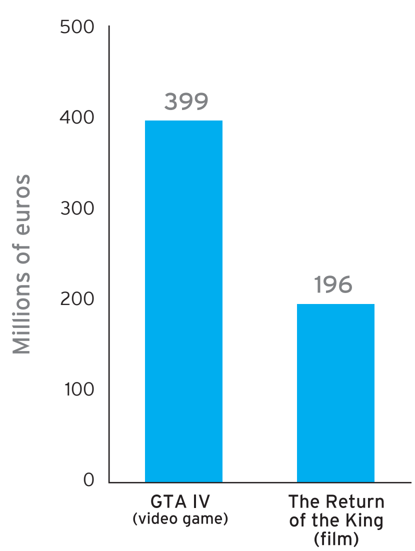
Source: ONTSI

Figure 2.11. World-wide revenue on first day of sale. Video games vs. Film Blockbusters in €M



Source: ONTSI

Figure 2.12. World-wide revenue during first week of sale. Video games vs. Film Blockbusters in €M



Source: ONTSI

maximum advantage of latest generation consoles, which were mainly acquired in 2007 and which provide new experiences, extraordinary graphics and scripts that compare with film productions.

These dynamics within the sector, based on high production costs, impose w*hat has been called the blockbuster* model. As large investments are needed to develop video games and the success of the latter is not assured, studios diversify the risk by increasing the number of superproductions, which in turn leads to corporate clustering and joint ventures between several studios. Moreover, a consequence of the model is that studios devote great effort to producing sequels to the productions that have been most successful commercially.

These sequels, even if they do not sell as well as their predecessors, are commercially very profitable due to their lower development costs. In this way, studios take advantage of the success of some of their creations by repeatedly re-releasing these sequels (*Pro Evolution Soccer, Halo, The Sims, Gran Turismo,* etc.) or even annually (*FIFA, PC Football, Formula One*, etc.).

In this way, studios' product portfolio risk is spread out; they usually have between 3 and 4 titles that account for a large part of their sales.

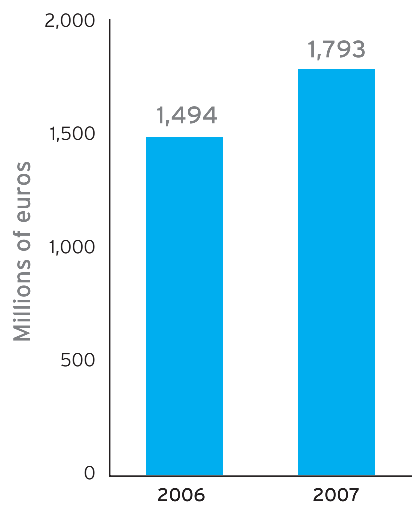
The most notable movement aimed at concentrating production in the sector recently was the purchase of the video games developer Activision by the French company Vivendi, the purpose being to merge Activision with its video games subsidiary, Blizzard. That is how Activision Blizzard came about and it is now the world leader in video games development in terms of sales; with €2.280 billion, it has overtaken the indisputable former leader, Electronic Arts, which recorded total sales of €2.022 billion. There have also been operations in the domestic market, such as the merger of m-Solutions and the Parmenion Group.

Casual video games

There is, however, an additional business line that is different from the global *blockbuster* model; these are casual video games. Casual video games are simple games, both in terms of playing them and developing them; they are also easy to learn as they are designed as a pastime. The most common playing platforms are Internet and mobiles and, to a lesser degree, the PC.

According to the world casual games association (CGA) sales of these games amounted to €17.933 billion world-wide with an increase of 20% in 2007.

Figure 2.13. World-wide casual video games market in €M



Source: "2007 Casual Games Report" by Casual Games Association Publishers

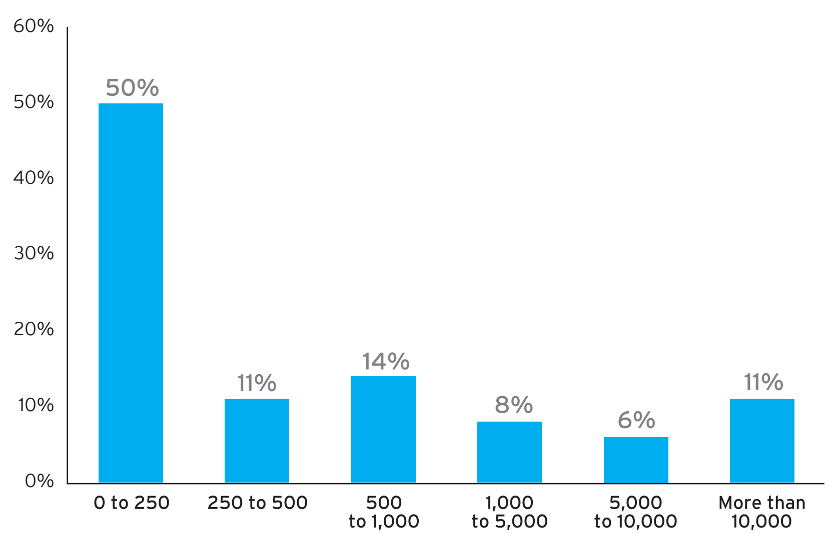
As far as development is concerned, the advantage of casual games is that they are technically easier to produce and, therefore, cheaper, with budgets of around €150,000. This almost makes the product a *commodity* (a homogeneous or low differentiation product, the sales of which are almost exclusively based on price), as a large number of very similar games can be produced with less production work, which enables smaller companies to enter the sector.

In spite of the fact that casual games have traditionally been produced by these smaller companies, there has been a reaction among the large video games companies and they are beginning to make strong inroads into this segment. For example, EA has launched an online games portal called Pogo.com, Codemasters has launched *Funtsa.com* and Microsoft *has its Xbox Live! Arcade*. Moreover, there are new entrants in this segment, such as the telecommunications operator France Telecom, which has recently launched its casual games portal *Goa.com*.

Video game best sellers

As figures 2.15 and 2.16 show, Nintendo, with its DS portable console, has succeeded in broadening the traditional target market of the industry by launching original products aimed at new demographic segments (adults, female consumers, etc.). The results achieved have allowed it to overtake the veteran Pro Evolution Soccer as the best selling video game in 2007 in Spain. It can be seen how in previous years, the sports game theme depended to a great extent on local culture, Spain being a country with a very deep-rooted football tradition. Furthermore, it is noteworthy that many best-selling game are sequels or new versions of games from previous years (*FIFA, Pro Evolution Soccer, Need For Speed, Halo, Pokemon,* etc.)

Figure 2.14. Casual video games companies in the USA. Percentage of American companies by sales in 2006 ($M)



Source: Data obtained from the IGDA (International Game Developers Association) 2006 survey

Figure 2.15. Ranking of 10 best-selling video games in 2007

Top Ten 2007 U.S.A			Top Ten 2007 Spain		
Titles	Platform	Distributor	Titles	Platform	Distributor
Halo 3	Xbox 360	Microsoft	Mas Brain Training	Ds	Nintendo
Wii Play	Wii	Nintendo	Brain Training Dr. Kawashima	Ds	Nintendo
Call of Duty 4: Modern Warfare	Xbox 360	Activision	Pro Evolution Soccer 2008	PS2	Konami
Guitar Hero III: Legends of Rock	PS2	Activision	Wii Play	Wii	Nintendo
Super Mario Galaxy	Wii	Nintendo	Pokémon Diamante	Ds	Nintendo
Pokémon Diamante	Ds	Nintendo	New Super Mario Bros.	Ds	Nintendo
Madden NFL 08	PS2	ElectronicArts	WWe Smackdown! vs. Raw 2008	PS2	Thq
Guitar Hero II	PS2	Activision	Pro Evolution Soccer 6 Platinum	PS2	Konami
Assassin's Creed	Xbox 360	Ubisoft	Pro Evolution Soccer 2008	PS3	Konami
Mario Party 8	Wii	Nintendo	Animal Crossing: Wild Wordl	Ds	Nintendo

Source: ADESE, The NPD Group

Figure 2.16. Ranking of 10 best-selling video games in 2006

Top Ten 2006 U.S.A		Top Ten 2006 Spain	
Titles	Distributor	Titles	Distributor
Madden NFL 07	Electronic Arts	Pro Evolution Soccer 6	Konami
Cars	THQ	Brain Training Dr. Kawashiwa	Nintendo
Lego Star Wars II: the original trilogy	Lucas Arts	Animal Crossing: Wild world	Nintendo
NCAA Football 07	Electronic Arts	FIFA 07	Electronic Arts
New Super Mario Brothers	Nintendo	Pokémon mundo misterioso	Nintendo
Need for Speed: Most Wanted	Electronic Arts	New Super Mario Brothers	Nintendo
Gears of War	Microsoft	Nintendogs: dálmata	Nintendo
Call of Duty III	Activision	Pro Evolution Soccer 5	Konami
Lego Star Wars	Eidos	Eye Toy Play 3	Sony
Fight Night Round III	Electronic Arts	Need for Speed: Carbono	Sony

Source: ADESE, ELSPA The NPD Group

2.3. ANALYSIS OF INTERNATIONAL BEST PRACTICES AND MAIN TRENDS

A comparative study of the video games sector in other countries has been conducted for the purpose of ascertaining international practices in the sector. The most significant countries for the purposes of the study were France, Canada and South Korea.

2.3.1. International practices

The case of France

When looking at Europe in the search of references in the sphere of video games, the case of France, the third largest European market, is unavoidable. France regards video games as "a form of artistic expression that involves creation and which includes scriptwriters, designers and directors" (Renaud Donnedieu de Vabres, ex-Minister of Culture) and, therefore, a large share of the responsibilities relating to the development, management and articulation of the sector are entrusted to the National Cinematography Centre.

In 2005, the French Ministry for Foreign Affairs created an Internet portal called *France Game*, the purpose of which is to promote the French video games sector abroad. Every quarter the portal publishes a catalogue of projects being worked on by French developers, which it sends to the principal international distributors in order to facilitate access to funding and to games being released. In addition, the Ministry for Foreign Affairs itself organises international campaigns to publicise and support the French video games industry.

An example of this would be the campaign *"France, the rising playground"*, which is a showcase for the French video games industry, which describes the situation of the sector in France and the advantages for foreign companies investing in this industry in France, namely: tax incentives, schools providing specialised training for the development and creation of video games, infrastructure, companies in this sector located in France, etc. All of this is backed up by the credentials represented by sales and a long list of successful video games created in France. Furthermore, different ways are provided for contacting the various agents, both in the public and the private sphere, that comprise the sector in France.

The information and publicity scheme is supplemented by a support programme for multimedia production and publishing (FAEM - *Fonds d'Aide à l'Edition Multimedia)* and a specific grant for the video games sector. The FAEM programme, which was set up at the end of 2003, is managed by the National Cinematography Centre (CNC). Its main goals are to aid in the layout, preproduction and production of video games.

The aforementioned grants, which do not exceed €15,000 per project, are awarded as small non-recoverable subsidies and are aimed at funding between 30 and 40% of video game's preproduction and production costs. The FAEM stipulates that grants must be paid back if the project goes to market. The success of the FAEM programme is demonstrated by the number of projects developed (71) and marketed (12).

As a complement to direct grants for the development of the video games industry, the French government has set up a programme of specific grants to promote research and development (R+D) in the multimedia sector (RIAM). The goal of the RIAM *(Research and Innovation in Audiovisuals and Multimedia)* programme is to develop a network to facilitate the circulation of knowledge and information in the audio-visual and multimedia sectors, and to help fund technological innovation research projects. It also grants tax allowances depending on the associated R+D costs in the shape of financial assistance for employee training schemes.

There are prestigious universities that offer specific advanced academic courses in France in subjects related to the video games industry. In addition, there are grants for employee training programmes.

The highly skilled French professionals, the infrastructure that exists and tax benefits are the three main arguments employed by the French public sector to attract foreign investment to the video games sector.

The case of South Korea

South Korea is a very important country in the development of the video games industry; it is the country with greatest broadband penetration and its online games market represents approximately half the total world market.

The importance of the technology and information industry in South Korea is such that in 1994, after an organisational reform of the public administration, the Ministry of Information and Communications (MIC) was created. One year later, in 1995, the MIC, aiming to boost and develop the industry, created the *Korea Information Infrastructure Initiative* (KII; 1995-2005). This initiative organised the aid for developing IT in South Korea on three fronts: *Government, Testbed and Private*. The goal of the first front *(Government)* was to ensure the existence of the infrastructures necessary for the development of a national broadband network in South Korea. The second initiative *(Testbed)* focused on promoting and developing R+D initiatives, whilst the mission of the third *(Private)* was to facilitate competition in the market for broadband to reach homes and companies through private enterprise.

Looking towards the future, South Korea is focusing on the creation of the *Digital Media City,* which is expected to be completed by 2010. The project is concentrating on two major areas: support for local companies and a drive to attract foreign companies.

The first of the South Korean government's areas of attention is aimed at supporting the transfer or establishment of local companies in the area of the *Digital Media City* (Seoul). Two measures have been implemented to facilitate the establishment of companies in the area. The first measure is aimed at entities interested in purchasing a site; payment facilities are provided for this purpose and discounts are offered for payment in advance. The purpose of the second initiative, funded by the Seoul Metropolitan Government, is to facilitate leasing, by partially financing it until prices fall to a very low level. The two initiatives are complemented by the location of two South Korean government ministries close to *Digital Media City*.

In addition to attracting local companies, the South Korean government has created grants designed to promote the influx of foreign companies to the Seoul area. These grants take the form of tax exemptions and a programme of assistance for expatriates.

Furthermore, some of the most prestigious technological research and development entities are already present in the *Digital Media City* .

The case of Canada

The measures taken by Canada to drive the video games sector are focused on promoting training, a comprehensive technological development policy and an array of grants grouped together, as in the cases of France and South Korea, under the umbrella of audio-visual/film contents. This strategy not only seeks to develop the local industry but also to encourage the main international companies to invest in Canada.

Supporting information campaigns on the video games sector and contributing towards its financing, *Telefilm Canada,* an institution responsible for promoting audio-visual content in Canada, has recently created a competition to select projects with greatest success potential through the application of market criteria. *The Great Canadian Video Game Competition,* which was launched in January 2007, has the support of the industry's major players (EA, Ubisoft, Sherpa Games, IGDA, Radical Entertainment). The competition is organised in three stages:

- Stage I - Innovation: ten projects are chosen from among all the applications submitted; they are assigned a mentor and given 50,000 dollars for a concept test of the product proposed. Once this stage is completed, four projects are chosen for the following stage.

- Stage II - Product development: 250,000 dollars are awarded to develop the project until a "playable" model is achieved. In addition, support is provided for advertising initiatives and the search for investors.
- Stage III - Marketing: the winner develops a marketing plan for its product and a market ready version, capable of attracting new private investment.

The objective of this initiative is to give an opportunity to many projects that, under normal conditions, would not see the light of day due to lack of funding. As projects are selected with market criteria and grants awarded in stages (linked to participants' achieving certain milestones), their effectiveness is maximised. Other points to highlight are the active participation of the main companies in the sector and the search for investors for projects after Stage II; this means that there are real possibilities that not only the winning project will go to market but also some or all of the short-listed projects.

Complementing the specific support and funding structure of the video games sector, the province of Quebec fosters initiatives to promote the industry in areas applicable to the video games sector. Among the latter, the following initiatives are worthy of mention: funding of SME's, tax measures and grants for setting up new companies. The funding of SME's is carried out through the programme *Financement PME*, which provides special loans for setting up SME's. The tax measures are designed for companies that carry out specialist activities (one of these being multimedia creation) in the region. These companies are eligible for tax deductions of between 26,25% and 37.5% for labour expenses. Finally, there are public and private grants (in the form of venture capital) for setting up companies in the region, which are encompassed within the FIER *(Fonds d'intervention économique regiona) funds.*

These subsidies aim to foster both the establishment of large multinational studios and the creation of smaller domestic studios that can focus mainly on the development of casual games and games for mobiles (with smaller budgets) or serve as a support industry for the large studios.

The existence of a highly-skilled workforce is essential both for the development of the industry itself and to encourage investment by the main companies in the sector in Canada. For this reason personnel training is encouraged in areas specifically related to the development of video games, such as programming or 3D design.

Of particular note, in this respect, is the creation of collaboration projects between the Canadian government and several universities in the country. These training projects award official qualifications and have agreements with prestigious universities in Canada itself and abroad. There are also other centres that provide specific training in subjects related to the creation of computer graphics or animation, such as the *Animation and Design Centre* (NAD), the *Institute for Computer Graphics Creation and Research* (NARI) and the *Institut national de l'image et du son* (INIS).

2.3.2. Main trends and new business models

At this point, having described the current situation in the video games market both internationally and nationally and having conducted an in-depth analysis of the sector in some benchmark countries, we now outline the main trends in the video games sector:

In the first place, one of the most outstanding aspects is the strong growth prevailing in the sector, with a forecast AAGR forecast for the world market in the period 2006-2012 of 13%, particularly in online games and games for mobiles. Growth in the video games sector is very closely related to the digital skills of citizens in different countries, as well s broadband penetration, both fixed and mobile, for the development of mobile and online platforms.

The strong concentration of products in large multinationals companies, mainly due to the rise in production costs and market globalisation, is also noteworthy. For example, in 2007, 4 companies held the top 10 positions for console video games in the USA., 6 in the UK and 3 in Japan, the three major world markets. Moreover, considering the three countries, 8 companies are the only ones that appear in their top 10.

There is also a strong tendency towards outsourcing, due to the increased complexity and the consequent need for specialisation. In fact, over 40% of studios currently resort to outsourcing, with a forecast of 868 million by 2010. The prevailing model, therefore, is one of large studios and small satellite companies, leading to a distributed industrial fabric. This distributed model will also lead in the coming years to a continuation of the process of progressive specialisation of small studios.

There are more and more instances of partial convergence in the exploitation of concepts between cinema and video games, as some recent examples show: Pirates of the Caribbean, Superman Returns, the Star Wars saga (with several titles in the top 10 in the USA.), Cars, The da Vinci Code and Torrente. In some cases, which are becoming more and more frequent, this convergence has occurred the other way round, with video games providing themes for films. Tomb Raider and Resident Evil are obvious examples of the increasing impact of video games on cinema.

The convergence of video games is not restricted to the film industry. To a lesser extent, synergies with the advertising industry are beginning to emerge (sports brand advertisements featured on hoardings in stadiums for a sports theme based video game or advertising on Formula 1 racing cars are some examples) as well as with the music industry, where there are now cases of well-known musicians who compose soundtracks specifically for video games.

Another tendency worthy of note is the gradual appearance and the major growth expected in the coming years of casual video games and games designed for online platforms and mobile telephones.

Finally, mention must be made of the latest trend: the development of sequels and updates due to the low costs generated compared to launching original video games. It should be remembered that the average cost of a sequel may be 40% of the cost of a new video game (60% saving); this is because components and technological developments of the initial version are reused. Furthermore, as we said before, the risk associated with the launch of sequels is lower; their success is based on that of previous versions of the game.

2.4. CHALLENGES AND OPPORTUNITIES WITHIN THE SECTOR

To conclude the present analysis, the main challenges and opportunities within the Spanish video games sector have been identified with regard to the future:

Enhancement of the articulation of the sector

Due mainly to the rapid growth of the sector and the emergence of a large number of companies in a short period, there are still certain opportunities to enhance the articulation of the "network" of agents that comprise the value chain (companies, universities, funding sources and administration).

The existence of ADESE, the creation of DOID (association of interactive digital developers) and DEV are the first articulation measures in the corporate sphere. The benefits that will be obtained from a better connection of the development and video games distribution sectors are obvious, especially in terms of skilled labour and corporate growth.

Investment in the R+D+i necessary to achieve competitiveness in a totally globalised sector, with huge multinational companies and investments representing millions of euro, is also a challenge.

Development of specific knowledge and skills

Any attempt to make the video games industry in Spain more dynamic is faced with the major challenge of training and recruiting highly specialised human resources. At present, education and specific training do not fully meet the needs of the sector. To address this situation, some companies and universities have launched their first joint training programmes, as outlined in previous sections.

Development of local industry and its dimension

Focusing on the Spanish video games production industry, it can be seen that its direct presence in the market is of little significance in terms of volume (Spanish producers only account for a little more than 5% of video game consumption in Spain), in spite of the fact that Spain is among the main consumers in Europe.

Although its growth is very significant in terms of number of companies, sales are still low, and only two companies generated over €10 million each in sales in 2007.

Bearing in mind the potential of the local market, there is the possibility of taking advantage of the major growth in online games and games for mobiles (a large number of the studios set up in Spain in recent years specialise in developing games for mobiles) given the increase in broadband connections and the important development of mobile networks in the country.

The video games market is subject to great "seasonality" (revenue tends to accumulate in the period following the launch of a new title) and it is therefore advisable for companies to be large enough to survive periods when no new titles are launched or to generate a continuous flow of titles.

Attracting foreign companies

In addition to fostering the local industry, another of the major challenges faced by the sector in Spain is attracting foreign companies. One such example of this is the recent establishment of a major multinational in the sector, which chose Madrid ahead of cities such as London, Prague and Warsaw to locate its European Development Services Centre (production, engineering, multilanguage quality control, certification and localisation) on a 6,000 square metre site, where it plans to employ over 200 people.

The large multinationals in the sector currently record sales of over €700 million in Spain (they will exceed 1,200 in 2012) and, except for notable exceptions, with a minimal production investment (they only maintain a marketing/sales structure in Spain). The location by the big international studios of part of their production in Spain might serve to drive the creation of an auxiliary industrial fabric, in line with the industrial fabric model based on outsourcing of services by the big studios and on the progressive specialisation of smaller studios, as is being seen in other countries.

APPENDIX.
List of the principal developing companies in Spain

List of Companies		
Abylight	Games Gi	Nona Studios
Alcachofa Soft	Gammick	Novarama
Andor Studios	Gargore	Nurendsoft
Animatu	Geardome	Nurium Games
Anyplays	Genera Mobile	Oker Factory
Arvirago	Gameloft	Omepet
Balance Games	Gamepro	OPQA
Bety Byte	Gextech	Pendulo Studios
Bit Managers	GMW	Pix Juegos
Bitoon	Grin	Planeta DeAgostini Interactive
BlackMaria	Imaginarte	Pxsp
Blue Studios	Indie Rover	Pyro Studios
Bread Killers	Ingenieria o Arte	Quest Tracers
CMY Multimedia	Interactive Fan	Revistronic
Coptron Game Studios	Iteration	Rtz 3d Mobile Games
Crocodile Entertainment	Kailab	Runica
Childtopía	KatGames	Shanblue
Delirium Studios	Kato Studios	Silicon Garage Arts
Devilish	KitMaker	Storm Basic
Digital Chocolate.	Kurisoft	Studio FX
Digital kickers	Lady Benko	Symbia It
Digital Legends	Legend Studios	Tanoku
El neutrino raro	Lemon Quest	Tao Spain
Enigma	Lemon Team	Tapazapa
Enjoy Up	M.A Software	Taykron Games
Enne	Maganic Wars	Time Invaders
Escaque	Mayhem Project	Toxin Works
Esperit VJ	Mercury Steam	Tragnarion
Evolution Dreams Studio	Microjocs	Ubisoft
Exelweiss	Mobile Games Pro	UC GAMES
Free Creation Games	Msolutions	Unkasoft
Freedom Factory Studios	Natygames	U-Play Studios
Fx Interactive	Nebula Entertainment	Vector Animado
Gaelco	Nerlaska	Virtual Toys
Gamepro	New Horizont	Zed
Games Always Return	Nivel 21	Zinkia

03

Music sector

- The music sector is experiencing a transformation process during which earnings have fallen from €457 million in 2003 to €284 million in 2007, mainly due to the decline of hard copy sales.

- In spite of the fact that music consumption in Spain continues to increase, its monetisation is complex, a situation that is illustrated by the fact that according to industry estimates Internet and mobile phones account for over 60% of consumption but only 9.5% of income.

- The high market penetration of mobile telephony in Spain, coupled with new features included in second and third generation phones, has meant that consumption of music downloaded to phones accounts for 82% of the country's overall digital market, bringing trade figures up to €22 million.

- The distribution of music through the Internet and mobile phones, with double digit growth figures, is an opportunity for the sector, as is advertising or social networks, which have become the basis for the development of new business models.

3.1. DESCRIPTION OF THE SECTOR

The music sector dealt with in this chapter is limited to music distributed in hard copy, digital distribution services and that which can be downloaded to mobile phones. Trade figures do not include income from concerts, although a passing reference in made to these, nor information on sales of hardware or secondary income such as that derived from the use of music in advertising campaigns.

The total income of the music market in Spain in 2007 was €284 million, of which €27 million came from digital distribution channels. This can be broken down into €22 million from sales via mobile phone, and €5 million from Internet downloading services.

While the evolution of the hard copy distribution market shows negative growth, digital distribution, both for mobile phones and the Internet, has experienced a significant increase.

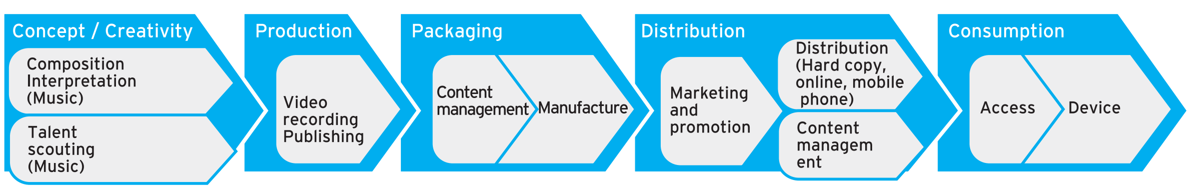
As far as demand is concerned, one of the features of Spain is the importance of the domestic music market, backed by various companies and by the current boom in Latin music. This trend is illustrated by the predominance of Spanish groups during 2007, which accounted for 32 of the 50 highest selling records.

The process of creating a product for the music industry starts by generating ideas, composing and performing the song and with talent scouting. At this stage creative talents, including song writers and singers, managers and labels, are active. Most of the work carried out in this link in the value chain consists in composition, performance, talent scouting and the promotion and management of artists.

The next stage is that of production itself. This includes recording and editing the material and involves the artists, recording studios and music producers. The activities carried out at this stage include artistic management of the recording, filming, editing and technical adjustments.

The next phase, packaging, generally comprises management and manufacture of contents based on previous ideas and productions. This stage involves record factories, production companies, radio stations, digital content management companies and mobile telephony operators. The work carried out at this stage includes transformation of formats, cataloguing, authorisation, copyright management and manufacturing, printing and releasing the material.

Figure 3.1. Music sector value chain



Source: ONTSI

The following stage, the actual distribution, involves marketing and promotion, distribution and content management. Agents involved at this stage include the media, music production companies, radio stations, retail distribution and sales, mobile telephony operators and other networks. The activities at this stage involve promotion, communication and distribution of the product. Digital platforms are emerging distribution channels.

The new business models currently arising require a reformulation of the music value chain as more and more distribution channels and marketing formulas are being created involving an increasing number of sectors. Such is the case with own-distribution or open licence music.

Finally, the consumer stage includes access to the product and the device on which it is supplied. On the access side, the agents involved are Internet operators, digital terrestrial television and digital satellite television, and analogical, cable and wireless operators who perform the task of connecting consumers with content. The physical formats used at this stage include DVD/DVRs, TVs, STBs (set-top-boxes), PCs and other playing devices such as MP3 and DVB-H mobile phones. All these devices enable the product to be consumed.

3.2. SITUATION OF THE MUSIC MARKET

3.2.1. Demand

Demand for music has had a varied evolution over the past 15 years. In 1991 the sector was worth €436 million, a figure that fell slightly in 1993 when the market was estimated at €425 million. From that moment it began to rise significantly until 2001, when it reached a record high (€685 million); this was also the year in which the transformation of the market commenced, with the emergence of new distribution channels.

The transformation processes caused the traditional market to fall by 11.2% a year between 2003 and 2007, although music consumption (number of songs) has grown by over 5% a year since 2002.

In 2001 nearly all music was distributed through hard copy channels. Forecasts indicate that new distribution channels such as mobile phones or online pay channels, will cushion loss of income in the short and medium term. Overall, music sales in Spain in 2007 fell by 22.7%, which represents a drop of €83 million in sales. Analysed individually, hard copy sales fell by 25.7%, although digital sales increased by 24.3%, reaching €27 million. This, however, has not offset the fall of hard copy sales.

Income from digital music, on the other hand (download services and digital content for mobile phones) has increased with respect to 2006, accounting for 9.6% of the overall market in 2007, according to figures released by Promusicae.[1]

According to PricewaterhouseCoopers forecasts, the growth of new distribution channels will offset the fall in the traditional market, and although trends point to a further drop in physical distribution of nearly 12% a year for the 2007 to 2012 period, annual growth figures of 16% for mobile phone distribution and 94% for online distribution are expected. Estimates for 2012 therefore indicate that new music formats will account for around 57% of the market, compared with 10% in 2007.

Live concerts are one of the most important and most loyalty-based forms of music consumption. According to estimates based on figures released by SGAE, income from live concerts has been steadily rising from €144 million in 2005 to €150 million in 2006.[2]

In 2007, rights derived from the staging of live concerts increased by 23%, a result of the increasing popularity of this kind of music consumption. Live concerts, therefore, already account for a considerable percentage of sector's revenue, far above digital distribution and gaining more and more ground on hard copy CD sales.

[1] http://www.promusicae.org

[2] http://www.tarifas-generales-sgae.es/es/comunicacion-publica/conciertos and http://www.sgae.es/recursos/informes/memoria_2007/08_los_ingresos.html#artes

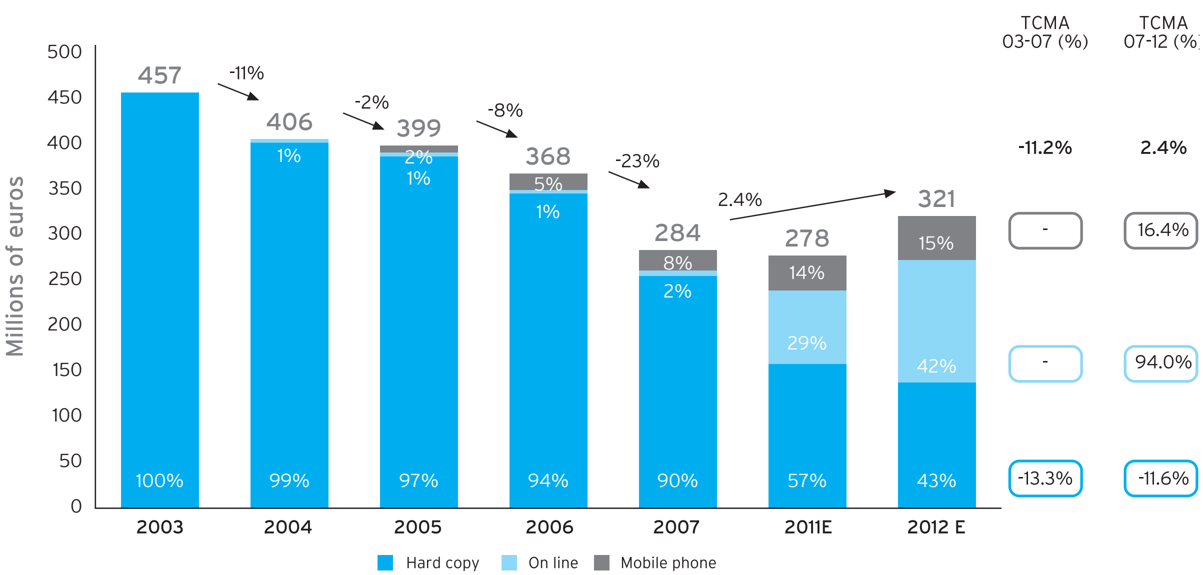
On the other hand, with regard the overall decline of the music market, consumption of music is, paradoxically, on the increase. In 2007 a total of 298,836,000 songs in hard copy format were sold.[4] In spite of the drop in industry revenue, music consumption has been steadily increasing in recent years as a result of the emergence of new listening formats such as MP3 players and mobile devices, which are increasingly streamlining their operational features towards reproducing music.

In this context of music consumption growth, Spanish artists could find openings in the Spanish speaking market, above all in Latin America and the USA.

Domestic music occupies an important position in Spain; sales are similar to those of foreign artists and domestic music accounts for approximately 70% of *hits* in Spain, deeming as a *hit* a record that is among the 50 most sold in a particular year. In terms of volume, 58% of sales in Spain correspond to domestic music, compared with 41% of music by foreign artists and 1% of classical music sales.[5]

This pattern of sustained growth of Spanish music is also reflected in the number of best selling records in Spain. In 1993 there were little more than 15 hits by Spanish artists compared with 35 by foreign artists. The percentage balanced out in 1998, with the *hit* parade divided in 25 records by foreign artists and 25 by Spanish performers. Finally, in

Figure 3.2. Evolution of the music sector in Spain, 2003-2012E (€M)



Source: ONTSI and "Global and Entertainment and Media Outlook: 2008-2012" PricewaterhouseCoopers (2008)[3]

[3] Basic Promusicae data and market outlook based on report by PriceWaterhouseCoopers.

[4] Estimate based on total sales of CDs, vinyl LPs, cassette tapes and singles and assuming 10 songs per CD and two per single.

[5] "Various artists" sales have been included

2007, 60% of the top 50 best selling albums were by Spanish artists, with 32 *hits* against 18 by foreign artists.

3.2.2. Supply

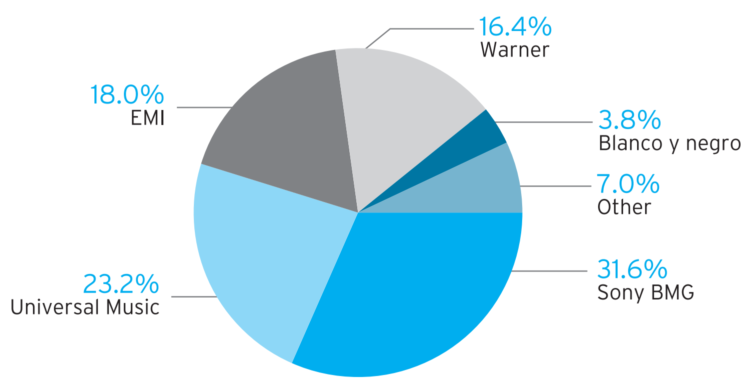
Currently, four multinational foreign record labels account for approximately 90% of market sales. The most important of these is Sony BMG, with a market share of 31.6%, followed by Universal Music with 23.2%. The latter purchased Vale Music, a Spanish record label, in 2006. Spanish record labels occupy 11% of the market and among these, Blanco y Negro, the largest, has 3.8% of the market share.

Of all the agents involved in the value chain, record companies play an important role by taking the financial risk of committing to a particular artist.

Although artists play a fundamental role in the creation and performance of songs, producers play a significant part not only in the recording and manufacturing process, but also in promotion, operation and production. There is, however, a real possibility that promotion, operation, production and distribution of music will no longer be controlled by intermediaries due to the existence of new distribution channels (Internet and mobile phones), which allow artists to supply their products directly by including them in leading music websites or through agreements with leading mobile phone operators.

In this shrinking market context producers are seeking diversification and business expansion strategies that enable them to be productive in the new context of digital convergence and withdrawal of physical formats.

Figure 3.3. Distribution of the record label market in Spain (% income for sales, 2007)



Source: Promusicae 2007

3.3. ANALYSIS OF INTERNATIONAL BEST PRACTICES AND MAIN TRENDS

In order to gain insight into international practices in the sector, a music industry benchmarking exercise was carried out. The countries considered most relevant for this survey were the UK, France, China, Japan and South Korea.

3.3.1. International practices

The case of the UK

The UK is the largest digital music market in Europe in terms of sales income, followed by France and Germany. It is the leading market in the EMEA region (Europe, Middle East and Africa) with an income of $3.187 billion, doubling the French figures which in 2007 were just slightly above $1.500 billion. With disaggregated data it also leads the field in the EMEA region in the online and mobile phone music spheres, with figures of $326 and $130 million respectively in 2007. This leadership has been maintained since 2003 due to the early digitisation of the country, a situation that has enabled a more extensive use to be made of new digital distribution channels compared to other countries analysed.

The UK has launched specific initiatives to promote British artists by creating a strategic music export development group for each key market, such as the US and China, and also through measures such as:

- The creation of a website to promote British artists.
- The organisation of a British music event in New York.
- Agreements with foreign distribution channels to play British music.

The UK has also launched government sponsored training programmes (in some cases in co-operation with music production companies) and has proposed granting tax credits for investing in artists and repertoires by classifying this as R+D.

The case of France

France has focussed its public policy on promoting two areas of the music industry. First, it has established a 40% quota of peak radio audience times for broadcasting the work of French artists, half of which must be devoted to new artists. This measure aims to promote French artists, above all new artists, in their country of origin.

Secondly, by means of a law passed in June 2008, France has outlawed all unauthorised copies of files, except private copies. Failure to comply with this can constitute grounds for civil or criminal action with penalties of up to €300,000 and/or three years imprisonment for the infringement of intellectual property rights. To ensure compliance with the law a monitoring organisation, the Authority for the Protection of Copyright and Dissemination of Works Over the Internet Authority, has been created.

The case of China

In a country with an extremely high volume of downloaded music, the recent agreement between Google and various Chinese and international record labels to launch a music search and download service funded by advertising has been a significant development. The new service will be called Music Onebox and will be launched through the Chinese website Top100.cn, which has up until now supplied pay as you go music. This new Google feature is part of the search engine's strategy to boost its presence in China and to catch up with its main competitor, and industry leader in China, Baidu.com.

The case of Japan

Japan leads the world in digital music sold through mobile phone channels (91% in 2007) and is one of the top 10 in the main digital markets. This situation is mainly due to the high penetration of mobile telephony, which has over 100 million subscribers and 70 million 3G users.

In addition to this, a main feature of the Japanese market is the creation of synergies between record labels and mobile phone users, which have boosted retail music services by increasing sales through this channel. An example of this situation is Label Mobile, a leading provider of digital content for mobile phone operators.

However, the greatest achievement of the Japanese market is its position as the first country to offset the fall in hard copy sales with digital sales: the ¥13.800 billion in losses in the hard copy market has been balanced by ¥15.076 billion in digital music consumed in 2006.

The case of South Korea

South Korea also derives significant income from digital formats which, in 2007, accounted for nearly 61% of sales, compared with 39% for the hard copy market. This is due to the country's high level of investment in cable infrastructure and providing HSDPA-based (*High Speed Downlink Packet Access*) mobile phone services that facilitate the consumption of music through *streaming*.

In figures, South Korea is third in the mobile phone music ranking, behind China and Japan. The country also has one of the most advanced wireless networks, which has enabled it to reach double figure mobile phone market growth rates (nearly 20%).

3.3.2. Main trends and new business models

3.3.2.1. New distribution channels

The effective monetisation of increasing consumption through new distribution channels could become one of the mainstays of the music industry, although traditional formats will continue the be important. According to figures (PricewaterhouseCoopers) for the music industry in Europe, the Middle East and Africa (EMEA) for the 2007 to 2011 period, physical formats will continue to lose ground and are expected to fall by 10% a year over the period, while new channels, mobile phone and digital formats, will become increasingly important with a forecast growth of 29.9% and 40.2% respectively until 2011.

In recent years there has been an abundance of new digital music distribution channels of which there are three types: downloads/pay-per-download, subscription and streaming.

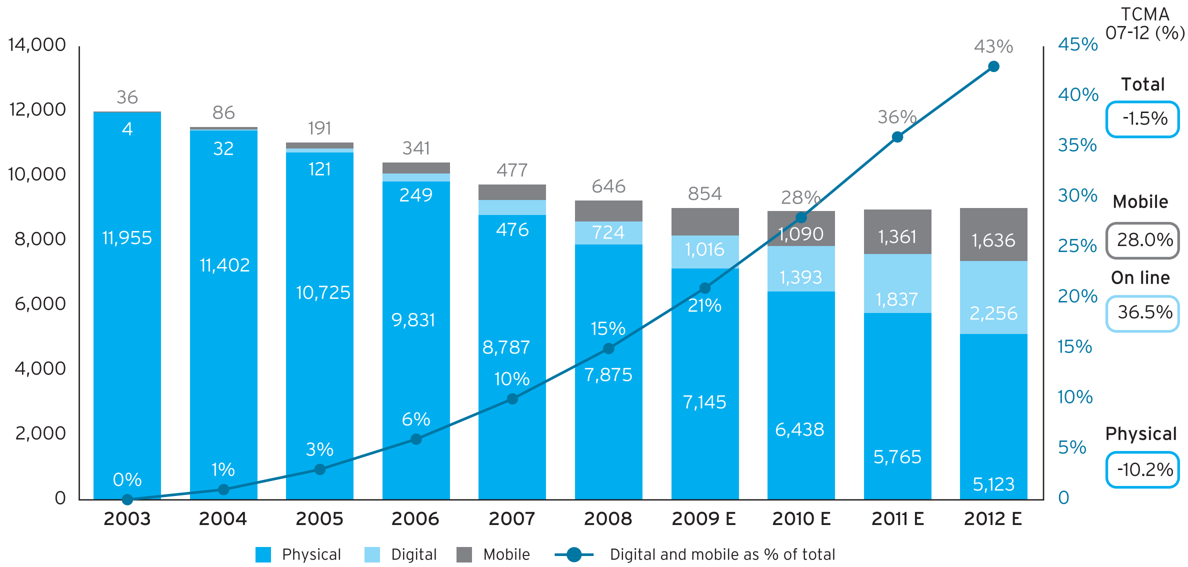
With regard to pay-per-download, there are various companies offering such services, these include iTunes, Nokia Music Store, msn, Mashboxx, Walmart, Yahoo!, Musiwave, BuyMusic.com, or Amazon MP3, which joined in 2007 and has become second to iTunes in the ranking of a la carte music download providers in the US, topping Walmart. Downloads usually cost between $0.88 and $0.99 each and usually follow the client/server model, where the content is owned by the user. This business model is complemented by the sale of devices.

In the field of subscriptions, the main competitors are Napster, Yahoo!, Rhapsody and Pixbox. Subscriptions cost between $8 and $15 a month and give access to the distributor's entire catalogue. Songs downloaded using this system can be played on the PC or on compatible MP3 players.

Widespread use of the Internet for music consumption first prompted record labels to supply DRM (Digital Rights Management) protected files. This became an obstacle to consumption as it hindered full client interoperability. In the light of recent industry trends, leading record labels such as Apple, EMI and Universal have decided to start making DRM-free songs available for public consumption.

Finally, *streaming*, with competitors such as Pandora, Visual Radio, Neuf Music and Yahoo!Music, provides users with a free, customised, online radio station. Income comes mainly from advertising and subscriptions to the content. Programming is individually configured for each user based on the songs chosen and their ranking. Yahoo!Launch also

Figure 3.4. Evolution of the EMEA music market, 2003-2012E (€M)



Source: "Global and Entertainment and Media Outlook: 2008-2012" PricewaterhouseCoopers (2008)

provides on-demand music videos. Pandora, Stage.fm, or Deezer are examples of free services funded by advertising. *Streaming* also provides an alternative, advertising-free subscription service. Pandora's prices for this, for example, are €36 a year or €12 a month.

3.3.2.2. Online music

There are several examples of online music sales, among which the most important are those that allow users to break albums up into individual songs, i.e., they provide the option of buying individual songs instead of entire albums. This convenience-based buying experience by which users can buy music online and download it to their device has the advantages of eliminating the need to visit a shop and avoiding having to accumulate towers of CDs.

Another successful model is based on creating interactive channels synchronised with a standard FM radio station. The main services on offer are music (accompanied by information about the artist and the song being played, together with concert dates and music industry news), news and sports (providing, for example, detailed maps to accompany the weather forecasts with photos and in-depth coverage during sports and news broadcasts), as well as interactive services through which users can take part in competitions, voting and give their opinions.

There are also peer-to-peer digital content download services for music, films and TV series. These involve payment of a monthly fee or pay-per-download (for example, €0.75 for an ordinary song and €1.15 for a new release). The content is made available thanks to agreements with large music production companies and these sites can have up to 1,500,000 downloadable files, mostly music.

Finally, it is important to mention the existence of social networks of applications that, for example, allow users to create their own "personal radio", a customised radio station created by uploading a selection of music that can later be played anywhere. This is enabling social networks to become one of the new distribution channels for digital music content.

3.3.2.3. Music on mobile phones

In recent years the release of second and third generation mobile phones has revolutionised music distributions models. The capacity to play and store files, in addition to Internet connectivity, have turned these into key portable devices; in fact, music downloaded to mobile phones accounts for half the global income from non-physical music distribution media.

In Spain, sales of polyphonic music (ringtones and polytones) for mobiles have achieved good results and an annual growth rate of 33.6% is expected over the next 5 years, constituting an important industry growth factor.[6]

Likewise, considerable innovations have taken place in the use of songs on mobile phones and it is now possible to make partial, adapted copies of songs. Record labels use CD covers and advertising to provide users with access to songs from their favourite artists.

New business models based on including additional services that give consumers added value in traditional media have sprung up around this revolutionary use of mobile phones as the number one portable music player.

With regard to musical content available online there are very few companies offering this kind of service, and a single company (iTunes) leads its competitors with 83% of all content on the market: in 2008 the company reached sales figures of 5,000 million songs.[7]

3.3.2.4. New marketing models

Music digitisation is opening up new marketing formulae, where monetisation can be both from direct (sale of access to contents) and indirect revenue (music content allows companies to sell other kinds of products or to include advertising).

Numerous business models are being developed based on fans acquiring the rights to songs in order to promote the recording and production of records by their favourite artists. Record labels have joined this new business trend and have started to sell and auction the rights to songs by famous groups.

3.4. CHALLENGES AND OPPORTUNITIES WITHIN THE SECTOR

An important challenge faced by the sector is the **increase** in Spanish music **exports**. Spanish music is widely consumed abroad, but the more international Spanish artists do not usually work with Spanish record labels or production companies and, therefore, their foreign sales mainly benefit multinationals.

The Latin market presents an interesting opportunity for the internationalisation of the Spanish music industry. Access to other markets offering digital distribution would provide an opportunity for making good use of the export potential of Spanish music. Another option is to sign agreements with international distribution companies to copy and market Spanish music.

[6] PricewaterhouseCoopers, November, 2007.
[7] www.elpais.com (20/06/2008).

The lower costs of online distribution with respect to hard copy distribution are an incentive for **digitising musical catalogues** that have hitherto been excluded from the commercial field because it would be unprofitable to market them using traditional means of distribution.

The challenge facing the music industry today is to continue to explore **new business models** that will lead it back onto the road to growth. Convergence with the video games industry (an example of which is "Guitar Hero"). and packaging music with mobile telephony terminals and services are two promising examples for the industry.

04

Audio-visual sector

- Within the audio-visual sector, the television (commercial and pay TV) and radio markets are analysed, in both analogue and the new digital formats

- The unencrypted TV market in Spain has shown considerable growth and profitability in recent years, with TV operators and production companies that are comparable in size and profitability to those in other EU markets.

- The increase in foreign-produced series and the migration of audiences to other media such as the Internet represent the most significant challenges for the sector.

- Audience fragmentation and the loss of advertising effectiveness might affect the sector in the medium term; it will have to gradually adapt to a different scenario from the current one.

- The new channels, such as mobile TV, interactive DTT services and television over ADSL represent a major opportunity for the different agents in the sector.

- In the radio sector, it is to note the strength of the traditional analogue model, which still dominates the market. The loss of listeners, however, and the entry of new modes of consumption of radio content forecast an inevitable evolution towards digital radio.

TELEVISION SECTOR

4.1. DESCRIPTION OF THE SECTOR

The audio-visual market includes television production companies, who make and produce programmes, and television operators. In Spain the television market achieved sales of €5.323 billion in 2007; pay TV accounts for 38% of this figure and unencrypted television 62%.

There is a structure of established and profitable production companies in Spain. However, some uncertainty exists in the face of gradual audience fragmentation and the resulting difficulty for channels to reach mass audiences. This fragmentation is caused by the proliferation of DTT (digital terrestrial television), Internet television, personal contents, etc., which have captured traditional TV format audiences.

The audio-visual sector value chain comprises five well-defined links, resulting in end products and services such as series, news programmes, documentaries, *talk shows, reality shows,* children's programmes, cartoons and personal contents, which are created by users themselves.

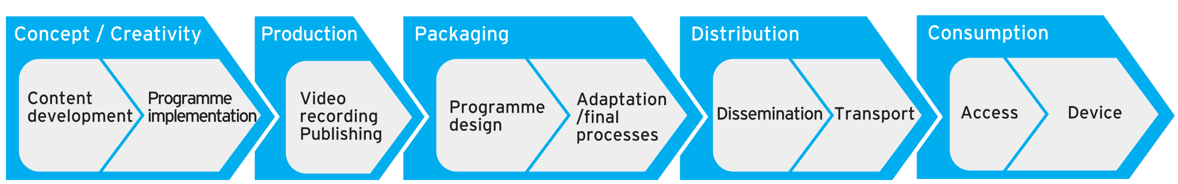
This value chain begins with the generation of ideas and creativity process, the creation of contents and the making of programmes; both production companies and television operators are involved. These two participating agents are responsible for gathering and analysing information, preparing scripts and interviews, casting and presenting programmes.

Production companies and television operators, as well as the agents commissioned to create formats, such as short films, gags, hidden camera, etc., participate at the production stage, when material is recorded and edited. All of these agents carry out filming, technical cutting, audio and video monitoring, lighting, and artistic design.

The channel editing phase includes programming design, adaptation and end processes. Television operators and cable operators participate in this phase; they are responsible for defining the type of programme and programme content, purchasing and managing rights, drawing up and updating the programme schedule, and adapting formats.

The next link in the value chain is distribution, which includes broadcasting and transporting the signal. With respect to broadcasting, one must bear in mind that in Spain there is a distinction between physical distribution, carried out by the telecommunications operators, and logical distribution, which is implemented by the television operators. In this stage the cable operators perform communication, promotion and broadcasting functions, whilst the

Figure 4.1. Audio-visual sector value chain



Source: ONTSI

telecommunications operators, who include the owners of repeaters, satellites, etc., are responsible for transporting the signal, whether terrestrial (analogue or digital), by satellite, cable or by Internet (IPTV).

Finally, the consumption stage includes access to the product by means of the different technologies and the device necessary to enjoy it. Television operators, telecommunications and cable operators, who carry out the connection between consumers and contents, whether by terrestrial digital connection, satellite digital, analogue, cable, Internet or mobile, participate in the aforementioned access. Also there are the manufacturers of televisions, computer,s DVD players, etc., who provide all kinds of physical media and the hardware elements necessary, from DVD's, DVR's, TV's, STB's *(set-top-boxes),* PC's, or portable players such as the iPod, or the DVB-H (standard necessary to distribute the TV signal to mobile handsets) mobile telephones.

In general terms, the audio-visual sector is facing a process of transformation. In this context, it is not clear how traditional television can retain mass consumption when addressing the now incipient substitution by Internet and mobile television, and the gradual increase in the age of the audience. Moreover, the audio-visual sector is very dependent on advertising, which is a a source of revenue with limited growth expectations (6.9% for the period 2007-2011, according to estimates by PricewaterhouseCoopers).

With regard to the broadcasting of traditional pay TV, it should be noted that the market is currently stagnant in terms of demand (with the disappearance of terrestrial pay television subscribers and growth of only 0.69% in subscribers to satellite television between 2002 and 2007).

All of the foregoing poses a series of questions for the sector on how demand will evolve: will a dog-eat-dog situation persist between pay operators (with the number of total subscribers remaining constant) or, in contrast, will the total number of subscribers continue to grow? Will it be possible to generate demand for new content, or how will Internet television or mobile television evolve in the medium term?

With regard to emerging models, in the area of video-on-demand and interactive television the sector is facing uncertainty in demand, especially in terms of the speed of adoption of the new interactive services.

4.2. SITUATION OF THE AUDIO-VISUAL MARKET

4.2.1. Demand

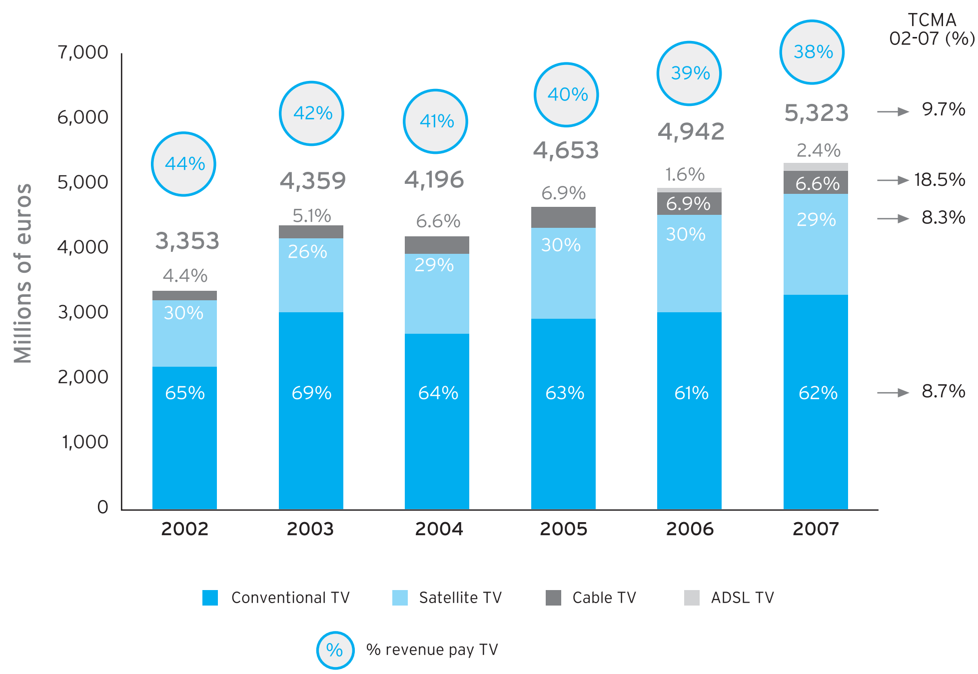
The television market in Spain is consolidated and is displaying progressive growth. Between 2002 and 2007 the sector grew at a rate of 9.7% a year, with sales increasing from €3.353 to €5.323 billion in 2007. This growth is mainly driven by the constant growth of the sector's two main transmission media, namely, conventional television (both digital and terrestrial) and satellite television (growth rates of 8.7% and 8.3% respectively), together with cable television sales, which rose from €149 million in 2002 to almost 350 million in 2007 (18.5% average annual growth).

Also noteworthy is the importance that new modes of transmission are acquiring, such as television over ADSL, non-existent in 2004, and which in 2007 represented 2.4% of sales, with around €130 million.

Future perspectives (PricewaterhouseCoopers forecasts) point to growth of the television market in Spain of ~11.4% for the period 2007 to 2011, which would set sales for the latter year at approximately €8.712 billion.

The future growth of the sector in Spain would depend to a large extent on television over DSL finally taking off (it is hoped that penetration of this

Figure 4.2. Television revenue by transmission medium 2002-2007 (€M)



Source: TMC Annual Report (2007)

broadcasting medium will increase to 1.9 million households in 2011 - an annual growth rate of 35% between 2007 and 2011), but also on another even more incipient television format, mobile television; sales for the EMEA region is already estimated at around 2.759 billion dollars for 2011 (143% AAGR 2007-2011).

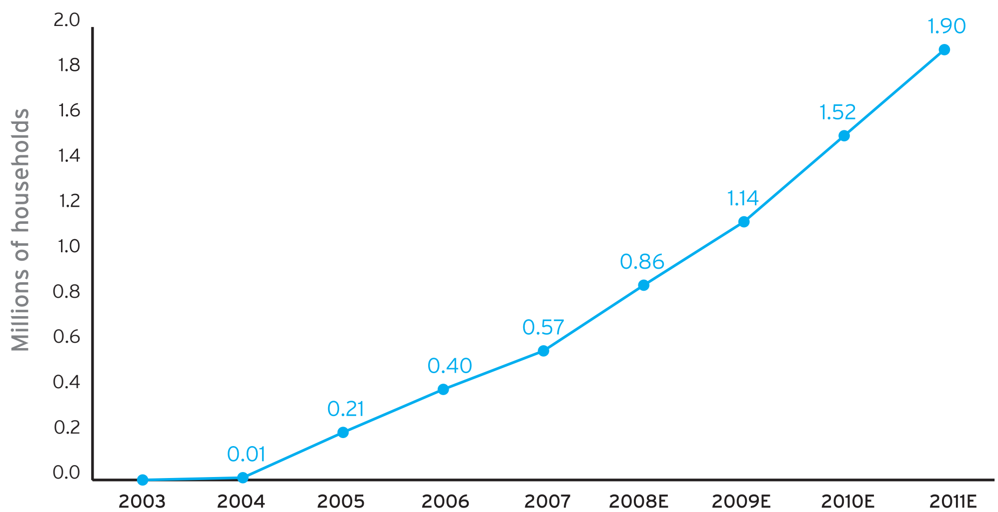
What has had a great influence on the evolution of the television sector in Spain is the fact that unencrypted television has really taken off, at the expense of pay TV. Thus, with pay TV representing 44% of the market in 2002, it has only captured 25% of growth in the sector between 2002 and 2007 (0.5 million of total market growth of almost 2 million).

In this way, pay TV has gradually decreased its share of total revenue in the sector, which has fallen from 44% of the revenue in 2002 to 38% in 2007. This demonstrates the growing success of the contents broadcast in Spain through free access media, which broadcast successful, unencrypted content such as football or Formula 1 racing.

In 2007, the principal private operators of unencrypted television achieved high profits, as can be deduced from the financial results of Telecinco and Antena 3 (profitability of 45% and 30% respectively).

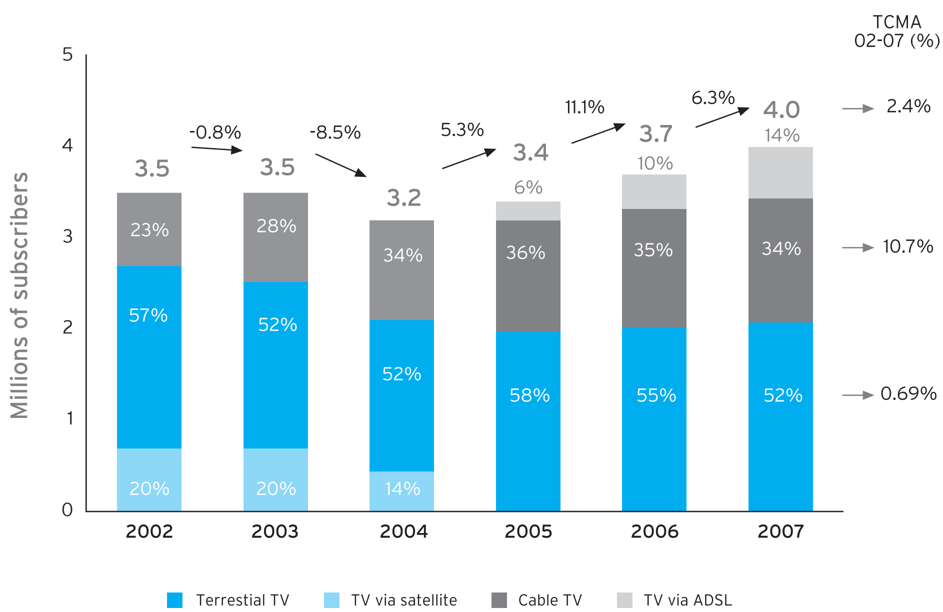
With regard to the number of subscribers to pay TV services, according to TMC data, in 2002, pay TV in Spain had 3.5 million subscribers, distributed as follows: almost 2 million subscribers to satellite television, 720,000 to terrestrial television and 811,000 to cable television.

Figure 4.3. Evolution of IPTV households in Spain 2003-2011E (millions of households)



Source: "Global Entertainment and Media Outlook: 2008-2012" PricewaterhouseCoopers (2008)

Figure 4.4. Evolution of pay TV subscribers 2002-2007 (millions of subscribers)



Source: TMC Annual Report (2007)

Although the total number of subscribers increased between 2002 and 2007 to 4 million, their distribution has varied up to 2007. Thus, the percentage of satellite television subscribers fell from 57% in 2002 to 52% in 2007, and subscribers to terrestrial pay TV had disappeared (they accounted for 20% in 2002).

In contrast, cable television, now concentrating 34% of these subscribers (23% in 2002), together with transmission media that were non-existent in 2002, such as television over ADSL (14% of the total number of subscribers in 2007), encompass the growth in the total number of subscribers between 2002 and 2007, despite the loss of over 700,000 terrestrial pay TV subscribers.

Regarding the type of content broadcast on Spanish television, it is mainly home-produced content and is held in very high regard by viewers; this is clearly shown by the fact that seven of the ten most watched programmes in 2007 were Spanish.

However, the increase in foreign series and the migration to Internet are affecting Spanish production, which has to compete against cheaper foreign series and new online media. In this sense, American series are currently regaining ground. In 2005 Spanish series were at the height of their popularity but by 2006 American series occupied over 50% of the time allotted to broadcasting comedy and drama series in Spain (Ibero-American Television Observatory data). Furthermore, the cost of purchasing American series is 10 times lower than the cost of creating Spanish series, which may dissuade television operators from investing in the latter.

Another factor is the Internet: penetration has increased greatly in recent years, which has led to users devoting part of the time that was occupied by watching television to Internet. This is particularly true of the young segment of the population (according to the study by the European Association of Interactive Advertising, 82% of young people use the Internet between 5 and 7 days a week while only 77% watch television in the same period).

This situation leads some television distribution companies to rethink their strategies in order to maintain the feasibility of their business; this has meant increasing the offering of digital terrestrial television channels, or even the more recent appearance of an offering of Internet or mobile television.

4.2.2. Offerings

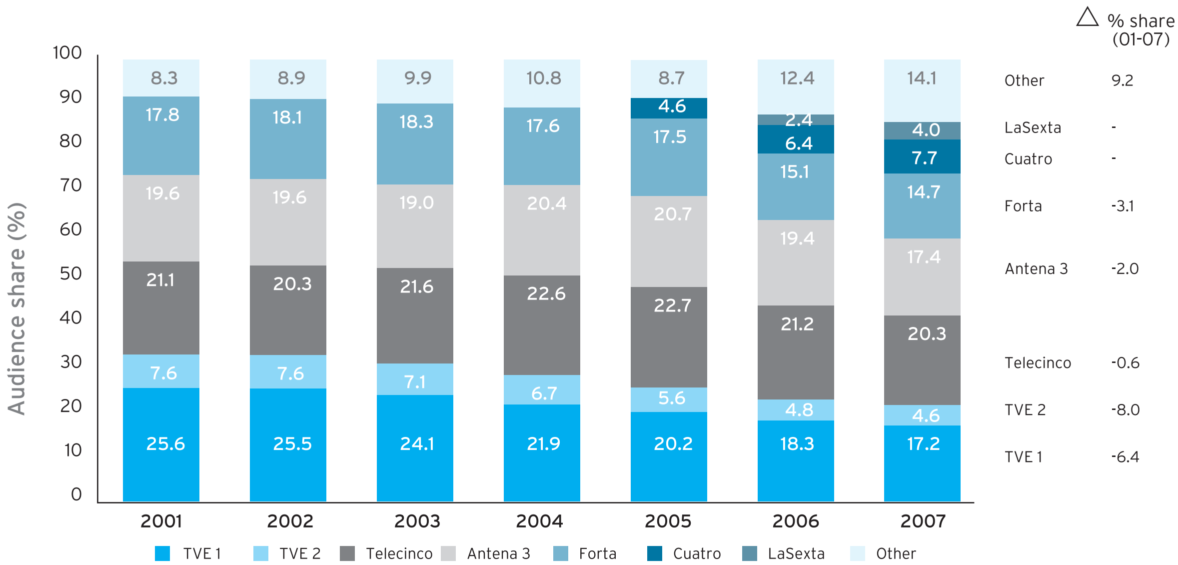
Audience fragmentation is expected to become more pronounced over the next few years as more and more new television channels become available; it is estimated that the number of channels will treble the current figure. Audience evolution since 2001 shows that in that first year five channels (La Primera, La 2, Telecinco, Antena 3 and Forta) accounted for 91.7% of the market share, while in 2006, with the emergence of channels such as Cuatro or La Sexta, the market share of the aforementioned 5 channels was only 78.8%, and in 2007 it fell to 74.2%. The operators most affected by this redistribution of the market are the public ones. In the period between 2001 and 2007 La Primera had negative growth of 6.4%, La 2 8.0% and Forta 3.1% in the same period.

The television production market in Spain is consolidated, with solid and profitable companies. Gestmusic/Endemol, for example, one of the major companies in the sector, recorded revenue of almost €87 million in 2007, compared to €76 million in 2006; this represents profitability (understood as EBITDA divided by sales) of 20% for that year, while profitability for the sector in Spain in the same year was almost 29% (Axesor data).

On the other hand, despite the growth witnessed in recent years, international sales of Spanish television productions have fallen; Spain's exports in this area amounted to €35 million in 2007, representing a reduction of 1.4% compared to 2006 (FAPAE data).

After television advertising market growth of around 10% between 2003 and 2007 (according to

Figure 4.5. Evolution of average listenership in Spain (1990-2007)



Source: TMC Sofres/IOPE; Infoadex; ZenithOptimedia

Infoadex data), €2.317 bn in 2003 to €3.467 bn in 2007, forecasts are for a lower growth rate in the coming years (around 7% between 2007 and 2011, according to PricewaterhouseCoopers).

However, although the market will continue to grow at a significant rate, the proliferation of new channels will mean that it will be shared out among more agents.

4.3. ANALYSIS OF INTERNATIONAL BEST PRACTICES AND MAIN TRENDS

A comparative study of the audio-visual industry in benchmark countries of most relevance for Spain with regard to the present study has been conducted for the purpose of observing best practices in the sector.

4.3.1. International best practices

The future growth of the television market is expected to be influenced to a large extent by the launch of new television modalities, especially television over ADSL, which will make Spain an important Internet television market in Europe. One of the reasons for this stems from the tax benefits introduced for digital television (a reduction of VAT in Spain from 16% to 7% in January 2006).

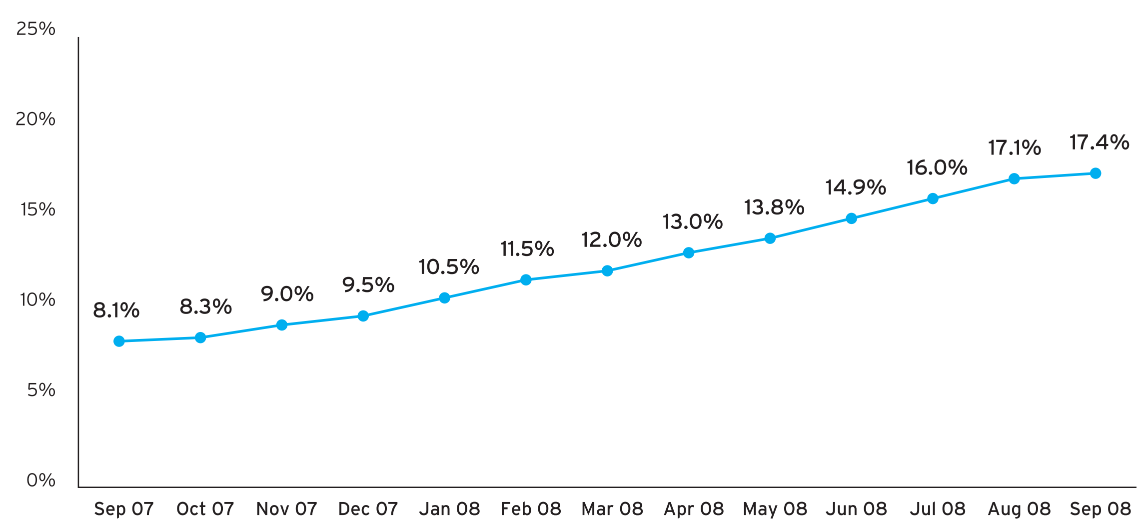
In other countries, such as the UK, France or Italy, there are larger television production companies than in Spain, although the *independent* ones are of a similar size to the leading companies in Spain. Endemol embodies the model of the pan-European producer, with production companies in countries such as Spain, France, the UK and Italy, among others, markets in which it is leader or occupies an important position.

The case of Spain and the implementation of digital terrestrial television

In Spain, the DTT development process is significantly modifying the audio-visual market, both as regards the extension of the technical distribution possibilities of television and the extension of contents and services that are accessible free of charge for citizens.

According to the latest data, the implementation of digital terrestrial television and Spanish people's

Figure 4.6. Evolution of DTT audience share in Spain (September 2007 to September 2008)



Source: Sofres

interest in this medium is progressing at a good pace. With the analogue switch-off set for 2010 (this date has been brought forward from 2012, the date initially set), in July 2008, 89% of Spanish people were able to receive Spanish DTT channels; this is promising in terms of achieving the goal set by the Digital Terrestrial Television National Technical Plan, according to which, reception of Spanish public channels must reach at least 98% of the population by April 2010.

Although 2010 is the deadline set for the analogue switch-off nation-wide, many towns are less than 6 months from that date; recently, the first analogue switch-off in Spain was carried out in **Soria**. On 23 July analogue television ceased broadcasting in 162 towns in this area. Since 23 July, no signal failure has been detected by red.es anywhere in the reception area, and of the 1,700 phone calls received within the Contingency Plan to address incidences, over 95% were resolved positively in less than 24 hours.

Penetration of DTT in Spanish households is 37% at September 2008, with an estimate of 41% for October 2008, (according to *Impulsatdt* - Association for the Implementation and Development of Digital Terrestrial Television in Spain) data, which is higher than the figure for other European countries such as Germany (11%) or Italy (26.7%), though still behind the UK (65%). By geographical area, according to Impulsatdt data, for the first time an Autonomous Region (Catalonia), with 51%, exceeds 50% penetration in households, followed very closely by Madrid, with 48%.

With regard to the **sale of equipment,** at September 2008 almost 12.4 million DTT tuners had been sold in Spain, with over 4 million receivers sold this year so far; sales were largely boosted by the 500,000 units sold in August alone thanks to the broadcasting of the Beijing Olympic Games.

DTT **audience share** also reached a high in September this year; compared to the 8.1% audience share for DTT in Spain at September 2007, a year later the figure had risen to 17.4% (Sofres data). This means that 7.7 million people now have daily contact with digital terrestrial television.

According to Impulsatdt data and in terms of viewer groups, children are generating increasing interest with regard to bringing forward the adaptation of digital terrestrial television, and in an audience ranking dominated by the major general interest domestic channels, Antena.neox is the DTT theme channel with the highest viewing figures, with a 3.7% share, followed by two theme channels aimed at a younger public, such as Disney Channel (DTT share of 3.6%) and Clan TVE (3.5%).

Worthy of note in the case of **Disney Channel,** which as from 1 July 2008 began to broadcast unencrypted via digital terrestrial television (on the channel formerly occupied by Fly Music. According to the company, the decision was prompted by the desire to “cease being an exclusively pay service and develop a connection with viewers and advertisers”.

The case of Italy

At the end of 2007, Italy had 4.4 million satellite television, 0.73 million cable television users and around 8.6 million DTT users.

Principal characteristics of DTT in Italy:

- There are 27 domestic channels and over 40 local ones, in a mixed model comprising unencrypted DTT and a pay model based on pay-per-view services and prepayment through the purchase of cards at news-stands and top-ups at ATM's or via SMS.

- DTT coverage reaches 80% of the population, and penetration in households is 26.7% (July 2008).

- Despite the fact that Italy had a slow start in the digital television race, since 2004 (when DTT was turned on), it has sped up its growth, thanks to government backing.
    - Between 2004 and 2005, a mass €200 million subsidising campaign of DTT tuners was carried out.
    - In addition, a €120 million (€40 million a year from 2007 to 2009) digital transition fund has been created to encourage the production of digital television content of exceptional value in order to make it accessible to all the population.
    - Furthermore, in July 2007 the *Ministero delle Comunicazioni* awarded a grant of €33 million to the RAI to increase DTT coverage and reach 85% of the population as soon as possible.
    - Currently, a new campaign to subsidise terminals is being carried out; this takes the shape of a €70 grant for the purchase of hi-tech tuners.

The case of the UK

With over 3 million cable television and 8.3 million satellite television users, the UK has structured the analogue switch-off over a 4 to 5 year period, from 2008 to 2012 (the switch-off was initially set for 2010); it is based on gradually activating switch-off processes in different regions and in different years.

Principal characteristics of DTT in the UK:

- It is a mixed model, with free channels via the Freeview platform, and pay channels via Top Up TV.

- There is a very large number of digital channels, with around 60 domestic digital channels, of which virtually two thirds offer unencrypted broadcasts.

- DTT penetration has grown significantly since 2001, and in July 2008 it had already reached 65.1% of households.

- To support the analogue switch-off process, the government will earmark €879 million between 2008 and 2012 to subsidise receivers and facilities for special groups (elderly people, handicapped, etc.).

The case of France

Principal characteristics of DTT in France:

- The analogue switch-off process in France is scheduled to be completed late in 2011 (it has been delayed as it was initially set for 2010).

- Like the UK and Italy, France has a mixed digital terrestrial television model that combines free programmes and pay per view offer; this results in an offering of 18 free channels and 11 pay channels.

- Digital terrestrial television penetration in French households is 31.7%.

The case of Germany

Germany's case is special due to the major penetration of cable and its importance for the German economy, which means that DTT is thought of as an alternative to the survival of this medium. At the end of 2007, of a total of 37 million households, there were 18.5 million cable television users and less than 1 million satellite television users.

Principal characteristics of DTT in Germany:

- DTT audio-visual offerings are based on a free model, broken down by region, the governments or regulating authorities of which are responsible for awarding licences; this means that DTT content is not the same from one region to another.

- As a result of this fragmentation and the difference in the awarding of licences, very few agents really operate as national DTT broadcasters.

- Of the European countries, Germany is the country with least digital television penetration, even though the technological switch-off is set for 2010 and the process has been initiated by area.
- Thus, with coverage of 86% in 2008, DTT penetration at July 2008 was only 11%.

4.3.2. Principal trends and new business models

In recent years, new forms of distribution have proliferated in the audio-visual sector; these, in turn, are generating original business models, which in many cases are disruptive with regard to the traditional sector model.

A key factor in the emergence of these new models is the growing importance of the **Internet** in all walks of life. Evidence of this is the fact that, according to Infoadex data, in 2007 the Internet absorbed 6% of the conventional advertising market (compared to 2.2% the previous year). TV companies, aware of the interest of this channel and of its possibilities with regard to strengthening the link with viewers, are committing to increasing offerings of specific Internet services.

As a first example of these new models based on the development of the Internet we have **theme videos and television series broadcast via specific portals,** which are transmitted via or downloaded from the Internet and are paid for through a subscription system, or per video or separate episodes.

As we have said above, **television via the Internet** is positioning itself as one of the future levers of growth in the television market. One of the most recent examples is **Zattoo,** a company founded in 2005 that provides television channels via the Internet in Spain and other European countries; its product portfolio in Spain consists of 28 channels that can be watched via computer. Spain, together with Denmark, is the only country with coverage where the service is not yet provided free of charge (subscription of one euro a month).

Personal contents have taken advantage of the facilities offered by the Internet and have shown significant growth in recent years**.** Contents are recorded by the user and uploaded onto the Internet according to other users' votes. The leading company in this model of distribution of personal content generated by users is YouTube (purchased by Google for €1.300 billion in 2006). However, the business model necessary to monetise personal contents is not clear as yet. Along these lines, initiatives have emerged (with scant success to date) based on sharing the revenue generated by content among the users that produce them and the platform on which these contents are broadcast.

There was a recent controversy in Spain regarding certain uses of portals for broadcasting content by users involving the aforementioned YouTube and Telecinco. The television channel filed a suit in mid 2008 against the video portal accusing it of broadcasting recordings owned by the channel without express authorisation (precautionary measures were recently accepted whereby the aforementioned portal cannot broadcast recordings without the express consent of Telecinco). The opposite case and an example of a collaborative model would be the Italian television channel RAI, or the American CBS, which has reached agreements with Youtube to show users of the portal contents owned by the channel. In the case of CBS, for example, Youtube will offer American users complete episodes of various series, episodes that will last between 20 and 48 minutes and will include advertising.

However, the emergence of new business models is not only based on increasing broadcasting via the Internet; in addition, television operators are supplementing their interactive offering with multiple services aimed at enhancing profitability and increasing viewer loyalty.

Thus, the main European public television operators are offering multiple multimedia services and channels. Channels such as the BBC, (British public television channel), RAI, (Italian public television channel), or RTP (Portuguese public television channel), and RTVE itself (Spanish public television), are offering Internet services, teletext, SMS, broadband and 3G. Among the examples of services available are updates in real time, websites with news in text and video formats, games, radio broadcasts, etc. These services generate extra revenue from advertising for TV operators.

One of the interactive services that has been generating an increasing volume of revenue for television channels for years is **SMS** services. This model includes viewers sending text messages by mobile to take part in voting, purchase ringtones, logos and games, participate in television draws, or receive videos of news and television programmes by SMS. An example of this service is the programme Operación Triunfo, whereby viewers can send text messages to participate in the decision on contestants staying in the show.

The revenue generated by these services is shared between the mobile operator (who enables text messages to be sent), the content and mobile services provider (who provides the contents or the voting platform, etc.) and the television operator (who places the service at viewers' disposal).

Another service used by television operators as a tool to gain customers' loyalty is **teletext.** TVE is the market leader in this service with a share of 57% and almost 3.5 million daily visits, followed at a great distance by Telecinco with 11%.

With regard to new interactive services being offered via **DTT,** it should be noted that development is still at an embryonic stage; it has been greatly restricted by the low penetration of decoders to enable this type of service. Therefore, according to *Impulsatdt* data, of the total number of external DTT decoders sold up to December 2007 (4.1 million), only 0.2% have the technology that enables access to interactive content being broadcast.

As far as the new TV services and modalities are concerned, mention must be made of **mobile television** especially, a modality in which great growth is expected in the coming years. The initial blueprint associated with mobile TV is a short video around 5 minutes long containing news, sports or music videoclips.

The agents entering this market are mobile network operators, TV channels and content producers, and, finally, manufacturers of chips and devices necessary to make the service available.

One of the main advantages of mobile television is that it will make it possible to combine the benefits of digital television, such as the integrated user experience (composition of one's own music channel, betting and games, voting, competitions, ordering food, buying tickets, etc.), with the ease of use of multichannel interactivity via telephone, SMS or computer (long used, for example, for voting, competitions, related downloads, etc.).

Of all the revenue expected to be generated by mobile television, between 50% and 80% would go to producers and content contributors. At present, the content accounts for 50% of the fees paid by consumers of traditional television, while distribution achieves around 21%.

With regard to Spain, the high mobile penetration rate (in 2006 it already exceeded a penetration rate of 100% and stands at 111.4% in September 2008 according to TMC data), together with the medium term and long term market opportunity, makes Spain one of the European countries with highest growth potential for mobile television.

As regards content, there is a wide variety with potential for mobiles that are also attractive for customers. For example, both television and radio news can be adapted to the mobile format without major changes, as can traditional video and music formats, which could be adapted for ringtones, music downloads for the mobile, and promotional clips and live performances.

The most successful interactive services are related to sports and entertainment. In the UK, golf, the Wimbledon tennis tournament and the football World Cup, as well as interactive entertainment programmes in which viewers play and vote, are the events that attract most viewers. In Spain, during the 2008 Olympic Games, RTVE, for example, offered users the possibility of following the television broadcast free of charge by mobile telephone.

In general, strong growth is expected in this TV consumption via mobile modality, both autonomously and by direct consumption via the mobile handset itself, and in combination with other home entertainment devices (convergence between mobile telephone, PC , TV, etc.).

4.4. CHALLENGES AND OPPORTUNITIES WITHIN THE SECTOR

One of the major challenges for the audio-visual sector is **to increase exports** of audio-visual products. The percentage of television production companies' revenue from international sales is low, due partly to the fact that exports consist of basic formats and series that are easy to copy.

Furthermore, **infrastructure development** is another of the major challenges facing the sector, mainly infrastructures that contribute to the development and extension of broadband, as well as HDTV (High Definition Television), the interoperability of devices, payment platforms, convergence and *wireless* services.

Although DTT penetration in Spain is evolving very favourably (it is estimated that in October 2008 41% of households will have been reached), there is still ample room for improvement; Spain, however, along with the UK with 65.1%, leads Europe in DTT penetration.

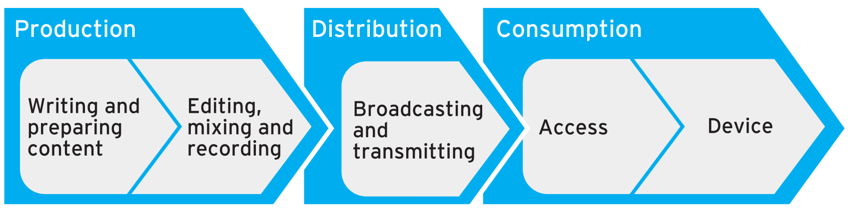
RADIO SECTOR

4.5. DESCRIPTION OF THE SECTOR

The following figure shows the value chain of the radio sector:

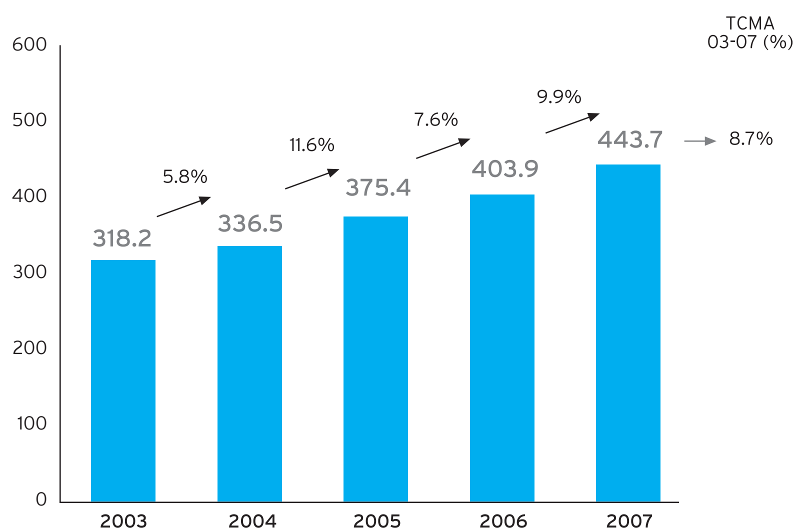
The radio industry in Spain has as a basis a business model based on advertising as the sole source of revenue (over 99% of revenue, excluding subsidies). Sales in the sector was €443.7 million in 2007, confirming the notable growth trend of recent years (8.7% average growth in the period 2003-2007).

Figure 4.7. Radio sector value chain



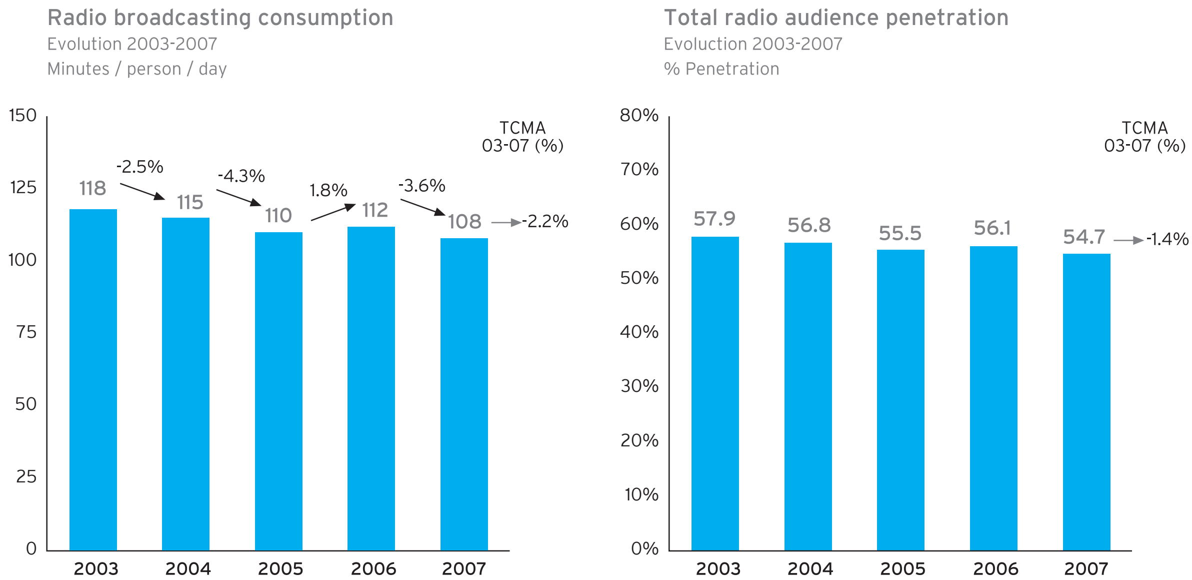
Source: ONTSI

Figure 4.8. Advertising revenue of radio sector in Spain 2003-2007 (€M)



Source: TMC

Figure 4.9. Evolution of radio listenership in Spain (2003-2007)



Source: TMC and EGM

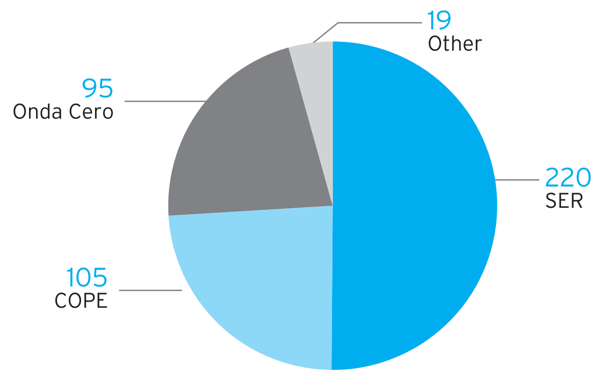
This growth in advertising revenue contrasts with drop in listenership; the annual average reduction in radio minutes consumed per person per day in the period 2003-2007 was 2.2%. This decreasing evolution is to be observed both in terms of average consumption per person and in terms of penetration and total listenership. There are two main factors to explain this fall in listenership and in radio consumption:

- The appearance of the Internet as an information and entertainment medium, which is displacing and reducing consumption of the other media (press, TV, radio, etc.).
- The change in media consumption habits of the young segments of the population, which, in general, show less interest in radio than previous generations.

Forecasts for the future of the industry are that the advertising market in radio will grow between 2007 and 2011 at a slower pace than formerly, at an annual average of 3.8% (PricewaterhouseCoopers forecasts); this would represent sales for the sector of around €514 million in 2011. This growth rate is slightly lower than that forecast for the EMEA region, which would stand at 4.7% (PricewaterhouseCoopers).

Excluding RNE (Spanish national radio), which has no advertising revenue, the radio market in Spain is characterised by its high concentration. The three main stations (SER, COPE, and Onda Cero) monopolise over 95% of total revenue for the industry with SER in a clear position of leadership; its market share is close to 50%.

Figure 4.10. Revenue of the main radio broadcasting companies and market shares 2007 (€M)



Source: TMC

4.6. THE ROAD TO DIGITAL RADIO

Two different aspects must be distinguished when addressing digitisation of the radio industry:

- On one hand there is the digitisation of the spectrum (digital broadcasting), that is, the evolution from analogue broadcasting of the radio signal (currently the prevailing model) to digital broadcasting (employing different technologies), in a process equivalent to the transition from analogue TV to DTT. This modality of radio digitisation, insofar as it uses the radio spectrum, depends a great deal for its development on the regulation and management of the aforesaid spectrum carried out by the public authorities.

- In addition, there are the new formats of broadcasting radio content via the Internet, in the different ways that the media provides (online radio):
    - Immediate real time broadcasting of radio content *(streaming radio)*.
    - Offering of deferred content to be downloaded by the user *(podcasts)*.

These new digital radio modalities, insofar as they do not use the radio spectrum for distribution, do not depend at all on regulation and administration by the public authorities; therefore, their development and massification will be directly determined by the supply and demand ratio.

4.7. DIGITAL BROADCASTING

Evolution towards a digital radio model has clear advantages over maintaining the analogue model:

- Greater efficiency in the use of the radio spectrum.
- Enhanced sound quality.
- Possibility of nation-wide frequencies.
- Lower network deployment and broadcasting costs.
- Possibility of joint data and audio content transmission.

Along these lines, digital radio was launched in Spain in 2000, with the first awarding of digital broadcasting licences (under the DAB - *Digital Audio*

Broadcasting - technological standard); licences were for nation-wide broadcasting and were operative from September of that year.

However, digital radio has yet to take off in Spain; listener numbers are very small (digital radio listenership is estimated to be irrelevant in comparison with total radio listenership) and coverage has only reached 51% of the country.

There are several factors behind this slowdown in the development of digital radio in Spain:

- The lack of clear incentives for the major stations to change to the digital model.
- The absence of a consensus process among industry players.
- The absence of a fully accepted technological standard.
- The difficulty of technological regulation in a business with thousands of local radio stations.
- The absence of a specific digital media product with content different from that of conventional radio.

4.8. "ONLINE" DIGITAL RADIO

In tandem with digital broadcasting there is online digital radio; this encompasses various modalities of radio content broadcasting via the Internet. These modalities represent a radical change in the radio value chain to the extent that:

- The distribution channel is the Internet rather than the radio spectrum, which means that locality/region/country lose all meaning; one can tune into an online radio station in any part of the world from any device connected to the Internet.
- The consumption device, instead of the classic FM receiver, is a PC, an MP3, or any other device with a broadband connection and the capacity to reproduce digital audio.

For the moment, online digital radio listeners are still regarded as a small minority (there is not even a reliable method to measure listenership beyond the number of website hits). However, the conviction exists in the sector that these radio modalities are profoundly changing media consumption habits in some segments of the population.

In addition, the major stations have yet to generate specific content for online radio; they have merely broadcast their conventional programmes simultaneously on their websites. Little by little, the sector is evolving towards greater interactivity and personalisation options such as radio a la carte, which enables content to be organised so that listeners can download content that interests them and listen to it at any time.

4.9. INTERNATIONAL EXAMPLES

On the international scene, without attempting to provide an exhaustive list, we can mention some interesting initiatives in the sphere of digital radio:

- Last fm: online radio station (acquired by the CBS group in 2007). It enables users to listen to their favourite music and make suggestions about artists or groups that they like. It also includes Web 2.0 facilities, as it enables multimedia content to be viewed, allows communication with other listeners and the music selection to be shared with other users.
- BlogTalkRadio.com: a combination of radio and blog. Designed for users to generate their own podcasts and *upload* them onto BlogTalkRadio; the latter are classified according to subject (literature, politics, sports, etc.).
- Pandora: one of the most popular web radio stations world-wide, it enables personalisation and preference selection. It has recently had to restrict broadcasting to the USA due to a conflict regarding artists' copyright.

05

Publishing sector

- Owing to differences between the markets, the publishing sector has been divided into three subsectors: newspapers, magazines and books.

- As far as the online side of publishing is concerned the online newspaper subsector is the most widely developed and shows significant growth both in income (22% AAGR of spending on internet advertising over the 2002-2006 period) and readers. The subsector generates its income solely from advertising. In spite of this, online advertising is still a very small percentage when compared to the sector as a whole (~6%).

- With regard to the magazine subsector, the online model is, generally speaking, still not very developed as in recent years it has been used as a platform for promoting printed editions. Nevertheless, given their potential, online line magazines are emerging within the sector, not only as an enhancement of the off-line media, but as a business in its own right.

- In 2006 the domestic market for digital format books (CD, DVD, online, etc.) accounted for 11% of the market as a whole. Of this, only 10% were online books (digital formats distributed over the Internet), although a sharp increase in these formats is expected in coming years.

5.1. DESCRIPTION OF THE SECTOR

The following is an analysis of the sector, describing the different stages of each publishing sector value chain.

Newspaper and magazine value chain

The following chart shows an outline of the newspaper and magazines value chain in both online and off-line format:

becoming content generating platforms for the networked society. Nevertheless, in the traditional composition model the main agents involved are news agencies, press departments and editorial staff.

Following this, according to the traditional model, the process continues with editing and publishing the material prepared and authorised during the previous stage. This process involves formatting and text layout to achieve a final printable version that is then sent to the printers and printing presses.

Figure 5.1. Newspaper and magazine value chain

Source: ONTSI

The value chain is based on the traditional hard copy model. The digital version needs a series of transformations that will be analysed in each of the stages that constitute the value chain. There are basically four stages: (1) creation and composition, (2) editing and publishing, (3) distribution and (4) consumption.

The first stage involves creating and composing the content. In the traditional model the main activities involved in this stage include writing texts, gathering photographs, etc. However, in the online line model multimedia content must also be added (ranging from digital photographs to audio and video).

In addition to this it is important to highlight content generated by users as one of the main trends to be considered, as newspapers and magazines are increasingly becoming more interactive and involve citizens through forums, blogs or surveys. In this way, online newspapers and magazines are

From the printers and printing presses the newspapers are then delivered to retailers to be sold. This is the third stage of the value chain and involves logistic operators, newspapers stands and other retailers.

In the online model, however, the last two stages (publication and distribution) are condensed into a single stage because in this case publication is immediate and involves a continuous cycle of publishing and updating of information. The traditional intermediaries, therefore, also disappear, as readers gain direct access to published content through the Internet. The new model has prompted the emergence of new agents such as search engines and information aggregators, which play a fundamental role in broadcasting the content.

Finally, we come to the consumption stage, in its different modalities. At this point, the traditional model is closer to the end user than the online model as a direct relationship is established, without the need for electronic devices or Internet access, as is the case with the online model. The consumption of online press requires the help of agents such as telecommunications operators and broadband and manufacturers of electronic devices (PCs, PDAs, mobile phones, etc.).

As far as the magazine sector is concerned, the new phenomenon of the online news stand also bears mentioning. These sites distribute downloadable digitised copies of printed magazines by subscription. In this business model, the value chain of traditional printed magazines is maintained although digitisation is added at the publishing stage and the distribution (download) and consumption (computer-based) stages are modified.

Value chain of books

Again, the value chain of books is similar to that described above; there are four stages involving creation, publishing, distribution and consumption. The only difference is that marketing and advertising is in this case included in the distribution stage.

As in the case of online newspapers, this value chain is similar to the traditional book publishing model but with the transformations needed to adapt it to the online model.

The first stage of this model involves the creators of the book - writers, journalists, experts or institutions who, once their job is done, hand the work over to the publishers or printers who will edit the text and do the layout. These agents are also responsible for registering the copyright and publishing the work in digital formats (CD-ROM, DVD, etc.).

Next comes the distribution stage, closely linked with the marketing stage as advertising and promotion take place during the launch of the book. An important element in this stage is the emergence of new platforms for selling books online (in digital format, distributed over the Internet in the form of downloadable files) such as online bookstores, which as yet have little demand.

Finally, the last stage, that of consumption where, as has been mentioned earlier, digital books (both in hard copy format, such as CD or DVD, or purely online) are dependant on the user having the electronic device needed to read it (PC, PDA, e-book, etc.).

Figure 5.2. Value chain of books

Source: ONTSI

5.2. SITUATION OF THE PUBLISHING MARKET

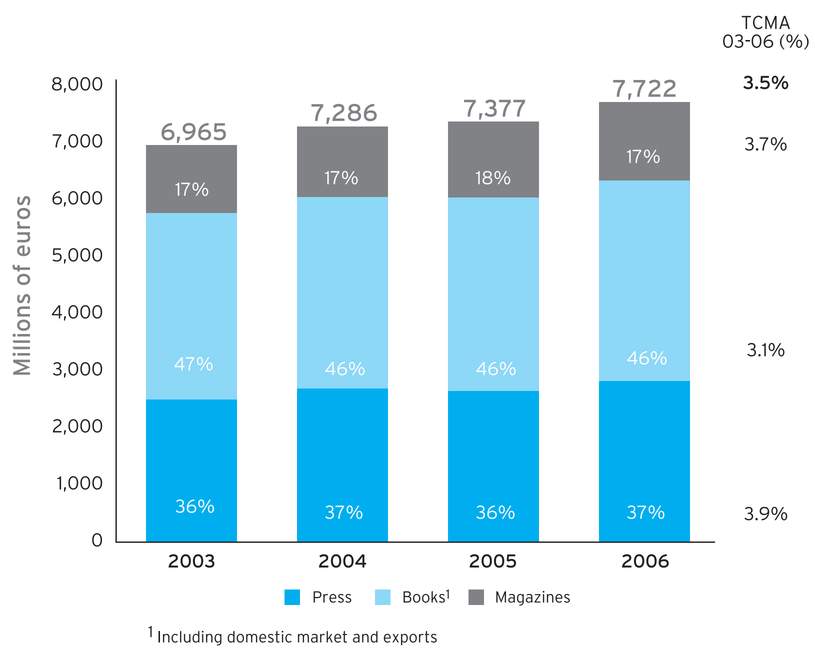
This analysis will focus mainly on publications available in digital format within the publishing sector. However, because of the strong link between online versions and the traditional hard copy sector, the off-line side of the business will also be analysed in order to gain better understanding of the context of the online publication market.

In order to facilitate the analysis and description included in this study we have divided the publishing sector into three separate markets: newspapers, magazines and electronic books.

The analysis of the sector (current situation, trends, benchmarks, etc.) will therefore deal separately with each of the markets identified. This will also enable us to develop an overall view of each of the component parts of the publishing sector.

The following chart shows the evolution of the publishing market in Spain in recent years (2003-2006), a detailed analysis of which will be made in this chapter.

Figure 5.3. Publishing market in Spain: evolution 2003-2007 (M€)



Source: AEDE ("Libro blanco de la prensa diaria"); Spanish Association of Publishers Guilds ("Comercio interior del libro en España"); PWC ("Global Entertainment & Media Outlook 2008-2012") (1) Includes domestic market and exports

5.2.1. Demand

Newspaper market

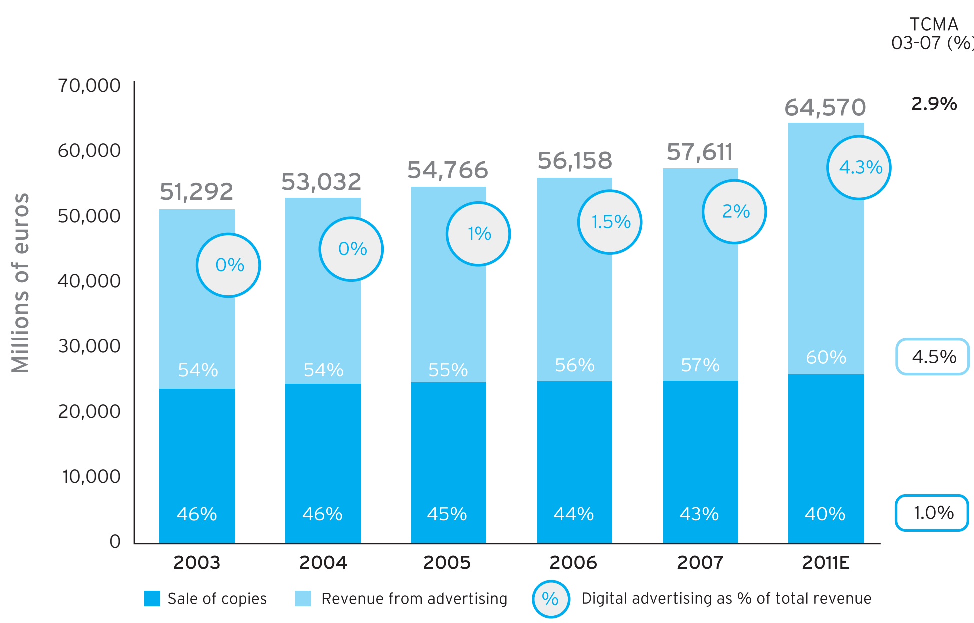
An analysis of the sales of the newspaper sector in EMEA (Europe, Africa and the Middle East) shows growth of nearly 3% between 2003 and 2007, reaching sales of €57.611 billion in 2007 (source: PricewaterhouseCoopers). It also shows the increasing importance of advertising as the main source of income. By 2007 this accounted for approximately 57% of income, and could reach 60% by 2011, to the detriment of income from the number of copies sold, which hardly grew at all during the 2003 to 2007 period (AAGR 1%) and is gradually losing significance in relation to overall income (43% in 2007). Online advertising is also gaining in importance: although percentages are still largely insignificant (2% of total income in 2007), this kind of advertising is expected to represent over 4% of income by 2011 (forecast by PriceWaterHouseCoopers).

As far as Spain is concerned, newspaper market sales (€2.816 billion in 2006) experienced a slight increase of 3.8%.between 2002 and 2006. The main source of income in recent years has been advertising, accounting for over half the sector's total income, and 4% growth over the 2002 to 2006 period.

The other important source of income, the sale of individual copies and subscriptions, in spite of an average annual growth rate of 3.6% between 2002 and 2006, has shown signs of stagnation since 2004 following the sharp increase of previous years.

The drop in income from sales is mainly due to the impact of online newspapers. However, this is not the only reason: in Spain the proliferation of free

Figure 5.4. Newspaper market turnover - EMEA (M€)

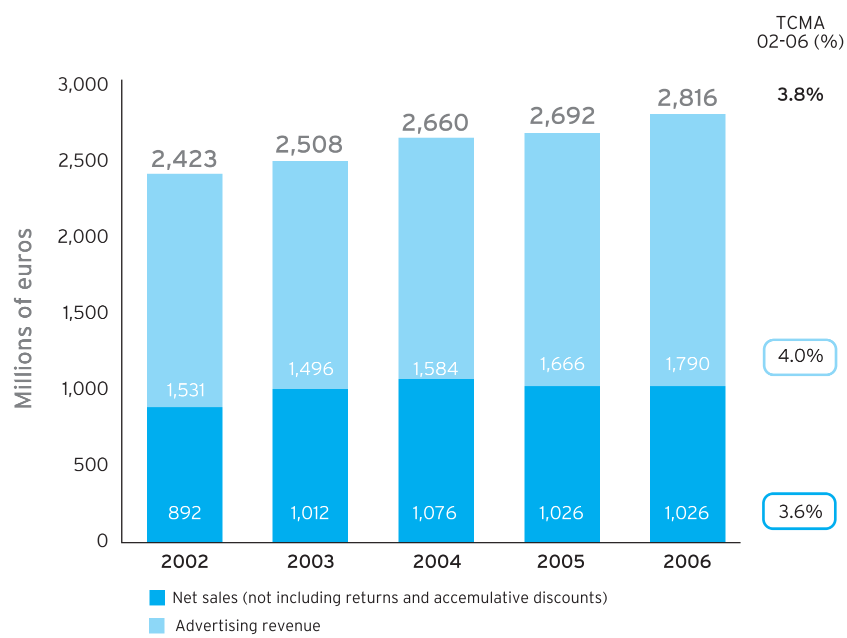


Source: "Global Entertainment and Media Outlook: 2008-2012" PricewaterhouseCoopers (2008); in-house analysis newspapers has also contributed to this trend. In 2006, therefore, free newspapers already accounted for 5.1% of total controlled newspaper circulation figures (Spanish Association of Newspaper Editors (AEDE) based on data from the Spanish circulation audit bureau - OJD).

Forecasts by PricewaterhouseCoopers indicate that future growth of the Spanish newspaper market will be determined by increased income from advertising. This will grow by 5.3% between 2006 and 2011, while income from newspaper sales will remain almost stationary (-0.1%). According to these estimates, the overall newspaper market in Spain will be worth €3.339 billion by 2011, which means an annual growth rate of 3.5%, which is somewhat lower than the growth rate registered up to 2006 (3.8% 2002-2006).

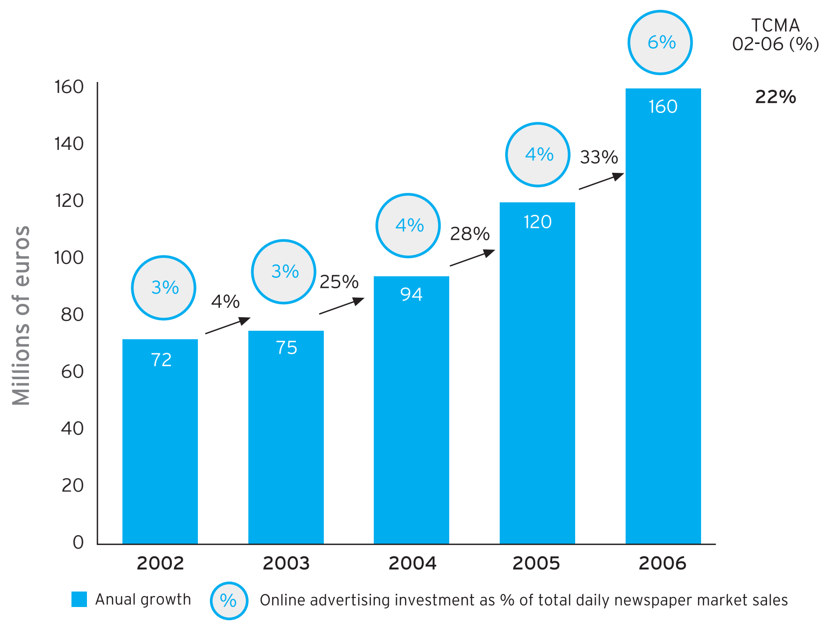
Focussing our attention on the digital aspect of the business it is important to consider that although the percentage of online newspapers is still low compared to the sector as a whole (the total income from advertising in online newspapers accounted for only 6% of overall sales) the Internet advertising trend is growing at a significant rate, with a AAGR of 22% for the 2002-2006 period, going from €120 million in 2005 to €160 million in 2006, while off-line sales shows a more moderate growth. Nevertheless, it should be noted that a significant part of online advertising goes to search engines and content aggregators (Google, Yahoo, etc.).

Figure 5.5. Newspaper market sales - Spain (M€)



Source: AEDE (Spanish Newspapers Publisher's Association), "Libro Blanco de la Prensa Diaria" 2005, 2006, 2007 and 2008 editions

Figure 5.6. Investments in Internet advertising (M€)



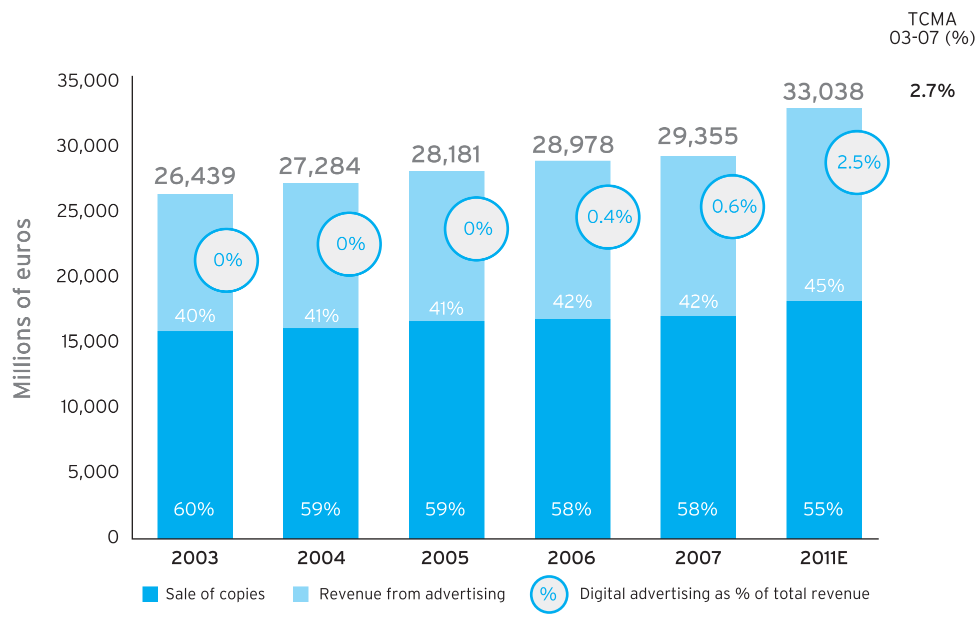
Source: AEDE, "Libro Blanco de la Prensa Diaria" 2005, 2006, 2007 and 2008 editions

The magazine market

Both in Spain and around the world, the online publication of magazines in recent years has been used mainly as a tool for promoting the printed version. Nevertheless, in view of the future potential of online editions, more and more publishers are considering this format as a business in itself and as a strategy for developing future business, above all in the light of advertising income. This stems, for example, from supplying advertisers with highly segmented target audience websites, which gives a great competitive advantage to advertisers seeking to enhance the effectiveness of their products.

In EMEA the magazine sector has grown at an annual rate of 2.7% and, as in the newspaper sector, advertising is becoming an increasingly significant source of income for the sector. In 2003 advertising accounted for 40% of total income and it is expected to reach 45% by 2011 (data and forecasts from PricewaterhouseCoopers). As far as income from online advertising is concerned, as a source of income for the sector this is still of little significance, accounting for a mere 0.6% in 2007, although forecasts point to online advertising representing around 2.5% of total income for the magazine sector by 2011 (PricewaterhouseCoopers).

Figure 5.7. Magazine market sales - EMEA (M€)



Source: "Global Entertainment and Media Outlook: 2008-2012" PricewaterhouseCoopers (2008); in-house analysis

The book market

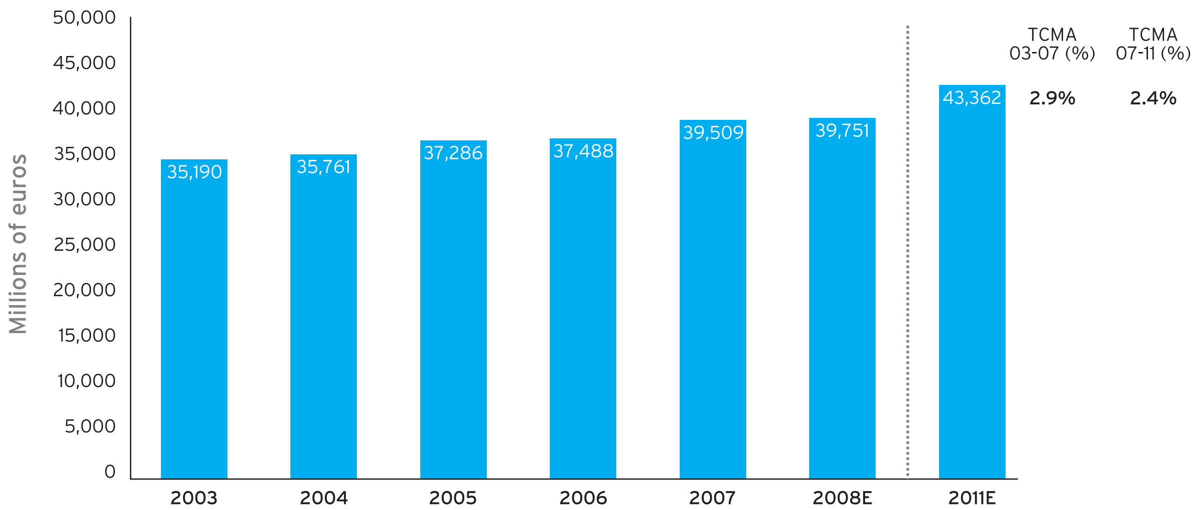
Electronic books in Europe account for a small percentage of sales, although it is estimated that they will rise sharply in the near future.

The total sales in the book market in EMEA in 2007 amounted to €39.509 billion. The market has reached a stage of maturity and has grown at a rate of 2.9% AAGR over the past 5 years. Future trends for the book market, according to analyses by PricewaterhouseCoopers, point to a sustained growth of 2.4% AAGR, reaching €43.362 billion by 2011. The following chart shows a detailed view of the evolution of the book market.

However, a detailed analysis of the electronic book market in EMEA shows a completely different outlook. The electronic book business, which was practically non-existent prior to 2007 when it accounted for just 0.02% of overall business, is now booming (although initial figures have been very low, a sharp increase has been observed in 2007 and 2008). A glance at the future of the electronic book market, with the help of PricewaterhouseCoopers, gives an estimated growth rate for 2007-2011 of 179%, reaching 1.4% (€605 million) of the total book market by 2011.

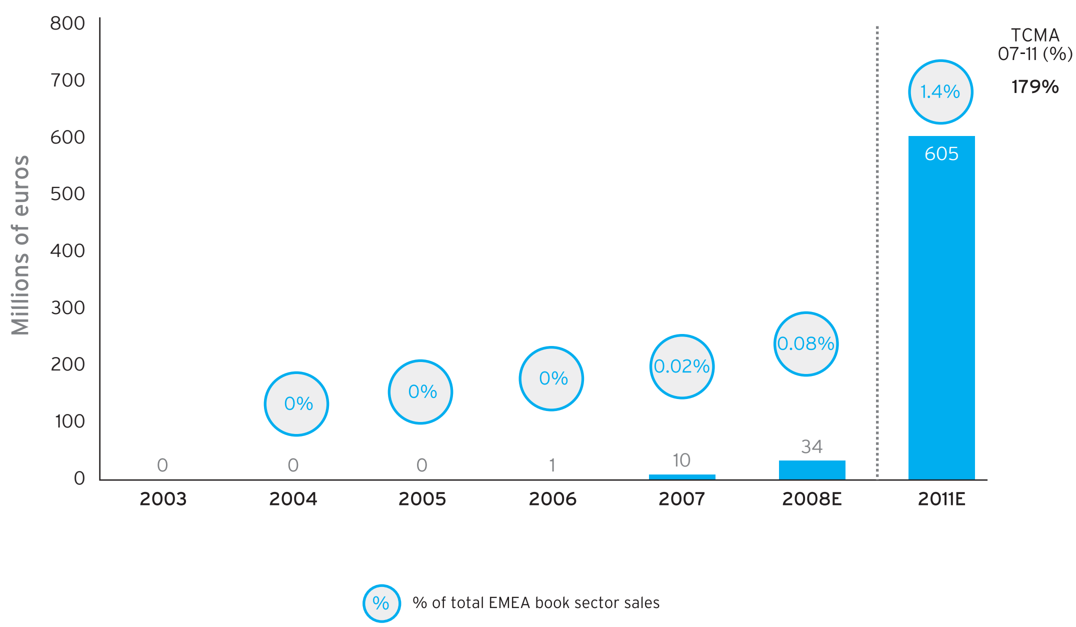
As far as the book market in Spain is concerned, sales seem to be stagnating, with similar or even lower growth than the GDP in the last few years. According to figures released by the Spanish Association of Publishers Guilds (Federación de Gremios de Editores de España, FGEE), domestic sales increased at a rate of 3% annually between 2002 and 2006, reaching €3.015 billion in 2006. An additional €175 million corresponding to imports

Figure 5.8. EMEA book sector overall sales (M€)



Source: ONTSI and "Global Entertainment and Media Outlook: 2008-2012" PricewaterhouseCoopers (2008)

Figure 5.9. Electronic books - EMEA overall sales (M€)



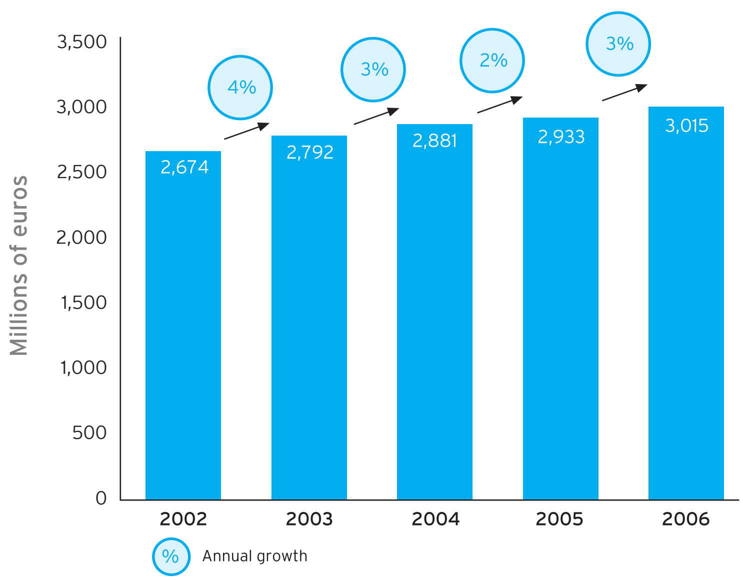
Source: ONTSI and "Global Entertainment and Media Outlook: 2008-2012" PricewaterhouseCoopers (2008) should be included. The market in Spain, therefore, (domestic trade plus imports) is worth around €3.190 billion.

Based on industry forecasts (estimates by PricewaterhouseCoopers) the annual growth rate of the book market in Spain will slow down: an average annual rate of 2.4% is estimated for the 2006-2011 period. This will place domestic market sales in Spain at €3.392 billion for 2011 (€4.018 billion including imports).

Looking at the digital side of the market in Spain, it can be seen that estimated sales in 2006 for books in formats other than paper (CD, DVD, online, etc.) accounted for 11.1% of total domestic market, of which only 10% corresponded to online sales. The growth of online books (purely digital books, distributed over the Internet by downloading files) is closely linked with the emergence of reading devices capable of achieving significant levels of acceptance.

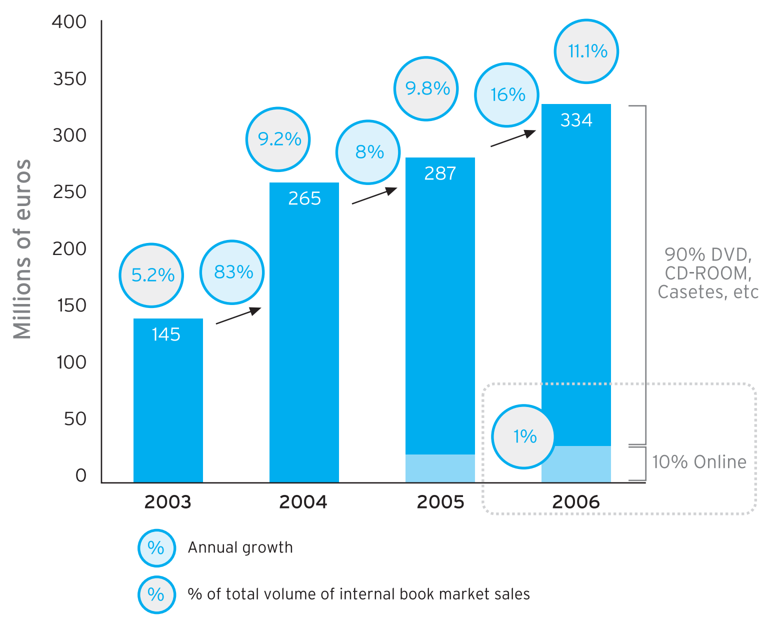
A retrospective analysis of the evolution of the digital book market shows a significant slowdown in 2005, a year in which sales grew by 8%, compared with 83% registered the previous year. Nevertheless, the growth observed between 2005 and 2006 (16%) points to a strong future upward trend in the digital book sector.

Figure 5.10. Domestic book market turnover - sales (M€)



Source: ONTSI and Spanish Association of Publishers Guilds "Comercio Interior del Libro en España 2006"

Figure 5.11. Domestic digital book market in Spain (M€)



Source: ONTSI and Spanish Association of Publishers Guilds "Comercio Interior del Libro en España 2006"

5.2.2. SUPPLY

This section will deal with an analysis and study of the three markets within the sector: newspapers, magazines and books. Furthermore, although the analysis mainly concerns the online market, aspects of the corresponding off-line markets will also be considered in order to provide a more comprehensive view.

Generally speaking, the online market in Europe and in Spain is not yet highly developed. The most significant business within this market is that of online newspapers, although these only represent 6% of all newspaper sales (taking online advertising as a digital newspaper trade figure). Sales are even lower for online books and magazines.

Newspaper market

An analysis of the off-line newspaper market from the point of view of supply reveals that, although there is a wide range of newspapers in Spain (there are currently 95 publications with circulation figures controlled by the Spanish Circulation Audit Bureau - OJD), circulation is dominated by the 10 leading newspapers, which monopolise 57% of readers.

For a closer look at this phenomenon, see below the ranking of leading Spanish newspapers with their circulation (number of copies) and reader (number of readers) figures for 2006.

The evolution of the circulation figures for Spanish newspapers has stagnated over the past decade (4.143 billion copies in 1996 compared with 4.138 in

Figure 5.12. Circulation ranking 2006 (newspapers)

Ranking	Newspaper	Daily readers
1º	El País	432,204
2º	El Mundo	330,634
3º	Marca	308,835
4º	ABC	240,225
5º	As	214,654
6º	La Vanguardia	202,161
7º	El Periódico	167,804
8º	La Razón	142,838
9º	El Correo	119,601
10º	Sport	118,098

57% of total copies

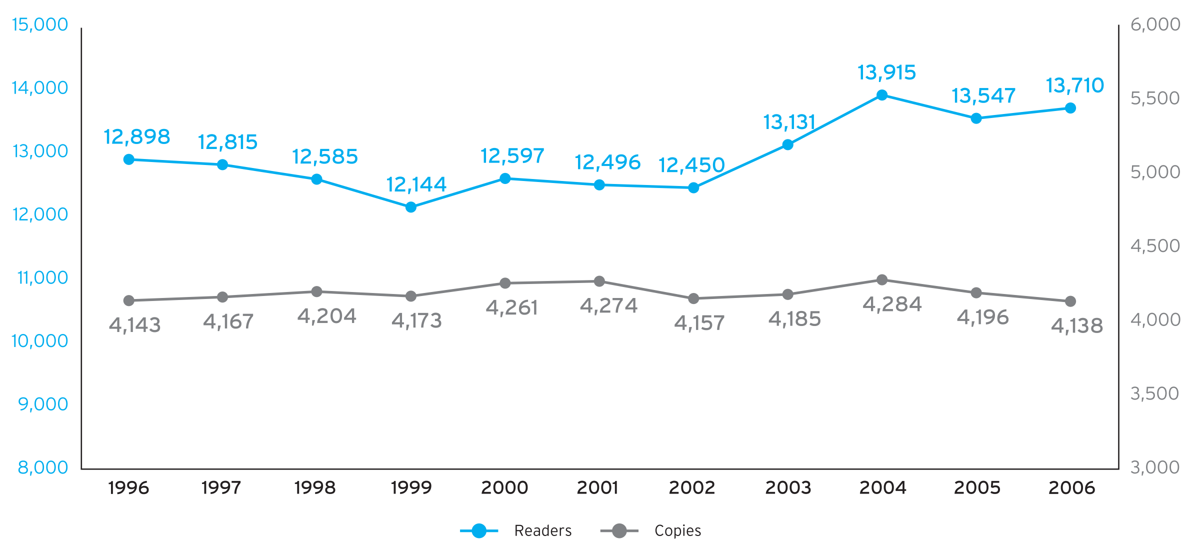
Source:AEDE (Spanish Newspapers Publisher's Association), "Libro Blanco de la Prensa Diaria" 2008 edition

Figure 5.13. Readers ranking 2006 (readers)

Ranking	Newspaper	Daily readers
1º	Marca	2,391,000
2º	El País	2,058,000
3º	El Mundo	1,338,000
4º	As	990,000
5º	El Periódico	789,000
6º	ABC	739,000
7º	La Vanguardia	697,000
8º	La Voz de Galicia	668,000
9º	Sport	567,000
10º	Mundo Deportivo	558,000

Source:AEDE (Spanish Newspapers Publisher's Association), "Libro Blanco de la Prensa Diaria" 2008 edition

Figure 5.14. Evolution of Spanish press (1996 - 2006): copies printed and readers (in thousands)



Source: AEDE (Spanish Newspapers Publisher's Association), "Libro Blanco de la Prensa Diaria" 2008 edition"

2006), in spite of the fact that in this same period the population of Spain has grown by nearly 6 million (source: Spanish National Institute for Statistics - INE).

During this same period, however, the number of readers gradually increased from 12,898,000 in 1996 to 13,710,000 in 2006, although with no direct impact on revenue. A significant increase in the number of readers can be seen from 2002, although this trend was interrupted in 2005 and 2006, mainly due to the boom in online newspapers.

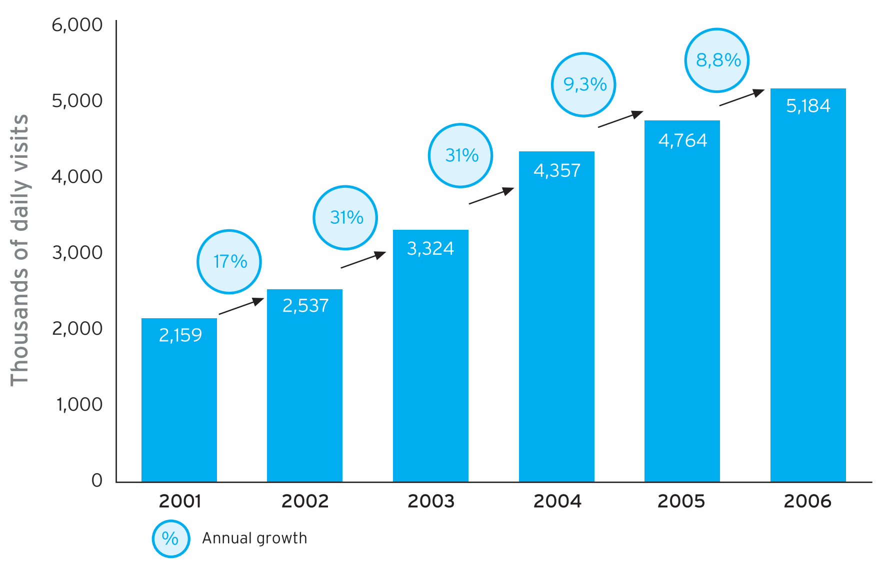
The high growth rate of online newspapers in Spain can be explained by the increase in the number of people using this format in recent years. As can be seen from the following chart, the average number of hits on digital newspapers has greatly increased since 2001, although growth has been slowing down slightly since 2005.

There has also been a significant increase in the number of sole users of online newspapers; in the 2004-2006 period alone this has gone from 489,000 users daily in 2004 to over 1 million in 2006.

With regard to the online market, although the estimate and classification of Internet readers varies greatly, it seems that *elmundo.es* currently leads the field in terms of readers and hence advertising. According to AEDE figures, therefore, *elmundo.es* is the digital newspaper with the greatest daily average of sole users (277,878 users in 2006), with an increase of 36% between 2005 and 2006.

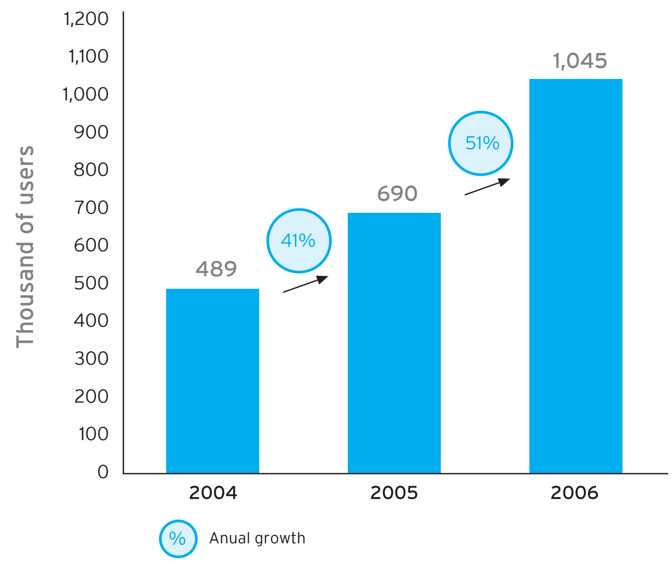
This sharp increase in users of digital newspapers can be seen across the sector: the average number of sole users of digital newspapers has grown from 690,443 in 2005 to 1,045,093 in 2006, an increase of 51%.

Figure 5.15. Average daily hits on digital newspapers (thousands)



Source: AEDE (Spanish Newspapers Publisher's Association), "Libro Blanco de la Prensa Diaria" 2008 edition

Figure 5.16. Sole users of digital newspapers (thousands)



Source: AEDE (Spanish Newspapers Publisher's Association), "Libro Blanco de la Prensa Diaria" 2008 edition

Figure 5.17. Ranking of online newspapers in Spain 2005-2006

Ranking	2006 Daily average of single users		2005 Daily average of single users	
1º	elmundo.es	277,878	elmundo.es	210,351
2º	marca.com	165,644	marca.com	104,305
3º	as.com	107,371	as.com	55,960
4º	abc.es	70,538	diariodenavarra.es	55,505
5º	sport.es	45,343	abc.es	44,568
6º	laverdad.es	27,289	sport.es	28,251
7º	elcorreodigital	24,202	elcorreodigital	20,221
8º	elperiodico.com	23,718	laverdad.es	19,345
9º	ideal.es	22,724	elperiodico.com	19,052
10º	larazon.es	18,056	ideal.es	17,293

Note: prepared according to OJD data (does not audit elpais.com data)

Source: AEDE (Spanish Newspapers Publisher's Association), "Libro Blanco de la Prensa Diaria" 2008 edition.

The magazine market

As has been said above in the section dealing with demand, the online magazine market is generally used as a means of promoting the printed version, although the future potential of online modalities is prompting publishers to change their strategy and the future approach of online magazines is increasingly that of an independent business line with impact on development.

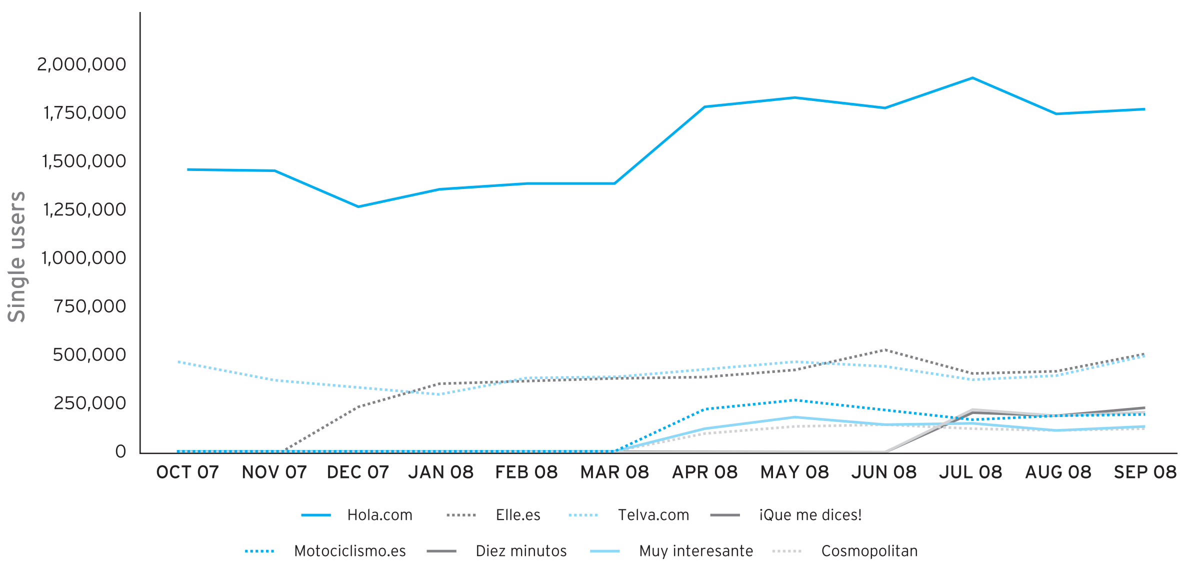
Taking as a sample some of the most successful Spanish magazines with online versions, based on the number of sole users (source: OJD), we can see that, although growth rates over the past year has not been significant in all cases, there has been a positive trend during this period, which confirms the positive outlook for online magazines in the future. An example of this is the case of Elle or Telva which in September 2008 had more than 500,000 sole users of the online version of the magazine; a further example is Hola, with nearly 2 million sole users (1,770,000 in September, 2008).

The promising evolution of the online magazine sector is paralleled by new initiatives such as online news stands (the best known of which is Zinio), which allow users to download magazines and read them on their computers. Generally, this requires the use of specific software, which aims to provide the user with a similar experience to that obtained from reading the printed version of the magazine.

This online news stand has an extensive catalogue of magazines (over 500 magazines from over 60 publishers, over 50 of which are in Spanish) and a wide range of types. Between 2002 and 2007 Zinio distributed over 60 million copies and the site has around 3.5 million subscribers from around the world.

Other agents identified are much smaller than Zinio and distribute what are considered niche magazines - aimed at a specific target audience.

Figure 5.18. Sole users of online magazines (sample Oct. 07 - Sept. 08)



Source: OJD

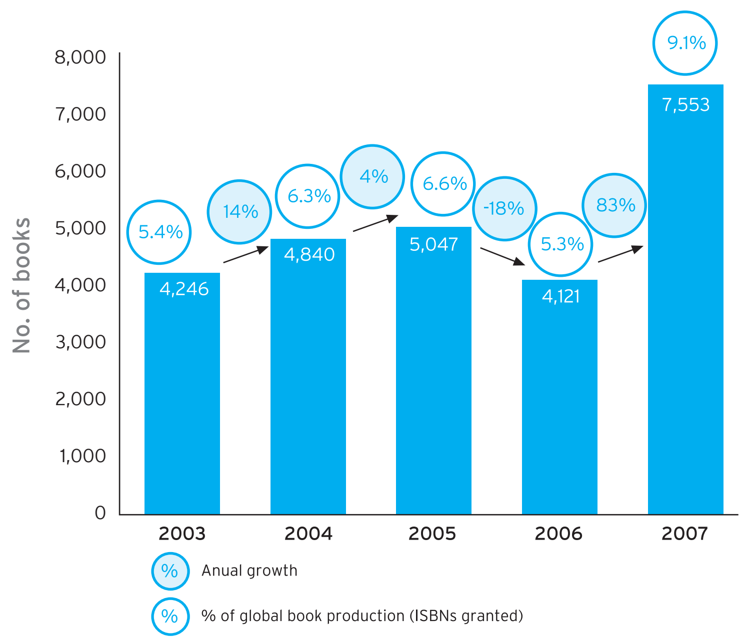
The book market

The book market in Spain is a concentrated market in which the sector's 30 main publishers have 63% of overall business. The remaining 37% of the market is occupied by 800 smaller publishers, including small publishers and author/publisher businesses.

As has been said previously, in spite of the fact that the online book market is in the midst of a boom with excellent short term growth forecasts, currently the turnover from online books in EMEA represents just 0.02% of all books sold, a percentage that is expected to grow to 1.4% in 2011.

Considering the diversity of digital books on offer rather than the business volume, it can be seen that following a horizontal, or even slightly negative evolutionary trend in the proportion of digital books compared to the total number of books published in the 2003 to 2006 period, in 2007 there was what could be the start of an upturn in the offer of electronic books, which today accounts for 9.1% of all books registered in Spain.

Figure 5.19. Evolution of no. of multimedia books registered (ISBNs)



Source: Ministry of Culture "Panorámica de la Edición Española de Libros 2008"

5.3. ANALYSIS OF INTERNATIONAL BEST PRACTICES AND MAIN TRENDS

To round off our overall perspective of the publishing sector with the best practices found in other markets we have gathered some of the most significant developments found in the newspaper, magazine and book markets from around the world.

5.3.1. International best practices

The case of the United States

The case of the US, second in sales in the international publishing market behind the EMEA region, is significant in the area of consumer books because it endeavours to promote new *e-book* marketing initiatives. For example, Amazon.com provides the *Amazon Upgrade* service with online access to a digitised copy of the book just purchased. Nevertheless, the success of *e-books* is closely linked to the emergence of reading devices generally accepted by the public, which has not yet occurred.

The reference book and public collection market has also witnessed some interesting developments in the US where two projects to digitise the book collections of universities, public libraries and publishing houses are being implemented. One of these is the *Google Book Search* (the search is now available in 35 languages with the help of over 10,000 publishers and authors from more than 100 countries). Another is the *Open Content Alliance* (equivalent to the Google initiative, but organised by Yahoo!).

Both projects have two aims: on the one hand, to digitise all works free of copyright, and on the other to wholly or partly digitise works where permission has been forthcoming even though they are still subject to copyright. On the other hand there is Microsoft who in mid-2008 announced its decision to abandon digitisation projects started through *Live Search Books and Academic*.

As far as newspapers are concerned, seven US communication groups, which together control 176 newspapers, reached an agreement with Yahoo! at the end of 2006 to share content and advertising with the search engine. The scheme was initially focussed on publishing job offers from Yahoo! in the newspapers but by mid-2007 this was extended to give Yahoo! access to news and analyses to be published on the search engine.

The case of Europe

In reaction to other international initiatives to digitise collections of books such as the aforementioned schemes implemented in the US, the EU launched the *European Digital* Library project with a budget of over €2 billion from EU funds and from contributions from public funds of the countries taking part in the project.

Once the initial task of digitising is complete the Project plans to open the European Digital Library in November 2008 on the *Europeana* web site, although the European Union has already announced that it will provide the project with a further €100 million to continue the task of digitising more books.

With regard to copyright, in Belgium the leading French-speaking publishers formed an association called *Copiepresse* to sue Google for content appearing on the search engine, alleging that the company has violated copyright by publishing links and summaries of articles published in Belgian newspapers without express authorisation. The lawsuit lasted for a year and in 2007 the Belgian courts found for *Copiepresse*, ruling that Google should reimburse the newspapers that published the news.

On the same subject it is worth mentioning the complaint lodged by the World Association of Newspapers (WAN) before the European and US competition authorities regarding the recent agreement signed by Google and Yahoo to share online advertising services, alleging that this could be considered anticompetitive conduct and would have a detrimental effect on the advertising revenue the search engines provide to newspaper and other sites.

The WAN argues that the competition that currently exists between Google and Yahoo is essential to ensure that member publications receive competitive income for online advertising on their respective web sites and to obtain competitive prices for the sale of advertising space on the Internet (statement by Gavin O'Reilly, chairman of WAN).

5.3.2. Main trends and new business models

Online newspapers and magazines

Generally speaking all printed press has strong online presence. Both in Europe and the US practically all printed press has an online version. Some examples of newspapers with a long tradition of printed versions that are currently available online are *The New York Times* (nytimes) or *USA Today* (usatoday.com) in the USA, *Daily Telegraph* (Telegraph.co.uk) *The Times* (Timesonline.co.uk) or *Frankfurter Allgemeine* (Faz.net) in Europe and *ABC* (abc.es), *El Mundo* (elmundo.es) or El País (elpais.com) in Spain. However, only part of the content of the online editions are created specifically for the Internet.

On the other hand, there are newspapers that are published exclusively in an online version. In Spain, for example, newspapers such as *libertaddigital.com, periodistadigital.es* or *elconfidencial.com* are **only available online** and have between 1.5 and 2 million sole hits, which, as far as the number of online users is concerned, situates them above many newspapers with both digital and printed versions.

It is also important to highlight the transition of digital newspapers towards a **multimedia content-based** model with videos, audio, chats, etc. This trend has had a positive effect on the growth of this kind of press by increasing the interactivity, collaboration and personalisation of the online newspaper.

In addition to this, the use of new technologies to present information in various media such as the press have paved the way for significant progress to be made in the use of information resources such as computer graphics (defined by the *Spanish Royal Academy as the "technique by which images are created on a computer"), some of the most obvious examples of which are weather maps, election result displays or the use of maps to enhance reports on military conflicts. In this way the transfer of information has increased in quality thanks to the application of these new technologies, also present in off-line press but especially in online media, which provide the reader with a greater degree of interactivity enhanced by the aforementioned multimedia content.

Currently, the aim of these newspapers is to encourage **reader interactivity** through forums, blogs, voting or by personalising the product, (for example, by identifying the user when he or she logs on). Nevertheless, online content also has an impact on production costs and on the technological means needed by the reader to enjoy these contents (band width).

Another trend to mention is the **importance of search engines,** even giving rise to new information aggregators that also encourage greater interactivity on the part of the user. Thus the traditional search engines (Google, Yahoo!) have been joined by well received initiatives such as *digg.com* or *meneame.net,* in which users can vote on the most interesting news items.

The development of the **networked society** is a key element in the increasing popularity of online press, particularly with regard to citizen-generated content enabling users to collaborate in blogs, forums, surveys, etc. Blogs are being increasingly included as a permanent feature of various newspapers (for example, elmundo.es, elpaís.com or abc.es, to mention just a few, have several blogs of various types).

With regard to business models, the predominant system is based on revenue from **advertising,** as most online newspapers provide their services free of charge and only a few of the world's leading newspapers and some specialised media operate on an online subscription basis.

Finally, there has been a strong tendency in recent years, above all within the **online** magazine **market,** to use the online version as a means of promoting the printed edition. Currently, however, a change in approach to the online version can be observed and the idea of the online edition as a business in itself is gaining ground.

As far as the online magazine market is concerned, one of the most significant recent developments has been online news stands. Because they are so new, there are hardly any statistics available on this line of business in which, for the moment, the only important provider is Zinio, with more than 60 million copies downloaded between 2002 and 2007 and over 3 million subscribers.

Digital books

In this section, a distinction is made between consumer books currently protected by copyright, and reference books and public collections that are not subject to copyright.

With regard to **consumer books,** it must be borne in mind that this is a limited market in which demand is still to be developed, as there has been scarce penetration world-wide. In the US, one of the most developed markets according to PricewaterhouseCoopers, e-books sales account for only 3% of overall book market sales (2007).

This market has yet to come up with a suitable reading device. A popular e-reader must be found (equivalent to MP3 players in the music world) with a high level of usability capable of provoking high demand.

Up until now the major hardware manufacturers have developed prototypes without finding a successful model and, following a series of unsuccessful attempts (such as, for example, the Sony Reader, the Illiad, the Hanlin or the Sony Librie), the online bookstore *Amazon* launched the *Kindle* device at the end of 2007 (for the moment only available in the US). This seems to have been well received by the public and a new version has been announced for 2009.

Apart from these technical considerations, there is also the value of the book itself as an object, which is a drawback to the process of digitising consumer books. For a large number of readers hard copy consumer books are valuable as objects in themselves and a digital format cannot provide this added value.

As far as **reference books and public collections** are concerned the most significant trend is the wholesale digitisation of public collections of published works. New initiatives have emerged in recent years, such as the aforementioned *Google Book Search, Open Content Alliance* in the United States or the European Union initiative *European Digital Library,* which intend to digitise all public domain books not subject to copyright. The initiative, owing to the type of books to be digitised, has met with great success, above all in the field of education and research where mainly reference books are used and only specific parts are consulted, as opposed to reading the book from cover to cover.

5.4. CHALLENGES AND OPPORTUNITIES WITHIN THE SECTOR

To round off our analysis of the publishing sector we have identified the main challenges to be faced in coming years. The challenges faced by the online advertising sector are also significant as this is the main source of income for online newspapers.

The first major challenge faced by the sector is to **promote the digital content of newspapers.** The creation of quality digital content for newspapers is extremely costly to develop, due mainly to the need to supply real time information. The content generating costs incurred by the digital press have to be offset almost exclusively by revenue from advertising, which often drastically reduces the profitability of digitising content and publications.

In addition to this, most advertising revenue goes to search engines and news aggregators who do not create the content although they actively participate in broadcasting it.

The search for business models in which both aggregators and content creators seek mutual benefits represents a huge opportunity for both, as online newspapers have shown considerable growth. In the case of Spain, sole users of digital newspapers increased by over 500,000 between 2004 and 2006 alone, and the number of sole users of leading online newspapers has already reached significant levels (elmundo.es had over 277,000 sole users in 2006 according to information from the AEDE).

Secondly, the sector faces the challenge of **promoting the digitisation of public collections.** Here it is important to highlight that the process is already underway and some institutions (Universidad Complutense, Biblioteca de Cataluña) have signed agreements with private companies (Google) to digitise their collections.

Digitisation provides an extremely important opportunity to foster the cultural development of society by promoting the democratisation of the access to knowledge sources mainly contained in public collections and universities.

A good example of the above is the Online Civil Register (Registro Civil en Línea) programme sponsored by red.es in collaboration with the Ministry of Justice. The rate of digitisation of civil records has increased in recent months and by the end of October 2008 the programme had achieved:

- 28,000 digitised registers, that is, over 16.5 million digitised pages.
- 116 civil registry offices completely digitised.

06

Advertising sector

- Conventional advertising in Spain represented €7.984 billion, 0.76% of GDP, in 2007; this is higher than the figure for the main European countries except the UK.

- TV continues to be the main medium for investment in advertising, with 44% of the total, although it is losing effectiveness as an advertising medium.

- Internet advertising represented 6% of total advertising in 2007; this is still below the figure for countries such as France and the UK, where it now exceeds 10% and 14% respectively.

- Internet now accounts for an average 9% of Spaniards' leisure time, which shows its potential as an advertising medium compared to other traditional media, such as television, which are now losing ground.

- The sector offers great opportunities based mainly on the application of new technologies to advertising (especially due to segmentation and user interactivity).

6.1. DESCRIPTION OF THE SECTOR

We have divided our analysis of the advertising sector into two parts: advertising agencies and media centres. Advertising agencies focus their activity on conceiving and producing advertising ideas. Media centres focus their activity on acting as an intermediary and buying and selling advertising slots and media.

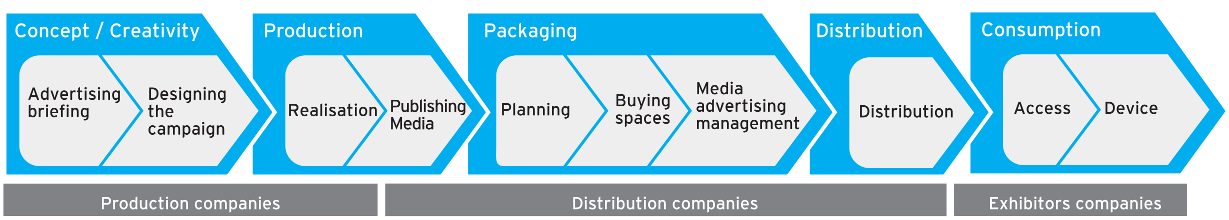
The advertising sector analysed in the present document includes the areas of advertising on television and radio and in the cinema, advertising in newspapers, magazines and supplements, exterior advertising (which includes hoardings, posters, booths, street furniture, etc.), Internet advertising and all kinds of new interactive media and other digital apparatuses. In short, advertising in conventional media.

In Spain, the conventional advertising market accounted for 0.76% of GDP in 2007, and non-conventional advertising represented 0.77% (Infoadex data). Sales for the total market was €16.108 billion in 2007; a breakdown of this figure shows there was a balance between conventional advertising, which accounted for €7.9836 billion and non-conventional with €8.1244 billion.

With regard to supply, a notable degree of concentration may be observed in the industry; the 5 leading media centres account for 59% of sales in their sector and the 5 leading advertising agencies are responsible for 43% of advertising investment (2006 data).

The advertising value chain consists of five different stages in which different agents play a part.

Figure 6.1. Advertising sector value chain



Source: ONTSI

The following, however, are beyond the scope of this study: non-conventional advertising, including personalised mailing, brochures and door-to-door delivery, point of sale advertising, shop signs, yearbooks, guides and directories, and other minor non-conventional media such as telemarketing, trade fairs, patronage, loyalty programmes, sports sponsorship or advertising gifts.

In the first place, the process of making and exhibiting an advertisement through any communication medium begins with the creative stage, where an idea is generated. Here, advertisers report their needs via a *briefing* and a script is drafted to serve as the basis for designing the advertising campaign that is to be carried out. The participants at this stage are advertisers and advertising agencies.

Next, there is the production stage, which comprises producing and exhibiting the advertisement. Advertising agencies and content and service providers participate in this stage. Among the tasks performed in this phase are filming and photography for the campaign as well as technical adjustments for sound, printing, etc.

The next phase, packaging, includes planning campaign media, purchasing advertising space and managing advertising in the exhibition medium; this is dealt with by the media centres. These negotiate with the media in order to contract advertising space, they generate the purchase orders, reach agreement on where advertising is to be located and manage the treatment and set-up of advertisements in the medium.

Subsequently, the advertising product is distributed. In this phase the media centres manage distribution with the different communication media where the advertisement is to be exhibited; these include digital, analogue and cable TV, radio stations, film distributors, mobile telephony operators, Internet portals, the press (including newspapers and magazines), and exterior advertising media.

Finally, in the consumption phase access to the product and the device necessary to enjoy it is provided for the public. At the access stage, different technologies enable the connection between the consumer and the advertising content, mainly the Internet, digital terrestrial television (DTT) and satellite digital, analogue and cable television, screenings in cinemas, *wireless* devices, and exterior advertising media.

Among the devices used as physical media, or hardware elements necessary to convey the product to the public, are radios, cinemas, DVD/DVR players, television sets, STBs (set-top-boxes), computers, portable players such as the iPod and DVB-H mobile telephones, as well as all the types of exterior physical media.

6.2. SITUATION OF THE ADVERTISING MARKET

6.2.1. Demand

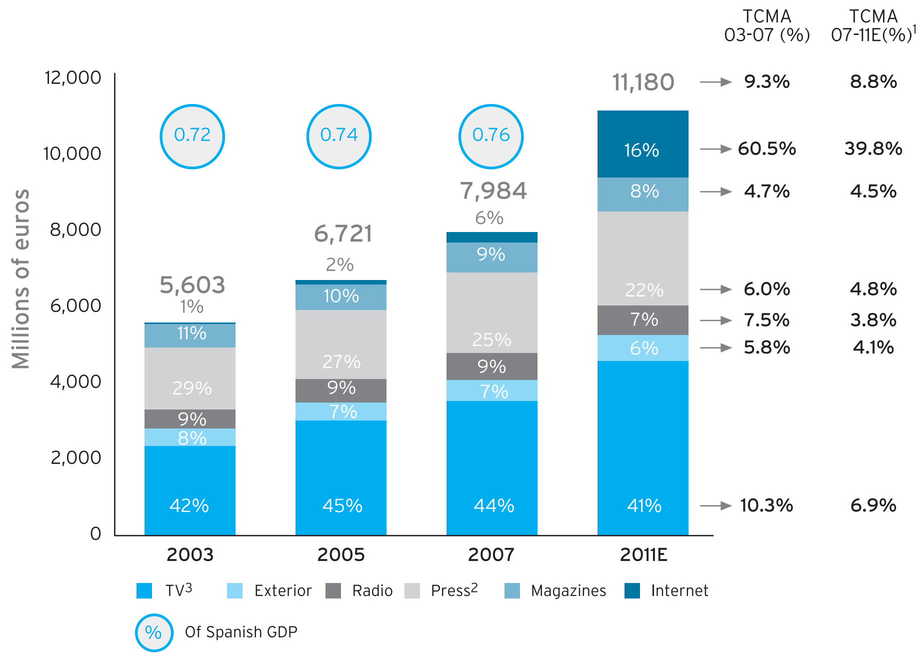
The advertising market in Spain has displayed significant and constant growth in recent years; already in 2007, the market's total sales amounted to €16.108 billion (Infoadex data), with a good balance between conventional advertising, which accounted for €7.984 billion and non-conventional with €8.124 billion.

The evolution of the total advertising market (conventional and non-conventional) between 2003 and 2007 shows average annual growth of 7.5%. This growth is more pronounced in the case of conventional advertising, with 9.3% for the same period; it increased from €5.603 billion in 2003 to €7.984 billion in 2007 (except for the Internet, which started out from a very small market share, but has recorded an exceptional growth rate of over 60%); advertising in all media has experienced growth rates of between 4 and 11%.

Since 2003 there has been great dependence on television as a medium; in 2007 it attracts almost 44% of conventional advertising (42% in 2003). Penetration of the new digital media (see "Internet" in figure 6.2.) in advertising investment has increased significantly in recent years. Thus, in 2007 it already accounted for 6% of the total advertising investment in conventional media in Spain (compared to 2.4% in 2005).

These past growth figures (according to Infoadex data) show stable evolution, and the forecast for the coming years (according to PricewaterhouseCoopers' growth estimates per sector) is that the conventional advertising market will continue to grow at an approximate rate of 8.8%, which would indicate total sales of around €11.180 billion.

Figure 6.2. Conventional advertising market in Spain: evolution 2003-2011E



1 Growth estimates based on data from "Global Entertainment and Media Outlook: 2008-2012" PriceWaterHouseCoopers (2008).

2 Including Sunday newspapers.

3 Including cinemas, which accounts for less than 1% of all conventional advertising.

Source: "Global Entertainment and Media Outlook: 2008-2012" PricewaterhouseCoopers (2008); Infoadex 2008

This future market dimension would be especially marked by the growth, although at a slower pace than to date, of the principal advertising medium, which is television. However, to a greater or lesser extent, all media would lose relative importance in the market in favour of Internet advertising; by 2011 the latter will account for around 16% of the market thanks to an estimated growth rate of almost 40% between 2007 and 2011.

The gradual loss of advertising effectiveness of television is worthy of note; it accounts for 40% of total conventional advertising market sales and has been the main advertising medium for years. Thus, between 1998 and 2004 alone, the percentage of recall fell from 51% to 37% (Vizeum studio data), and another 10.5% between 2004 and 2007 (Spanish Association of Media Agencies data). Moreover, with the emergence of new channels accessible via different technologies, the aggregate share of the principal channels, considering those with over 10% of the total audience, fell from 84% in 2001 to 70% in 2007.

Consequently, and as we have already stated, advertising on the Internet and in other interactive media bids fair to be the major growth driver in the advertising sector in Spain.

6.2.2. Offerings

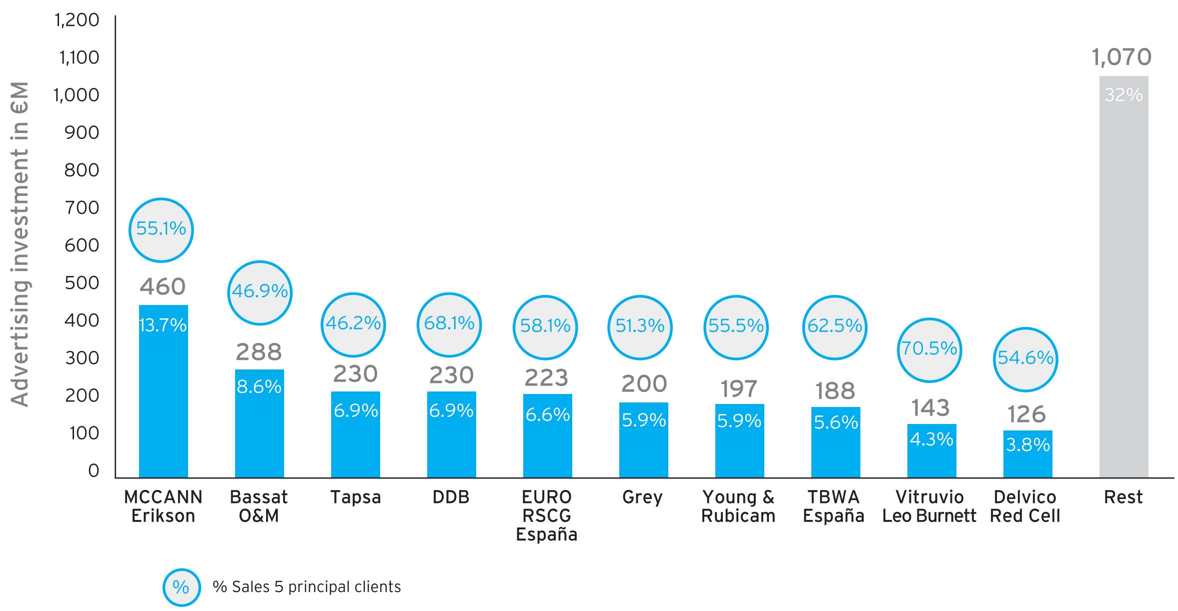
Advertising agencies

The advertising agency sector in Spain is mature, with high concentration (though not as high as the media centre sector) and is tremendously competitive. According to Infoadex data, in 2006 the 5 leading advertising agencies accounted for 43% of advertising investment channelled through this medium, and the leading 10 represented almost 70%.

In this context, it should be noted that the largest Spanish agency, MCCANN Erickson, receives almost 14% of total agency market revenue in Spain, followed by Bassat O&M, with 8.6%, and Tapsa and DDB, both with almost 7% of the total sales.

Furthermore, the client portfolio is equally concentrated; in general, the smaller the agency the greater this concentration. Therefore, for example, MCCANN Erickson, with a base of 97 clients, concentrated 55% of the investment received in just five clients; likewise, only five of Bassat O&M's principal advertisers account for 47%. In other cases, this concentration has been even greater; DBB (the fourth biggest agency in terms of sales in 2006) concentrated almost 70% of the investment in its five principal clients (according to the same Infoadex data).

Figure 6.3. Advertising agencies sales (2006)



Source: Infoadex 2007; Association of Spanish Advertising Agencies

Media centres

As we have said above, the concentration of media centres within the advertising sector is worthy of note, even more so than in the case of advertising agencies. According to 2006 data (Infoadex), the 5 major media centres represented almost 60% of the investment received. The case of Media Planning stands out: it is consolidated as sector leader with slightly more than 18% of the investment.

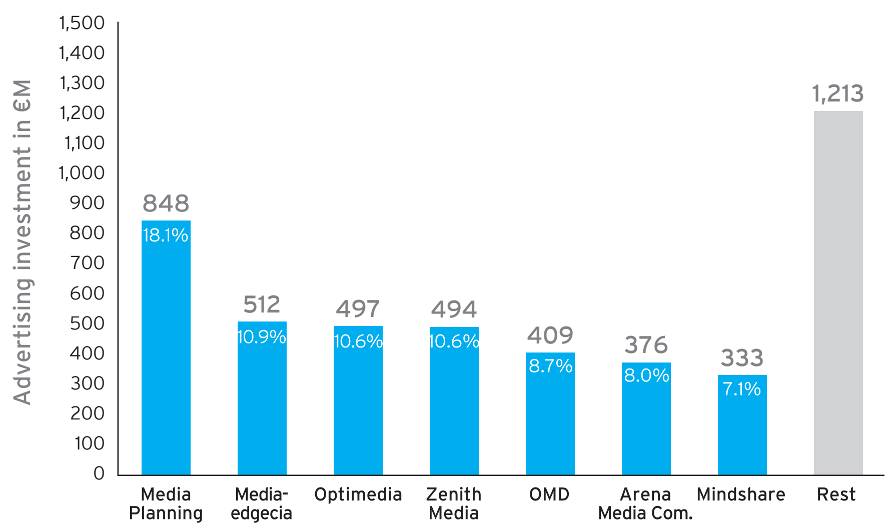
The media centres, which occupy the final links in the value chain, have lower profitability than agencies. In fact, compared with sales-profit ratios of between 3 and 8% in agencies, media centres usually achieve sales-profit ratios de of between 0.5 and 2.5%.

Internet advertising in Spain

With the development of the new technologies, the proliferation of new communication media, and the change in people's habits, advertising is undergoing an increase in complexity. Internet is playing an important part in this evolution; according to General Media Study data for 2008, Spaniards are devoting less and less leisure time to traditional media such as television (from 61% to 57% of leisure time between 2003 and 2007) and more to the Internet (from 4% to 9% in the same period). This will gradually change the influence of media on advertising activities.

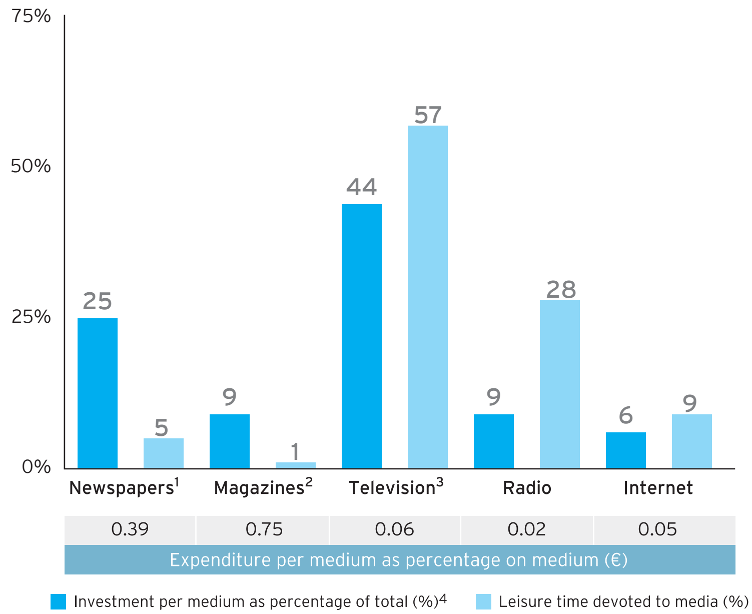
For the advertising market, the Internet is regarded as an economical medium with good prospects with regard to use. Despite taking up 9% of people's

Figure 6.4. Media centres sales (2006)



Source: Infoadex 2007; Association of Spanish Advertising Agencies

Figure 6.5. Advertising expenditure and consumption per medium (Spain 2007)



1 Newspaper and supplements
2 Monthly, fortnightly and weekly magazines
3 Includes cinema (0.5% of conventional advertising investment)
4 Does not include external advertising (7% of conventional advertising investment)

Source: Infoadex 2008; EGM; INE population census 2007

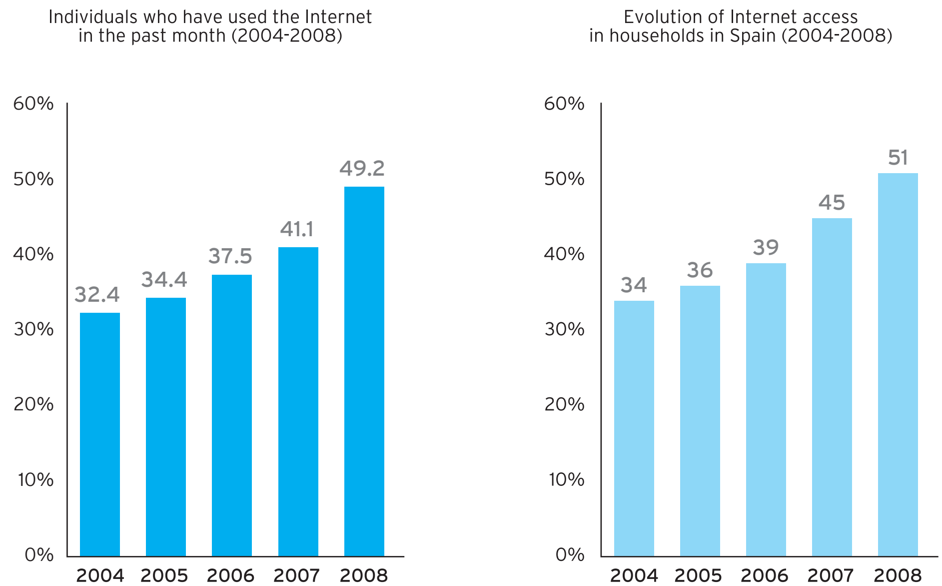
leisure time in Spain, the Internet only attracts 6% of the advertising investment in conventional media in 2007. In contrast, media such as the press and magazines display a more unbalanced relationship between people's leisure time and the medium's advertising investment.

Looking at investment data and leisure time by medium, it emerges that in terms of cost for the advertiser, Internet is only bettered by Radio (€0.05 and €0.02 per person per hour respectively). Television, however, is still an economical medium for advertisers, with expenditure of €0.06. Newspapers and magazines, in contrast, have a noticeably higher cost, at €0.39 and €0.75 respectively.

The Spanish advertising industry still seems to be lagging behind in the use the Internet as an advertising medium. Thus, advertising investment in the Internet compared to total advertising in conventional media is 6% in 2007 (Infoadex data in late 2007). This situates online advertising investment in Spain below that of European benchmark countries such as the UK or France, where investment in online advertising midway through 2007 stood at 14.7% and 10.8% respectively (*Interactive Advertising Bureau* data in the first six months of 2007).

Nevertheless, this gap is not a cause of concern, in view of the recent growth in online advertising investment in Spain and the forecasts for the

Figure 6.6. Evolution of Internet use in Spain: use in the last month (% of individuals) and Internet access in households (% of households)



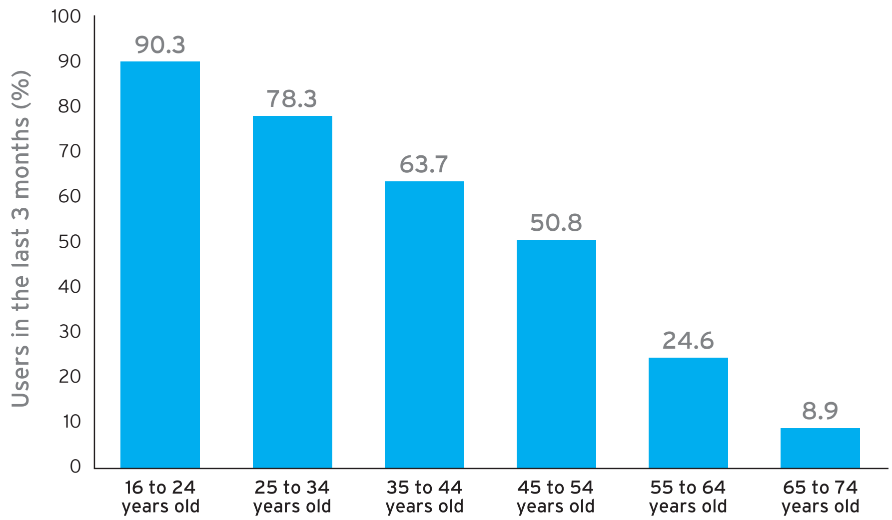
Source: INE

coming years. Moreover, broadband penetration and electronic commerce are clearly on the rise. Internet penetration is growing in a sustained fashion although its use as an advertising medium is still below that of European countries with similar Internet penetration, which means that it is fertile ground for Internet advertising to finally take off.

According to INE (National Statistics Institute) data, in 2008, 44.6% of households in Spain had a broadband connection, which represents an increase of approximately 964,000 households compared to the previous year. If we also consider Internet access, in 2008, 51% of Spanish households had an Internet connection (whether a normal one or broadband), compared to 45% in 2007.

Internet use in Spain continues to rise among all age groups. Nevertheless, it is among the young population that more frequent use is to be observed. Thus, among young people between 16 and 24 years of age, the percentage of people that used the Internet over the last three months was 90.3% in 2008, compared to older groups, where the figure was 24.6% for users between 55 and 64 years and 8.9% for over 65's (INE data 2008).

Figure 6.7. Internet users in the last three months (% of users)



Source: INE

6.3. ANALYSIS OF INTERNATIONAL BEST PRACTICES AND MAIN TRENDS

Within the scope of the present study, a comparative study of the advertising industry in benchmark countries for Spain has been conducted in order to identify best practices in the sector.

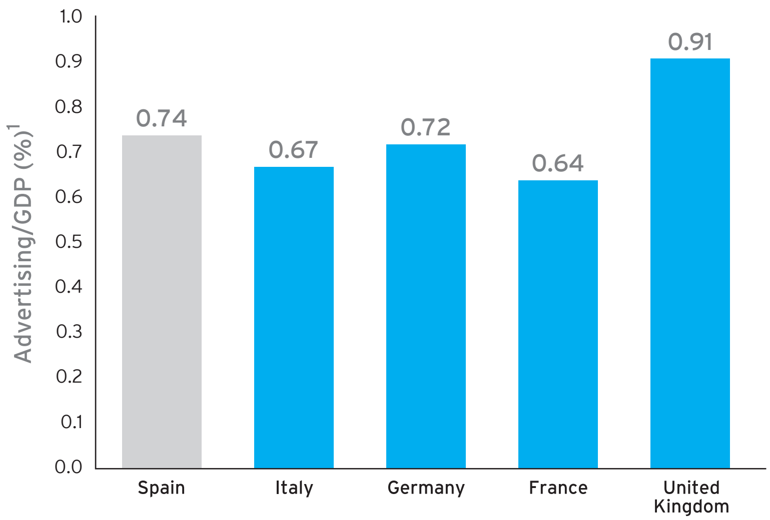
6.3.1. International best practices

Advertising is an important market in Spain. Of the five large benchmark European countries, Spain is the second largest market in terms of advertising in conventional media in 2006. Considered as a proportion of GDP, the figure is 0.74%, which places us behind the UK, with 0.91%, and ahead of Germany (0.72%), Italy (0.67%) and France (0.64%).

However, Spain lags behind in the use of the Internet as an advertising medium. According to Interactive Advertising Bureau data, Spain's Internet advertising investment in the first half of 2007 was 5.5% of the total conventional advertising (6% at the end of 2007, according to Infoadex), placing it behind the UK (14.7%), France (10.8%), Germany (8.7%), and Italy (7.3%).

Nevertheless, the strong growth in online advertising investment between 2005 and 2007 (from 2% to 6% of the total advertising in conventional media) has significantly reduced differences with the benchmark European countries; this augurs well for the growth of advertising in this medium in the future.

Figure 6.8. Advertising in conventional media as a percentage of GDP and the influence of the Internet as an advertising medium on the total investment



5.5	7.3	8.7	10.8	14.7
Internet advertising (%)[2]				

[1] Data 2006 (Infoadex 2008).
[2] Of total conventional advertising first half 2007.

Source: "Global Entertainment and Media Outlook: 2008-2012" PricewaterhouseCoopers (2008); European Commission for the Information Society and Media; Infoadex 2008; IAB 2008

The case of the United States

In the United States Internet advertising expenditure has increased a great deal over the last 5 years (32% AAGR between 2003 and 2007). The principal driver of this expenditure is undoubtedly Internet penetration; it had increased from approximately 20% in 1998 to 71% at the end of 2007; in the last ten years use per person has also risen. Logically, this has meant significant consumption of media and online entertainment, which amounts to a large number of individuals devoting time every week to performing different activities online. In this context, Internet advertising investment has increased considerably from 7.300 billion dollars in 2003 to almost 22.000 billion dollars in 2007 (PricewaterhouseCoopers data).

There is currently controversy in the United States concerning advertising via browsers, especially after the agreement reached in 2008 between the Google and Yahoo! search engines, whereby the latter could show advertisements provided by Google on its search pages. Pending the ruling of the U.S Justice Department on the agreement, according to different public associations such as the World Association of Newspapers (WAN), this agreement, applicable for now in the United States, would enhance Google's power even more in the search engine advertising market and might be in breach of market competition rules.

The case of the EU

The main European countries had very different situations at the outset with regard to the use of **Internet as an advertising medium.** Taking online sales in 1999 as a reference, we can see that France has a clear lead; sales via the Internet had a clear predecessor there in Minitel, offered by France Telecom, which enabled online purchasing before Internet became popular. Behind France, which had total electronic commerce sales of €1.646 billion in 1999, were Germany and the UK, with online sales of €1.125 and €924 billion respectively. Other countries had lower sales, among them Spain and Portugal, with €66 million in online sales jointly between the two countries. By 2007, 11% of companies in Spain were making sales via electronic commerce, and revenue from these sales reached €140.975 billion (INE data).

As a result of the different starting positions, Internet advertising expenditure has evolved very differently in the different European countries from 2003 to 2007. Thus, Spain with almost 61% growth in this period, displays one of the highest online advertising growth rates, together with the UK (63%) and Germany (56%). In contrast, France and Italy have increased their online advertising investment between 2003 and 2007 by 33% and 31% respectively (Pricewaterhouse-Coopers data).

Although the main goal of the EU in regulating advertising is **consumer protection** , in general terms it is also making its regulations more flexible so that member states can promote advertising as a fundamental source of revenue for the contents industry, thus meeting the demands of the advertising sector.

A case in point would be the request by the UK, which, considering itself in a disadvantageous position when competing with the film industry in other markets such as the American, asked the EU about the possibility of introducing *product placement* (indirect advertising).

Thus, in 2007, the European Parliament approved the use, with limitations, of this advertising resource via its **Directive** on **"Television without Frontiers"**. This Directive, on the issue of television advertising in general, stipulates that in the case of films, films made for TV, children's programmes and news programmes, there can only be interruptions for advertisements once every 30 minutes. For other programmes there is complete deregulation, with the sole exception of the limitation to a maximum 12 minutes of advertisements per hour. With regard specifically to *product placement*, as a general rule, it is forbidden except in films, series and sports programmes, although member states may be more restrictive. It is noteworthy, finally, that this Directive does not extend its scope of application to Internet content, due especially to Spain and France's lobbying.

It should not be forgotten that this type of initiative aimed at making advertising regulations more flexible attempts to combat users' increasing ability to avoid advertising. Television viewers now have greater access to television content via the Internet; they download it and watch it without advertising, and the new devices enable television content to be seen recorded, with viewers going forwards and backwards in the programme schedule as they wish.

On the Internet, this ability of the user not to receive advertising is especially important. There currently exist more and more **advertising blocking tools** in any of their modalities (pop-up blocking, anti-spam to screen e-mails, banner blocking programmes, etc.). In Spain, already in 2006, 70% of Spanish users had pop-up blocking tools (EGM data). The consolidation of this trend will affect traditional advertising formats, which will evolve towards formats that will be less intrusive and better accepted by users.

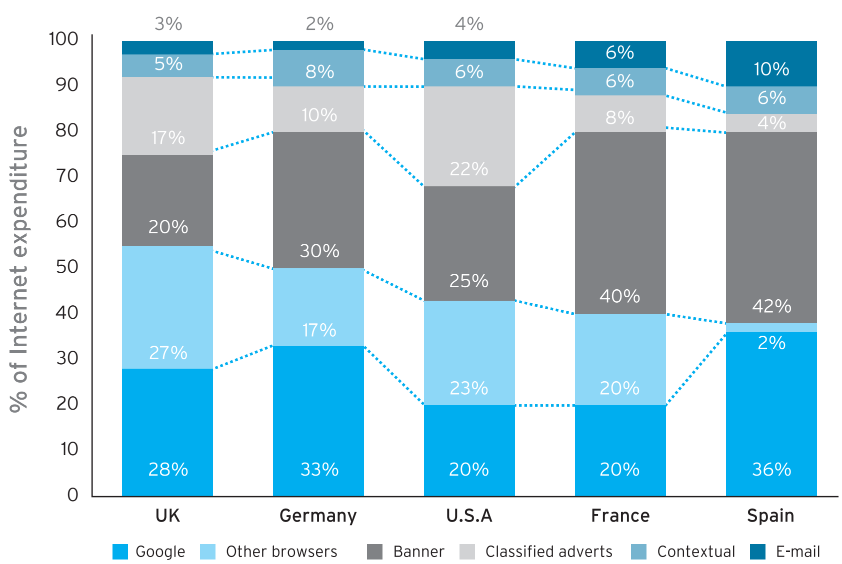
6.3.2. Main trends and new business models

In the principal world advertising markets, the sector is displaying a general tendency to invest more in **advertising in search engines** (Google or Yahoo, for example) at the expense of banners or e-mail. Whereas in Europe the predominant advertising medium in Internet in recent years had already become search engines, in Spain the recent distribution of advertising investment in the Internet has been different, with a greater preponderance of banners rather than the search engine format. The greater use in Spain of advertising via e-mail compared to other European countries is also significant.

Nevertheless, according to IAB (*Interactive Advertising Bureau*) data, online advertising investment in Spain in 2007 displays a trend that is more in line with European data. Thus, the gradual increase in investment in sponsored browsers and links (64% increase from 2006 to 2007) and the gradual disappearance of the use of e-mail as an advertising medium is also confirmed in Spain. The use of **e-mail**s probably does not have a promising future; its abuse as an advertising medium leads to user saturation as it is a non-discriminatory medium and has been badly affected by illegitimate practices such as the sending of *spam*.

One must also mention the incipient increase in investment in blogs, which is beginning to be seen by advertisers as a new advertising investment medium; in fact, the new technologies are providing major business opportunities, mainly based on digitalisation of distribution and of audio-visual content.

Figure 6.9. Distribution of Internet advertising by format (2006)



Source: "Global Entertainment and Media Outlook: 2008-2012" (Pricewaterhouse Coopers); Infoadex 2008; "The Online Advertising Landscape, Europe" (Chris Lake)

The first of these new business models that should be highlighted is the one based on the **financing of new audio-visual formats** to distribute television series and other content free of charge via the Internet and mobile telephone. Advertising would finance this mode of distribution, including advertisements at the start of each episode. This type of financing initiative for new audio-visual formats would be compatible with the production of content with formats adapted to the new communication channels, such as *moviesodes* and *movieseries*, specially produced to be broadcast over mobile telephone.

Another new model would be **contextual advertising and in search engines**, which shows advertising segmented for users who have previously identified their preferences and needs. The major advantage of this model for advertisers is, unquestionably, the possibility of more accurately segmenting the target public. Google, for example, shows certain advertising links according to users' searches; in this way, advertisers are sure of addressing their target public.

A third model would be **advertising and personalised promotions**, which are carried out through **virtual communities** such as Jones Soda or Home Made Simple; these boost loyalty and promote the brand. These communities offer advice, recipes, free trials, invitations to events, etc., as a way of attracting potential customers.

Another interesting model is **interactive advertising**, which enables users to adapt the advertisement depending on their interest in the product. In this way, an advertisement 30 seconds long, for example, can become 30 minutes long for users who are more interested in the product and can access more information via the interactive feature.

A specific example of an interactive advertisement would be the one for a Panasonic vacuum cleaner, the length of which varies according to the consumer's interest. This advertisement enables consumers to watch an advertisement 30 seconds long and, via a virtual site devoted to electronic commerce, choose whether they wish to receive more information on the product. In this way, consumers are always in control of the time they devote to the advertisement and decide on their degree of participation (participation in games and competitions, requesting a catalogue or additional information), or even purchasing the product *online*.

Without a doubt, the future of advertising seems to lie in interaction with the target public, which would serve to counteract the loss of effectiveness of advertising (for example, on television). There is an evolution from an advertiser-consumer relationship conducted solely via massive and one-dimensional media (such as traditional television, radio and printed press), to advertising with a two-directional relationship between advertisers and consumers. The advantages of this latter relationship model are manifold; two-directional communication generates links that boost consumer loyalty and enables information to be sent and received in an individualised way. Moreover, consumers use the media in different ways and with different intensity and form online opinion networks that provide stimulating opportunities for advertisers to reach their target public.

Finally, mention must be made of **advertising via mobile phone**, which, according to some opinions in the sector, may be the major driver of future growth in the advertising industry, not only in Spain but world-wide. According to e-marketer (September 2008), the advertising via mobile phone market could grow to around €2.600 billion by 2010 in Western Europe and to almost €8.000 billion world-wide. Evidence of this incipient trend is the agreement reached in September 2008 between Ericsson and KPN in Holland to insert advertising contents via mobile phone and other devices.

When considering these new business models, one must bear in mind that, in general, Internet advertising has shown a clear tendency towards concentration in large agencies, due to the major economies of scale. The case of the United States, one of the most mature Internet advertising markets, is paradigmatic; it shows an extremely high **concentration of the three main** Internet search engines. The three major browsers account for almost 95% of searches, with Google leading at 70.7%, followed by Yahoo!Search at 18.6%, and MSN Search at 5.3%.

These agents are based on software that enables them to provide sophisticated services free of charge for users at a low cost. Google Analytics, for example, provides value-added services to AdWords customers, such as complex analyses of advertising and online traffic, which Google performs automatically and at a low cost.

6.4. CHALLENGES AND OPPORTUNITIES WITHIN THE SECTOR

The advertising market in Spain must address the following challenges:

In the first place, there is **still a certain imbalance between advertising investment and real consumption of media**. Thus, despite the growth of recent years, only 6% of advertising investment was directed to the Internet, while the latter already accounted for 9% of media consumption in Spain. In comparison, advertising investment in France and the UK exceeds - easily, in the case of the latter - 10% of conventional advertising investment.

In a context of consumer saturation in the face of new media, which has led to a sharp reduction since 1998 in the effectiveness of advertising in traditional media such as television, it is essential to strengthen advertisers' confidence in **online advertising**.

The second challenge faced by the sector is to provide **audience measuring systems** in line with the new technologies. These systems are currently inaccurate and insufficient for channels with audience numbers lower than 5%. These new systems would be unnecessary for digital television with return channels, which can report on who is watching what; however, at the moment sales of DTT devices with return channels are very low.

Another major challenge for advertising is assimilating the increasing use of **new technologies** that hinder the receipt of advertisers' messages by the public. The new technologies enable audiences to avoid advertising, and there are on-demand recording devices providing this feature that are becoming more popular. Furthermore, there is a proliferation of anti pop-up and anti-spam software, which restricts the reception of online advertising; already in 2006 this software was being used by 70% of Internet users in the USA. Another element adding to this challenge is the proliferation of digital television (with 41% penetration in Spain as at October 2008, according to *impulsatdt* data), which increasingly exacerbates audience fragmentation.

07

Film industry

- The film market in Spain (including box office takings and revenue from the sale and rental of films, and excluding the sale of viewing devices: televisions, DVDs, home-cinema, etc.), recorded total sales of €916 million in 2007, around €4 million more than in 2006 (an increase of 0.47%) and an annual rate of decline of 1.9% between 2002 and 2007.

- Stagnation in sales was caused by the decline of conventional business models (above all in film rentals), which has yet to be offset by new models.

- Although the evolution of feature film production and the number of Spanish production companies is positive and has shown significant growth in recent years, the number of people going to the cinema continues to show a downward trend: there were nearly 5 million fewer spectators with respect to 2006 (a fall of ~3.9%).

- This trend, however, is in line with industry data from Europe as a whole, which shows an overall drop of 1.3% in the number of cinema-goers between 2006 and 2007.

- New business opportunities are arising as a result of world-wide changes in leisure and entertainment patterns, above all business models based on the use of the Internet as an online channel for renting and selling films.

- The development of a solid business structure in Spain together with the incorporation of new technologies in cinemas and the exploration of new business models is one of the main challenges faced by the industry in Spain.

7.1. DESCRIPTION OF THE SECTOR

This chapter analyses the film industry in Spain, an analysis that includes revenue from box-office sales and the rental and sale of videos (in VHS, DVD or other recently introduced formats such as UMD, Blu Ray or HDDVD). Income from the sale in Spain of equipment or devices for viewing films is not included in the scope of this analysis.

The film and video market in Spain (not including equipment: televisions, DVDs, home-cinema, etc.) recorded sales of €916 million (source: Ministry of Culture and the Unión Videográfica Española), including €644 million from box-office sales, €220 million from film sales and €52 million from rentals.

Figures for the 2002 to 2007 period show a stagnation of box-office takings (0.6% average growth) and a downturn in the business of selling and renting films, which experienced an average annual rate of decline of 3.7% and 15.2% respectively over the same period.

The stagnation of the traditional market has yet to be offset by sales generated from new business models, although forecasts point to a revival of the sector in the coming years above all due to the boom in new business models such as renting and selling films online.

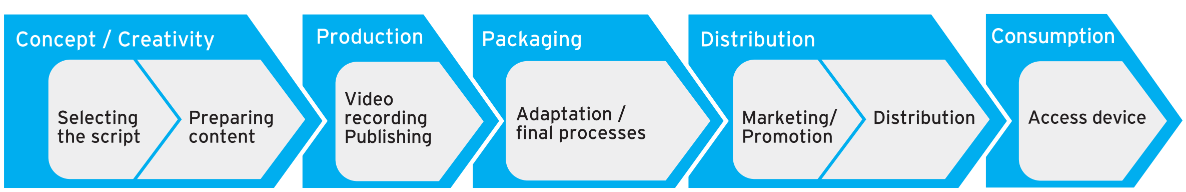
The film industry value chain includes five different stages involving several agents. The value chain starts with the **concept and creation** process during which the information necessary for the whole creative process is gathered, the scripts are selected, prepared and interpreted and the content to be subsequently developed is prepared. This stage involves various creative agents such as script writers, actors and producers.

Next comes the **production** stage in which production companies or television operators (films made by television operators) carry out the filming, editing, audio and video control, lighting and artistic design and any other functions pertinent to the job of editing and recording the material.

The next phase, involving the distribution companies, is that of **packaging** the product, ready for distribution. This involves adapting the content to various user formats, dubbing and other processes needed for the subsequent distribution and viewing of the product such as negotiating distribution and selling rights.

Following this, the product enters the **distribution** stage. This starts with the job of marketing and promoting the film and distributing it through various "windows". For conventional models (based on viewing on a cinema screen or a TV) the product is mainly distributed through film distribution companies, television / cable operators or retail companies (the sale of DVDs or other formats). With the digitisation of the industry, however, the need has arisen to distribute the content to be viewed on new media such as PCs, video game consoles, mobile phones and other viewing devices. As will be

Figure 7.1. Film industry value chain



Source: ONTSI

discussed below, the online distribution of films is becoming increasingly important, as in the case of online sales and rental ("videoclubs" and online shops).

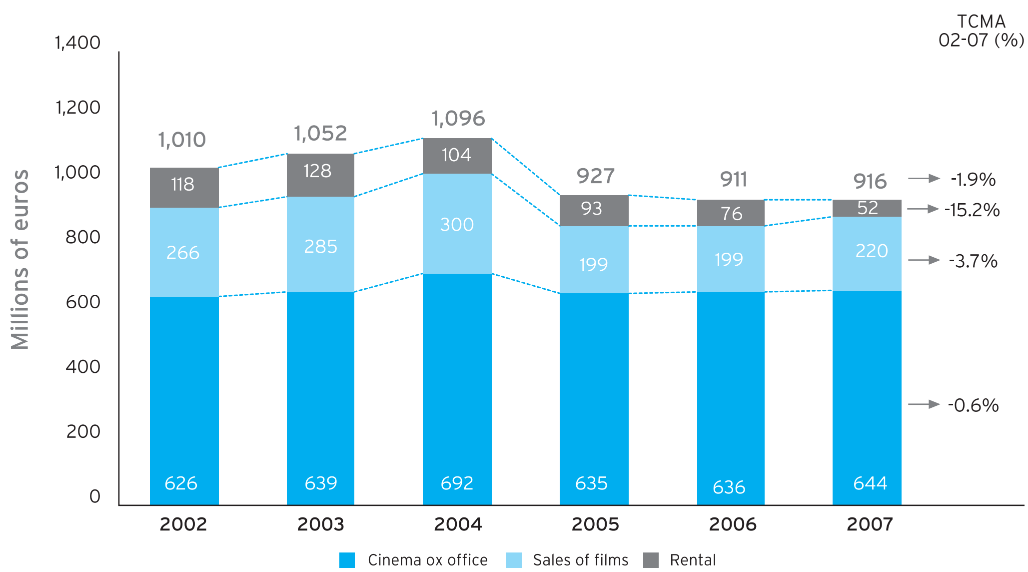
The final stage is that of **consumption** that includes accessing the product through various technologies and the device needed to view the content. This involves cinemas, in the case of the main conventional means of access through cinema projection, and also manufacturers and other agents who provide consumers with the technology and devices needed for consumption such as televisions, PCs, DVDs or other formats (for example, Blu Ray), mobile phones, etc.

7.2. SITUATION OF THE FILM MARKET

7.2.1. Demand

Certain stagnation, and even a slight decline, can be observed in the film industry in Spain in recent years. With regard to revenue (according to data from the Ministry of Culture and the Unión Videográfica Española) the market as a whole fell at an annual rate of 1.9% over the 2002 to 2007 period, going from €1.010 billion in 2002 to €916 million in 2007. This trend is caused, on one hand by the stagnation of revenue from the box-office and on the other hand, by the drop in the sale and rental market.

Figure 7.2. Evolution of the film market in Spain (2002-2007)



Note: Including sales and rentals in VHS, DVD, UMD, Blu Ray and HDDVD format.

Source: Ministry of Culture; Unión Videográfica Española (UVE); prepared in-house

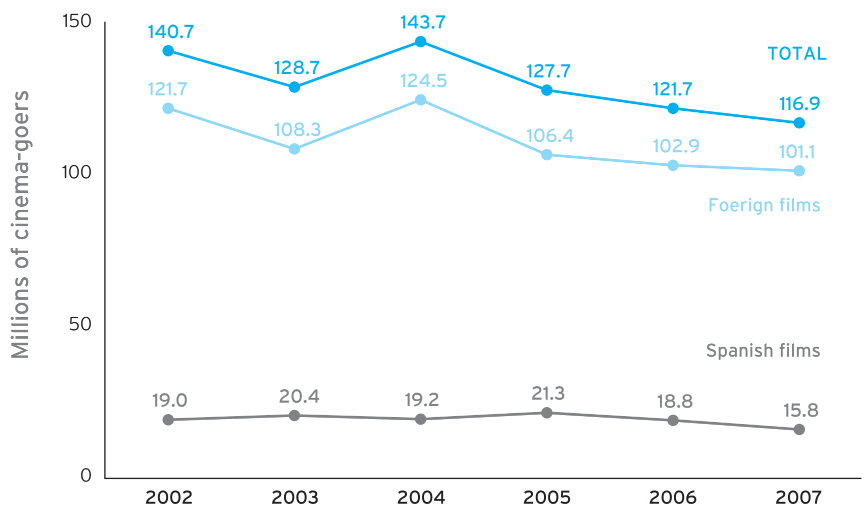
The main source of income for the industry in Spain is still the box-office which, in recent years, has contributed between 60% and 70% of revenue. However, a steady decline in audience figures (5 million were lost during the 2006 to 2007 period according to data from the FAPAE) has meant that in spite of an increase in ticket prices this source of income has shown very little growth (0.6% between 2002 and 2007).

As far as audience figures are concerned the trend in recent years has been discouraging: since 2001, when the highest level, nearly 147 million spectators, was reached (source: FAPAE), the influx of viewers to Spanish cinemas has fallen steadily, and during the 2002 to 2007 period audience figures dropped from 140 million in 2002 to nearly 117 million in 2007 (an average annual fall of 3.6% between 2002 and 2007).

The trend in audience figures in Spain, however, reflects the situation in the rest of the world. In this respect, audience figures in Europe fell by 1.3% between 2006 and 2007, and in the case of reference countries such as France and Germany figures show a drop of 5.9% and 8.2% respectively for last year (source: FAPAE). Only in a few European countries, including the UK and Italy, has the total number of cinema-goers increased.

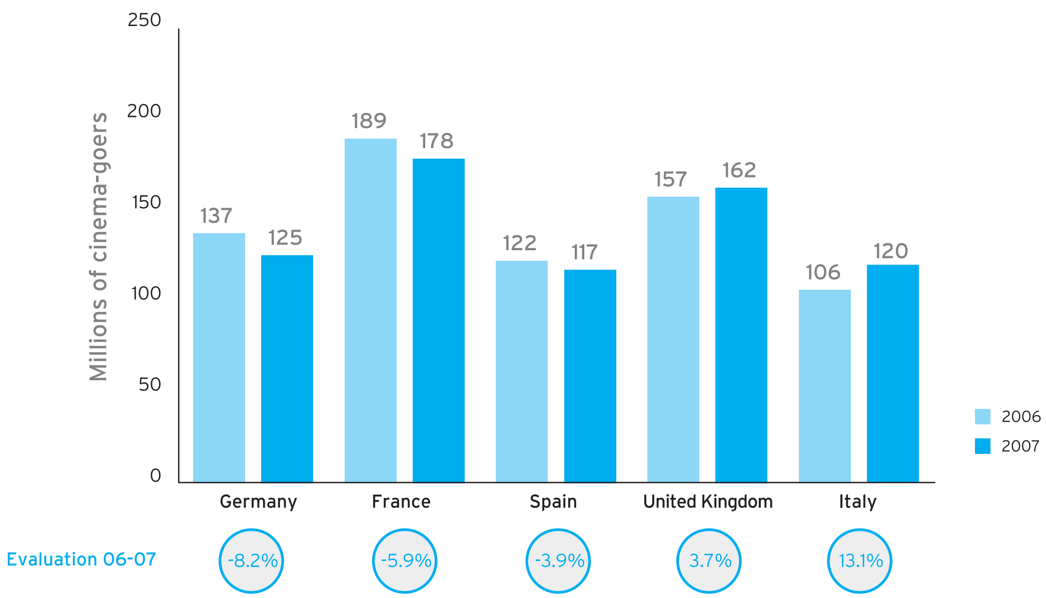
The stagnation of box-office revenue has not been offset by increased revenue from other sources: revenue from the sale of films in all formats, which showed an upward trend until 2004, has since fallen and for the 2002 to 2007 period there was an average annual drop of 3.7%. The downturn has been even more accentuated in the film rental business: in 2002 this accounted for around 12% of Spanish film industry sales, however, after a drop of a little over 15% between 2002 and 2007 and with sales at €52 million, film rentals now account for barely 6% of total industry revenue.

Figure 7.3. Evolution of the number of cinema-goers in Spain based on the country of origin of the film (million of spectators)



Source: FAPAE

Figure 7.4. Chart comparing cinema audience figure in reference countries (millions of spectators)



Source: FAPAE

Estimates of future trends indicate that the rate of decline in the Spanish film industry will continue. According to forecasts by PricewaterhouseCoopers the annual rate between 2007 and 2011 will be -1.6% which will bring industry sales in Spain in 2011 to €860 million. This future trend will be mainly the result of a steady annual fall in the hard copy rental market of over 8%. This will not be offset by revenue from the box-office, which will fall by around 0.5% over the same period (2007-2011).

Technological progress and changes in lifestyle in which Internet-based business models are increasingly predominant point to traditional business models being replaced in the future, at least in part. An example of the boom in emerging consumer models is the evolution of revenue from Video-On-Demand and Pay-Per-View in Spain, which showed an annual growth of 16.3% between 2002 and 2007 with significant increases since 2006 and sales of €55.6 million in 2007.

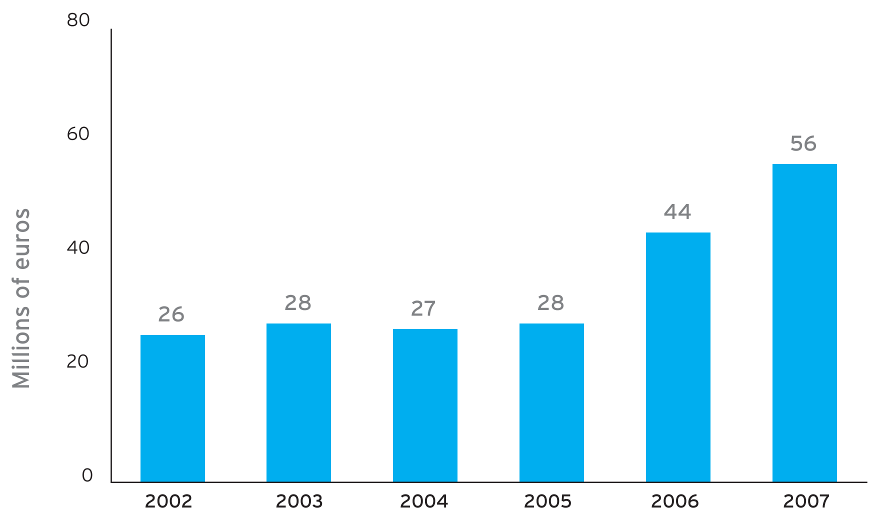
As far as online rental and sale of films is concerned, future estimates for this subsector indicate strong growth. According to PWC (PricewaterhouseCoopers, Global Entertainment and Media Outlook 2008-2012) income from the online rental and sale of films in EMEA (Europe, Africa and the Middle East) will reach around $2.200 billion by 2011, an annual growth rate of nearly 43% between 2007 and 2011.

7.2.2. Supply

The volume of Spanish film production has risen steadily, with 172 feature films produced in 2007 - a landmark in the recent history of Spanish film production and a significant annual increase of more than 4.6% between 2002 and 2007 (source: Ministry of Culture).

Nevertheless, as we have mentioned above, box-office revenue has stagnated in recent years and

Figure 7.5. Revenue per film in VOD (Video-On-Demand) and PPV (Pay-Per-View) in Spain: 2002-2007



Source: TMC

multinational productions, above all from the US, monopolise a large percentage of revenue from films in Spain. As an example of what has been happening in recent years, in 2007 five multinational companies monopolised nearly 71% of box-office revenue for the whole year (source: Ministry of Culture).

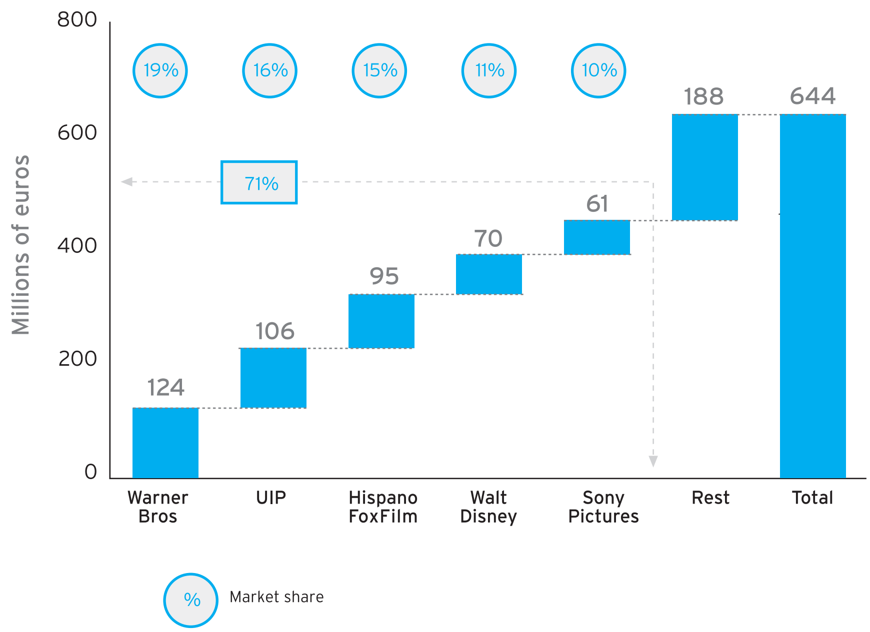
The number of production companies in operation within the film production sector in Spain (considering as such those that have participated in the year's production of films) reached its highest point in 2007 with 213 Spanish production companies, almost double the number operating in 2003 (120)

However, Spanish film production is very unevenly distributed among the agents involved in the industry. Although there is a small group of consolidated companies showing important and continuous production activity and significant revenue, there is another large group of companies with little activity both in terms of revenue and the number of films in which they have been involved over a given year.

Therefore, 167 Spanish production companies (nearly 80%) only took part in one film during 2007, and only 9 (4% of the total) participated in one way or another in more than 5 films.

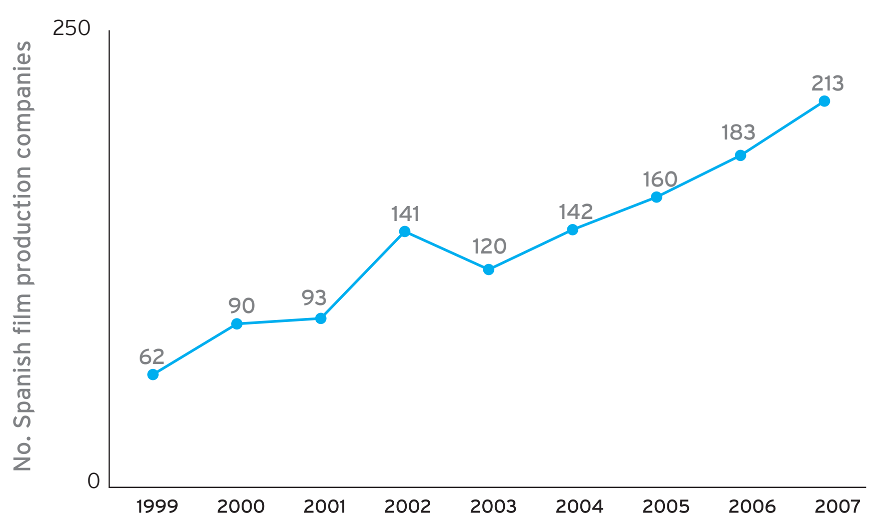
The concentration of activity of a large number of Spanish production companies in a given year is illustrated by a low level of diversification of income among the films in which they take part. Taking as an example some of the leading Spanish production companies in terms of sales in 2007, we find examples such as *Rodar y Rodar Cine y Televisión S.L.* and *Pedro Costa Producciones Cinematográficas S.A.*, for which 100% of their annual box-office revenue was the result of their participation in only one successful film ("El Orfanato" and "Las Trece Rosas" respectively).

Figure 7.6. Distribution of box-office takings by multinational firms in Spain (2007)



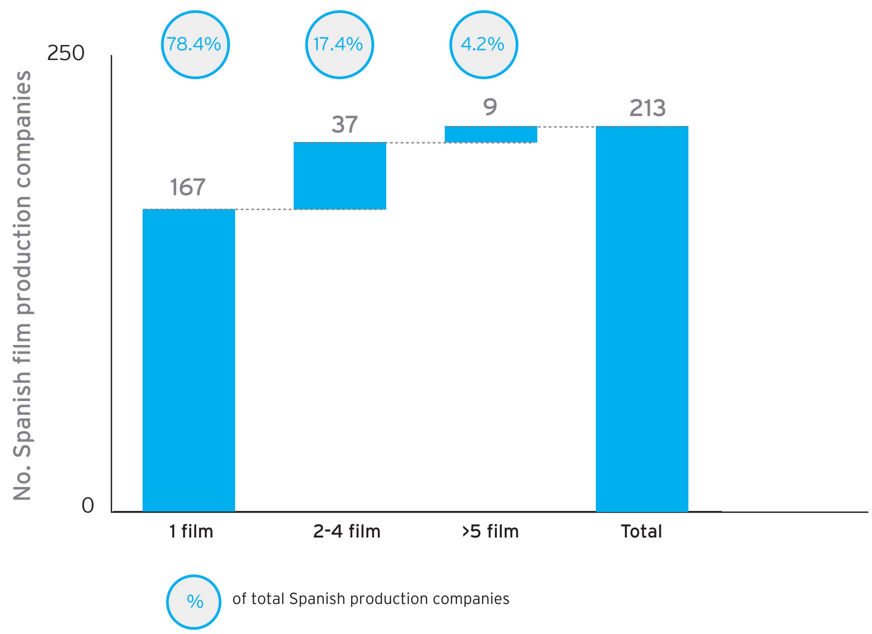
Source: Ministry of Culture

Figure 7.7. Number of Spanish production companies (evolution 1999 - 2007)



Source: Ministry of Culture

Figure 7.8. Diversification of production activity among Spanish production companies (2007)



Source: Ministry of Culture

Even in the case of production companies that participate in more than one film, most of their sales are usually concentrated in a single film. Such is the case, for example, of *Castelao Productions S.A.*, which participated in a large number of films, but 67% of its total revenue in 2007 came from "REC".

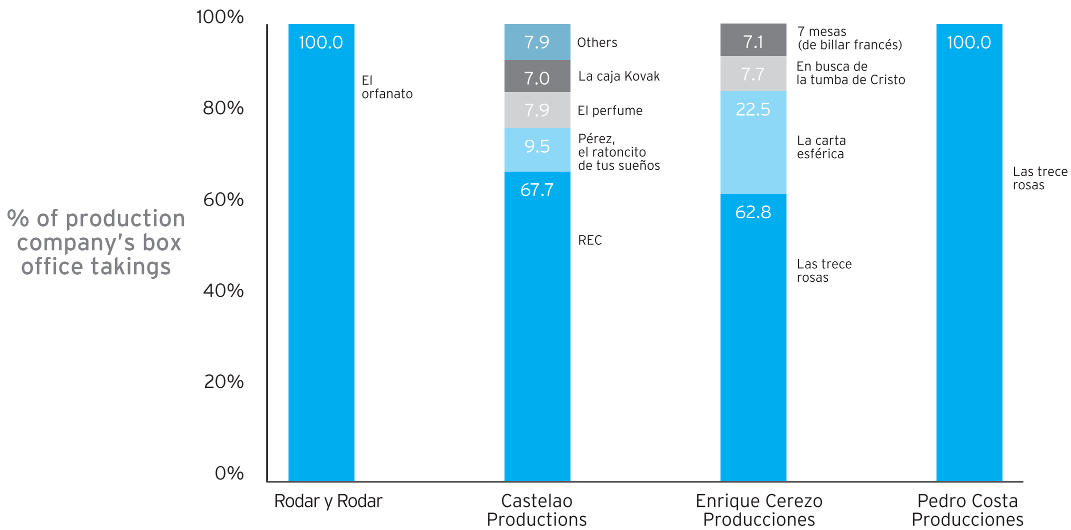
With regard to income based on the country of origin of the film, US productions have consistently monopolised a large portion of annual takings in recent years (67.6% in 2007), although this percentage dropped after reaching 71.2% in 2006, the highest in recent years. Even so, films produced in other foreign countries (excluding the US) increased their market share to 19%, while market share for Spanish films fell by nearly two points to 13.5% of the total in 2007. However, preliminary figures for 2008 (FAPAE, April 2008) show a significant increase for the year, with Spanish-made films taking nearly 20% of market share for the first quarter of the year, compared with 10.3% for the same period in 2007.

For the first time since 2003 ("Mortadelo y Filemón") a Spanish film, "El Orfanato", was the highest earning production, grossing over €24 million (the next highest box-office Spanish film was REC at number 16 in the ranking, which grossed €7.7 million). Nevertheless, box-office takings for Spanish films is concentrated among a few titles with the first six monopolising nearly 50% of gross sales of Spanish productions in 2007.

The situation of the Spanish film industry (loss of cinema-goers, stagnation - in some cases decline - of traditional business models, emergence of new business models, etc.) is an example of how the Internet and new technologies are changing the leisure and entertainment market.

New business models have not yet offset the fall of traditional models in the film industry, although the outlook indicates a return to the upward trend either through a boom in new business models adapted to today's society or a renovation of current models.

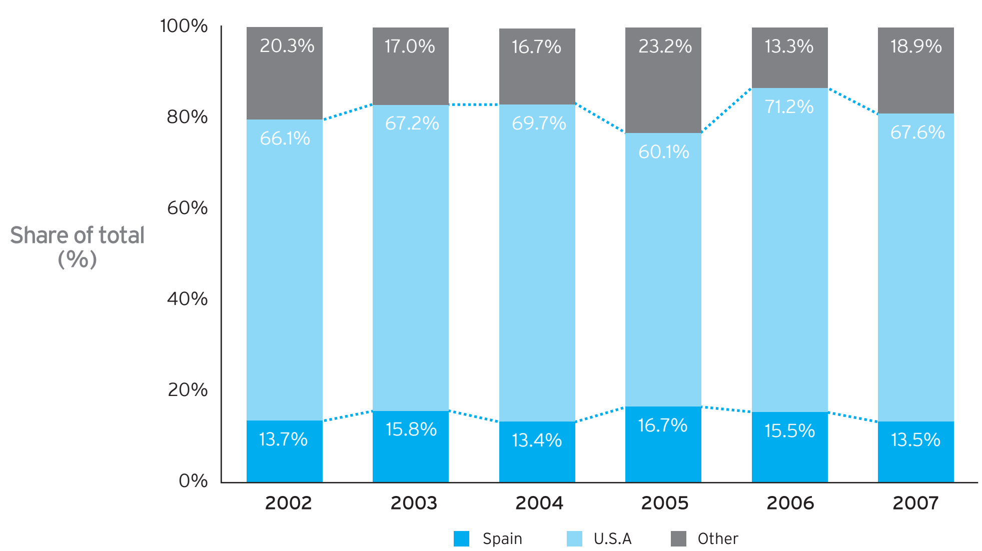
Figure 7.9. Distribution of box-office takings for the main Spanish production companies (2007)



Note: Telecinco Cinema SAU (1st production company 2007) and Antena 3 Films (5th) not reflected

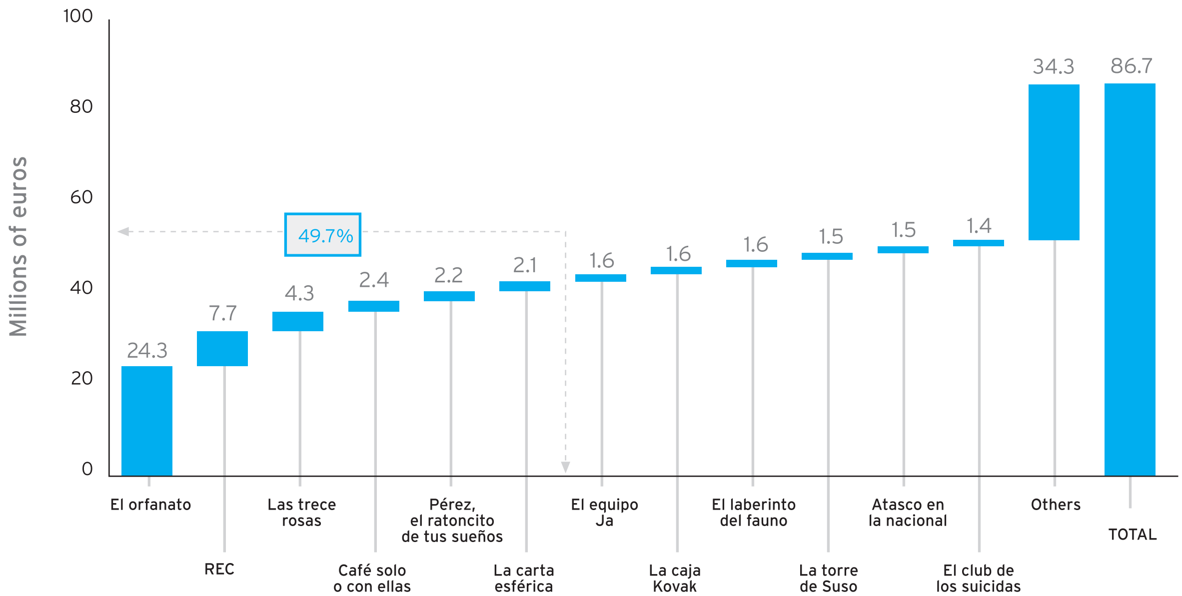
Source: ONTSI and Ministry of Culture

Figure 7.10. Gross takings according to country of origin of the film (2007)



Source: Ministry of Culture

Figure 7.11. Gross takings of most popular Spanish films (2007)



Source: Ministry of Culture

As an example of these changes in society, the Ministry of Culture, in their Encuesta de Hábitos y Prácticas Culturales 2006 - 2007 (Survey of Cultural Practices and Customs), states that 11.2% of subjects polled claimed they never or hardly ever go to the cinema and prefer to watch films on the television, video or PC. In the case of cinemas, the digital and high definition cinemas that will continue to spring up in coming years should give new stimulus to the number of spectators going to the cinema.

As far as the rental and sale of films is concerned a significant development has been the steady drop in this business over the past 5 years (6.7% average annual fall between 2002 and 2007). As we have mentioned before, the prevailing trend in the rental and sales market is to access content through online channels. The recent increase in the number of Spanish homes with access to the Internet and broadband (51% and 45% respectively of penetration in Spanish homes in 2008, according to data from the Spanish National Institute for Statistics) together with the aforementioned proliferation in recent years of other business models such as Video-On-Demand (VOD) means that growth forecasts for these business models in Spain are encouraging for the industry as a whole.

7.3. ANALYSIS OF INTERNATIONAL BEST PRACTICES AND MAIN TRENDS

Within the scope of the present study, a comparative study of the film industry in benchmark countries for Spain has been conducted in order to identify best practices in the sector.

7.3.1. International best practices

The case of the European Union

The first initiative to highlight on a European level is the community support programme for the European audio-visual sector, the MEDIA 2007 programme (*Mesures pour Encourager le Développement de l'Industrie Audiovisuelle*). The programme, with a budget of nearly €755 million, is organised by the Information Society and Media Directorate General and will be implemented from January 2007 to December 2013. The main objectives are:

- To preserve and enhance Europe's cultural and linguistic diversity and its cinema and audio-visual heritage.
- To increase the circulation and audience of European audio-visual works inside and outside the European Union.
- To boost the competitiveness of the European audio-visual sector in an open and competitive market that is propitious to employment.

The case of France

France is a clear reference in the European film industry. With 228 feature films produced in 2007, 133 exclusively produced in France, the industry has the highest cinema audience figures in Europe, with 177.5 million cinema-goers (source: FAPAE) and the largest domestic film industry market share, with 36.6% over total share (source: CNC - *Centre National de la Cinématographie*).

Nevertheless, both aspects suffer from the same trend discussed previously with regard to the Spanish film market, i.e., a decline in audience figures and loss of domestic market share to foreign productions. In the case of France, the number of cinema-goers fell by 5.9% between 2006 and 2007 (a loss of slightly more than 11 million viewers) and French productions dropped from 44.6% of the total to 36.6% (source: CNC).

France is one of the countries that most firmly supports its film industry in order to encourage its development. Of the initiatives taken, the first and foremost has been to grant **tax credits** to film production companies. The credit consists of a 20% tax exemption, up to €1 million per film, on certain production costs.

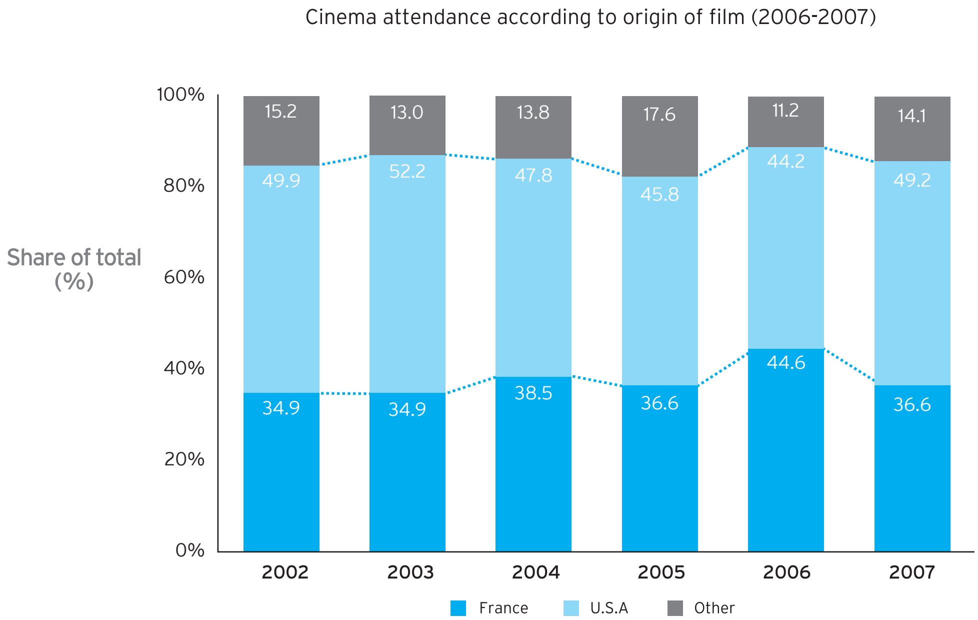
Secondly, as part of the competencies assumed by each European country in the application of the EU "Television Without Frontiers" directive, France imposed on television operators the **obligation** that at least 60% of audio-visual productions included in their **televised films** should be of European origin and 40 % French.

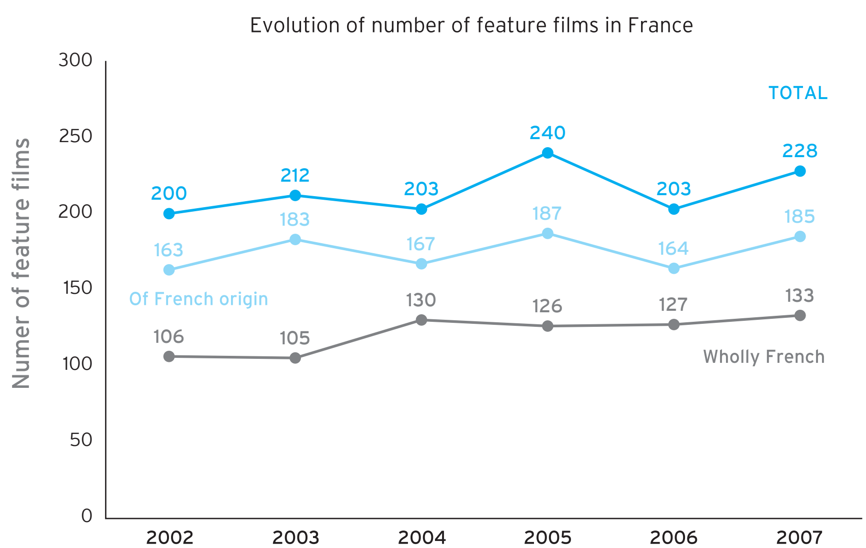
Finally we would mention that since 1991 France has been implementing a programme to maintain and restore the country's film **archive** as part of the process of preserving it. As a result of this programme, which had a budget of more than €2.2 million in 2007, 620 films have been digitised.

The case of the UK

The UK is also a country of reference in the film and video market (which, according to the UK Film Council had overall sales of £4.023 billion in 2007) and has the second highest cinema audience figures in Europe. In this respect, the UK was one of the few European countries with a significant number of cinema-goers, a figure that has risen 4% between 2006 and 2007, increasing from 156.6 million spectators in 2006 to 162.43 million in 2007 (source: FAPAE).

Figure 7.12. Evolution of feature film production and domestic market share in France: 2002-2007





Source: CNC (National de la Cinématographie)

Without reaching the level of France, the UK has one of Europe's highest market shares for domestic films: 29% of box-office revenue comes from domestic productions, a figure that has also increased since 2006, when domestic market share stood at 19% (source: UK Film Council). The UK differs from other countries such as France (49%) with respect to the market share taken by US productions, which accounted for 68% in 2007, although to a large extent this can be explained by the linguistic connection between these countries.

One factor that has prevented considerable losses in cinema audience figures is the boom in **digital cinemas**. With 296, UK currently has the largest number of digital cinemas in Europe (source: UK Film Council 2007), well ahead of its nearest rivals, Germany (135) and Belgium (65) and even more in respect of Spain, with 31 (although in the case of Spain, the number grew by 63% with respect to 2006). In this regard the UK trend has been both steady and steep and the country has gone from having 17% of all digital cinemas in Europe (38) to 34% (296) in 2007.

Another development worth noting is the UK's energetic **tax incentive** policy applied to British film productions: these are eligible for a tax deduction of 25% of total production costs.

7.3.2. Main trends and new business models

One of the most significant new models emerging from recent technological changes, above all the increasing importance of the Internet in the context of leisure and entertainment, is the **online rental and sale of films** or "*online videoclubs*" which, as we have said before, show excellent prospects for future growth world wide.

This model consists either in the sale or rental of downloadable films or television series available on certain websites or what is known as *Video On Demand* (VOD), where users view the content on their television for a specific period of time whenever they choose.

An example of the first modality, in which users pay for each download (the price usually varies depending on whether the product is being purchased or rented and also if it is included in the catalogue or is a new release) is **Pixbox** a service provided by Terra for downloading films, television series and music. In this case, purchase of a film costs between €3.99 and €16.95, depending on how long it has been on the market, and €0.99 and €2.99 to rent.

Another example, and a world-wide reference, is **Apple's** iTunes download store (*iTunes Store*) through which, according to figures released by the company itself, over 125 million TV programmes and 7 million films have already been sold *online*. Also, again from company sources (press release dated 19 June 2008), users are purchasing or renting more than 50,000 films a day.

With regard to *Video on Demand*, by which users view catalogue items on the TV, clear examples of this service in Spain include *Videoclub* from **Imagenio** and the services provided by **ONO** (OJO), Digital +, Orange or Jazztel.

Imagenio, Telefónica's digital TV service, in addition to providing TV channels and football, offers clients the possibility of renting films, TV series and documentaries. Users can view the content as often as they wish within a limited period of time; there is also the pay-per-view modality, where users pay a single price per content, vouchers, or a monthly subscription rate.

In the case of the cable operator, ONO, users subscribing to the company's television service can also choose, in the single payment per content modality, to view films and TV series as many times as they wish for a limited period of time (as in the case of Imagenio).

Among *online* videoclub models, a service worth mentioning is the one launched by the pay television channel **HBO** at the beginning of 2008, which providers pay TV subscribers with the option of downloading films and television programmes free over the Internet.

There are other cases where a single agent has combined online access to content with traditional hard copy distribution. Two examples of this with varying results are Netflix and Wal Mart.

Netflix provides its clients (there are currently over 8 million) with an extensive catalogue of over 100,000 DVD films that can be rented over the Internet and delivered and collected from the client's home. It also provides the option of downloading and viewing online (only available in certain parts of the US) over 12,000 films and television series on a PC or television.

Wal Mart, on the other hand, with an important line in selling films both in its shops and on its web page, closed down its online film downloading service at the end of 2007 after only a year.

7.4. CHALLENGES AND OPPORTUNITIES WITHIN THE SECTOR

The first main challenge faced by the industry in Spain is to create a **solid business structure** capable of exploiting investments to the full and diversifying risks through economies of scale. There is only a small group of Spanish companies sustaining an important and continuous activity in the field of production or distribution and nearly 80% of production companies only participated in one film during 2007 (source: Ministerio de Cultura). In addition to this, multinational companies monopolise a large percentage of industry revenue in Spain: in 2007 alone five US multinationals accounted for 70% of the year's box-office revenue.

The second challenge is to **regain cinemas audience** figures. In this respect, the growing trend towards digital cinemas should encourage cinema-goers, as is the case in the UK, which has the highest number of digital cinemas in Europe and is one of the few countries in Europe area that showed positive growth in cinema audience figures last year.

In Spain there were 31 digital cinemas in 2007, an increase of over 60% with respect to 2006. Nevertheless, in this respect Spain still trails other European countries with less buoyant film industries.

The film industry also faces the challenge of continuing to explore new **business models** associated with digital distribution. Initiatives such as Apple TV, which allows users to rent films from *iTunes*, are a good example of the direction the leaders of the online world are taking. A commonly held opinion in the industry is that in spite of the decline in the number of cinema-goers and revenue from renting videos, consumption of films and video is not losing ground in Spain, rather, consumer habits have changed. Thus, the decline of tradition channels is offset by the rise of other models, above all Internet downloads.

08

The Networked Society

Recent surveys carried out by the ONTSI (Spanish Telecommunications and Information Society Observatory) on the use of Information Society services have shown that Spanish society is fast approaching full integration of information technology in the daily lives of its citizens and in enterprises and public sector activity, a clear illustration of which are the following facts and figures:

- In Spain nearly two thirds of the population consume digital content (68% men and 61% women); the home (88%) is the most popular place of consumption and music the most highly consumed content (78% of users).

- Video sharing websites are accessed by 87% of Spain's Internet users, which is more than in the UK (85%), Germany (77%) or France (63%). These sites are third in the list of most visited websites.

- Spanish is the second most widely used language in collaborative websites (*wikis*) the most outstanding of which is Wikipedia, which is eighth in the list of most visited websites.

- Blogs are used both by private individuals and enterprises. Specifically, 77.8% of Internet users claim to have read a blog at one time or another and 5% of enterprises have their own blog.

- Social networks, rapidly on the rise at the moment with 35% growth in Europe over the past year (June 07 - June 08), are accessed by 20% of Internet users and more than 40% have knowledge of them.

- Advertising has become the main source of income for the Networked Society business model.

This new range of behaviours and consumption patterns recorded among enterprises and users has been given the umbrella term of "Networked Society", a concept that is still hard to model from the economic point of view but which will have prime importance in the future in developing new business models; it could also be a factor to be considered by public administrations for their promotional policies. For this reason, social networks have been dealt with in a separate chapter in this document, albeit on the understanding that their influence and implications cut across the other issues discussed.

8.1. INTRODUCTION

This chapter deals with websites generated by the Networked Society. A common characteristic of this content is that it has a high proportion of user input, although this does not exclude the participation of enterprises and other organisations. Because of the way these sites are generated in some cases there is either a very newly emerged industrial sector or none at all.

An analysis of this trend is fundamental for two reasons: on one hand some of these are the mostly widely visited Internet sites in the world, and on the other the number of sites is rapidly increasing, heralding in many cases the emergence of associated businesses and important industrial sectors.

Included in the report are some of the potential openings for Spanish industry. These are not necessarily limited to generating the websites themselves but also include the supply of related or associated services and products.

Although the range of websites is in fact more extensive, this report will mainly analyse the following:

- Video sharing websites.
- Collaborative websites (wikis).
- Blogs, (blogs, moblogs, photoblogs, etc.).
- Content generated in social networks.
- Class notes and monograph exchange websites.
- Geographic and cartographic content.

In addition to an analysis of the current range of websites on offer there is also a brief study on the use of this content from the consumer point of view.

Organisation of the chapter

Because the websites discussed in this chapter are different and due to the way they are generated (being at times non-industrialised) they must be analysed more as potential generators of industrial value rather than as real sectors, even though in some cases they already have a considerable turnover.

The analysis will include 5 elements. A ***description***, which establishes a definition and limits scope, followed by identification of the ***authors*** or the site, whether private citizens, enterprises or other kinds of organisation.

The analysis is complemented, depending on availability, with various ***statistics*** that help to evaluate both their current and potential impact.

The analysis of ***legal issues*** defines the points that affect both the private and industrial use of these websites. Each chapter concludes with the ***challenges and opportunities*** in terms of identifying viable business lines.

8.2. VIDEO REPOSITORIES

8.2.1. Description

A video repositorie or a video sharing website is a site on which videos are stored, usually classified according to category, and where users can share them with their peers.

These sites usually require the user to register in order to upload material but not to view content. They usually contain a wide variety of film clips, musical videos, home movies and other types of video.

The most popular of these is YouTube, which currently monopolises 80% of the world Internet video market. Its capacity to store home videos has made it the third most visited site on the Internet (according to data from Alexa). Since 2007 this video website has been available in 15 languages, including Spanish. Videos uploaded to YouTube can be inserted into blogs and web pages by using APIs (application programming interfaces) or by including HTML code (hypertext markup language, used for constructing web pages). Other platforms similar to YouTube are:

Figure 8.1. Other video sharing websites around the world

Other platforms	
Jumpcut	Dailymotion
Dalealplay*	Vimeo
Metacafe	Google Video
Yahoo video	Blip.tv
Tu.tv	MySpace TV
Stage6	

* of Spanish origin

Source: ONTSI

The significant growth shown by these platforms, above all YouTube, has prompted some Spanish TV channels to open a space on the website to upload their leading series and programmes, an initiative that has also been followed by the main political parties.

8.2.2. Authors of the content

The content uploaded to these sharing websites comes mainly from two sources:

- From the users themselves who, once they have registered, can upload their videos, which they normally record and edit themselves.
- From television channels or other enterprises that decide to use this platform to promote their products or services.

Therefore, this brings up the need to determine the authorship of the videos uploaded to these platforms to ensure that no copyright-protected content to which the users have no entitlement is uploaded.

8.2.3. Statistics

As a reference, YouTube, the leading website in this sector, was purchased by Google in 2006 for nearly €1.300 billion, a move that enabled the search engine to included YouTube videos in its own Google Video sharing site.

The consumption of videos over the Internet has significantly increased in recent years: according to a report by ComScore, in May 2008 US citizens viewed more than 12,000 million videos on the Internet. This means that every US citizen (whether or not they use Internet) saw a daily average of 1.3 videos (a 45% increase over the previous year). The following chart shows the list of the video web sites *most visited* by US citizens, according to data from 2008.

Figure 8.2. Classification of US video sharing websites (May 2008)

Repository	Videos ('000)	Percentage of total
Total Internet	12,086,273	100.0
Google Site	4,205,700	34.8
Fix Interactive Media	778,168	6.4
Yahoo! Sites	346,825	2.9
Microsoft Sites	245,899	2.0
Viacom Digital	206,047	1.7
Time Warner-Excl. AOL	145,113	1.2
ABC.com	126,589	1.0
Disney Online	107,876	0.9
AOL LLC	104,681	0.9
HULU.com	88,284	0.7

Source: ComScore Video Metrix

This report also reveals other situations such as the fact that the younger Internet users, between 18 and 34 years of age, are those who most view videos on the Internet. Likewise, it highlights the prevalence of YouTube, (included in Google Sites), which has more than 80 million users viewing 4.100 billion videos each month (year on year data).

It should be noted that more videos are consumed over the Internet in Spain than in any other European country according to a survey by Microsoft Advertising. The survey revealed that 87% of Spanish Internet users watch videos on their PC, a figure that places Spain above the UK with 85% of Internet users, Italy with 78%, Germany with 77% or France with 63%.

Figure 8.3. Percentage of users consuming online videos

Country	% of users
Spain	87%
United Kingdom	85%
Italy	78%
Germany	77%
France	63%

Source: Microsoft Advertising

On the other hand, when it comes to watching videos on mobile phones, the figures show that Spain, with 16% of internet users, is still low in comparison with other countries (see table below).

Figure 8.4. Percentage of users consuming videos on mobile phones

Country	% of users
Spain	16%
United Kingdom	28%
Italy	27%
Germany	21%
France	12%

Source: Microsoft Advertising

It should also be noted that, according to the survey, this consumption of mobile phone videos is led by the youngest age group (16-44).

In general, the users surveyed preferred the PC for viewing long videos and chose portable personal devices for short clips.

With regard to YouTube, which monopolises 80% of the world online video market, this company accounted for 75% of the US video website traffic in May 2008 (according to data from Hitwise), a long way ahead of its nearest rival, MySpace TV, with 9% of traffic, and Google Video with 3.73% of the sector, Yahoo Video with 1.9% and Veoh with 1.3%.

8.2.4. Legal issues regarding the content

In spite of the policies implemented by the video sharing websites, ensuring complete control of the use of copyright protected content it is no easy matter, and at times it has been found that copyrighted material has been *uploaded* to these websites by users who are not the holders of said rights.

Likewise, another of the legal challenges involves protecting the privacy of Internet users due to the facilities currently available for recording a video and uploading it to one of these websites.

8.2.5. Challenges and opportunities

One of the short term challenges is to provide video content for mobile phones. In this respect Spanish operators are already offering high demand audio-visual content in "streaming", such as cartoons or sporting events.

As regards the business model, advertising included on video sharing websites is currently the main source of income and, given the success of these Internet sites, the media, enterprises and institutions are all using this channel as a means of promoting their products and services.

An interesting business model and one that is also linked to advertising is “ viral marketing ” (a marketing technique consisting in using social networks to cause a particular content to be shared en masse by users). This has become a widely used Internet strategy that has found in audio-visual websites a powerful tool for communicating and attracting the attention of millions of users, at times even exceeding conventional advertising.

8.3. COLLABORATIVE WEBSITES (WIKIS)

8.3.1. Description

A collaborative website, or wiki, is one that includes texts, links, images or other content that can be both visited and edited either by any users, or only by those who are registered. These are tools that provide an easy way of creating and aggregating collective content as they essentially depend on open collaboration due to the fact that users can modify, update or eliminate existing content or add new information. The most paradigmatic example of this is Wikipedia, a collaborative encyclopaedia where any registered user can upload a document and other users can make whatever contribution they see fit to the same. Use of this encyclopaedia has become so popular that it has now overtaken its printed predecessors.

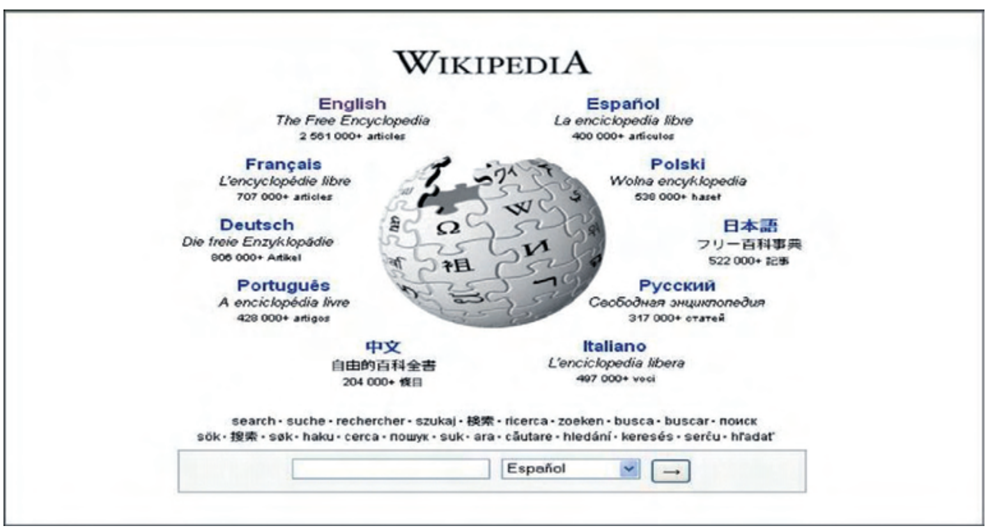
Wikis can store content on any subject put forward by those promoting them and some programmes for implementing wikis are freely distributed while others must be purchased. Examples of the former include Mediawiki and Twiki; a comparison of many of these programmes can be found on WikiMatrix.

On of the most important spaces for creating wikis is Wikispaces which has 1.3 million members and 600,000 wikis (data from October. 2008).

Other parallel projects have been developed along the lines of Wikipedia, also launched by the Wikimedia Foundation. These include:

- http://commons.wikimedia.org (Multimedia content sharing website providing over 3.3 million items).
- http://wiktionary.org (Dictionary in 253 languages. The Spanish language version has over 110,000 entries).

Figure 8.5. Wikipedia home page



Source: Wikipedia website

- http://www.wikiquote.org (Over 3,000 pages of quotes in Spanish).
- http://wikisource.org (Library of available books with over 38,000 pages in Spanish).
- http://es.wikinews.org (Sharing website featuring news articles created by users).
- http://species.wikipedia.org (Catalogue of animal species that currently contains over 150,000 descriptions).
- http://www.wikibooks.org (Website containing educational books, with over 4,000 pages in Spanish).

Other collaborative encyclopaedias are Knol (launched by the popular search engine Google) and the online version of the Larousse. The difference between the former and Wikipedia is that it has been created as a platform where expert users or researchers in a particular field can write articles and at the same time receive economic incentives from advertising, specifically by inserting advertisements in the Adsense network. Users must be registered and the author can decide whether to acknowledge the contribution or submit it anonymously.

There are other world-wide examples such as Helium and Citizendium.

With regard to the Spanish market a particular initiative, due to its specialised content and geographical area, should be mentioned: Wikanda, the first social Wikipedia containing Andalusian multimedia content. This website had 22,570 entries at August 2008, including photographs and videos of all the Andalusian provinces. On a more local level, we have Madridpedia, the online encyclopaedia of Madrid and the surrounding region.

Another kind of specialised collaborative website are link networks where users can share their links once these have been categorised by means of labels (known as tags). A world-wide example of this kind of website is .icio.us, which has more than 5 million registered users and over 180 million shared links.

8.3.2. Authors of the content

Authorship policy is established by the promoters of each website. In the case of Wikipedia, for example, the users are the authors of the documents, and register to create contributions that they think will be useful to the community .

In Wikipedia there is also a groups of users called librarians who ensure that the content is homogeneous and resolve any controversy arising from contents contributed to the website.

8.3.3. Statistics

Wikipedia is a symbol of web-based collaboration and in its little more than seven years of existence it has become exceedingly popular. It is number eight in the Alexa classification of most visited web sites (data from October, 2008). The English language version has the most traffic - 52% - while the Spanish version, second in ranking, has 19%, a very significant figure that illustrates the potential of Spanish on the Internet.

World-wide, Wikipedia contains more than 11 articles in the 253 languages in which it is published, and the Spanish edition now has over 410,000 articles, compared with more than 140,000 in Catalan, 40,000 in the Galician language and 31,000 in the Basque language. Over the past 10 years Wikipedia has grown at an average rate of 300 entries a day.

An example of the extent of user participation in Wikipedia, according to data gathered by Hitwise, 4.6% of users visiting the site create and edit entries.

8.3.4. Legal issues regarding the content

Websites such as Wikipedia illustrate a commitment to free culture and collective creation. Its contents are copyleft (unrestricted distribution or modification) and are included in a *GNU Free Documentation License*, which allows them to be reproduced.[8]

8.3.5. Challenges and opportunities

The popularity of wikis will not only, as they do now, enable projects similar to Wikipedia to arise (and even some more local and specialised projects), but will also foster the emergence of a sector-based industry devoted to the creation and maintenance of these kinds of collaborative platforms, both to promote in-house communication and to provide clients with the ideal tool for forwarding their opinions on the products or service being marketed.

Likewise, the use of this format in the education sector could give rise to enterprises centring their activity on developing specific software for knowledge exchange in the classroom.

As with other Web 2.0 applications there is also a market for wikis on mobile phones.

8.4. BLOGS

8.4.1. Description

A blog is a personal communication space where authors publish their articles in chronological order.[9] These articles are called "posts" (consisting, in their simplest form, of a title, a variable text, the date, the time of publication and the "permalink", i.e., the permanent link that enables them to be referenced by other readers) and readers can attach their comments to these articles. A blog is an easy way of publishing work and a tool for encouraging communication between users and the author. The content is also very easily updated, although it requires full time dedication from the author.

In addition to the elements already mentioned (posts and readers' comments), it is also common to include a blogroll (a list of links frequently used by the author).

The expansion of blogging on the Internet is also aided by the existence of many free publication services, such as Pitas, Blogger, Typepad or Wordpress.

There are a wide variety of blogs, which can be classified as follows:

- Subject:
    - Personal blogs (about the author's experiences and interests).
    - Professional blogs (created by a professional author or expert in a particular subject).
    - Corporate blogs (associated with an enterprise).

- Content:
    - Audioblogs (including sound files in various formats).
    - Fotoblogs (daily publication of photos).
    - Moblogs (blogs based on images recorded on a mobile phone).
    - Videoblogs (share site/gallery of video clips).

Blogs have become a fundamental communication element not only for private individuals: 5% of large and medium sized enterprises in Spain have a blog (according to data from Euroblog 2007).

Corporate blogs have two main uses: they are a tool that enables the enterprise to communicate with the outside world in the sense of branding and being present on the Internet, and are also a platform for fomenting a philosophy of collaboration between employees and of shared knowledge management. The advent of corporate blogs has been a spontaneous and gradual process and has mainly

[8] http://www.gnu.org/copyleft/fdl.html#TOC1

[9] There are many definitions. As an example, see the definitions available on Wikipedia: http://en.wikipedia.org/wiki/Weblog

been reduced to the technology industry although it is slowly extending to other sectors.

There are also blogs that have been started by public administration professionals ("La blogosfera publica" includes a list of many blogs in this area).

Blogs have also been opened by politicians in an attempt to bring their policies or proposals closer to citizens, above all during election campaigns. Such is the case with the blog of the socialist MP Lourdes Muñoz, which, according to the Alianzo ranking, is the most visited, or the blog of the conservative Partido Popular MP, Daniel Sirera.

In the sphere of journalism, blogs have also become an essential tool for encouraging interaction with users and even for enabling them to put forward their own opinions with their own blogs. Today nearly all the leading newspapers have specific sections for blogs from collaborators, journalists and readers in their digital versions. There are also other subject-orientated blog networks dealing, for example, with communication and journalism, travel, video games, or specific to sports such as football.

8.4.2. Authors of the content

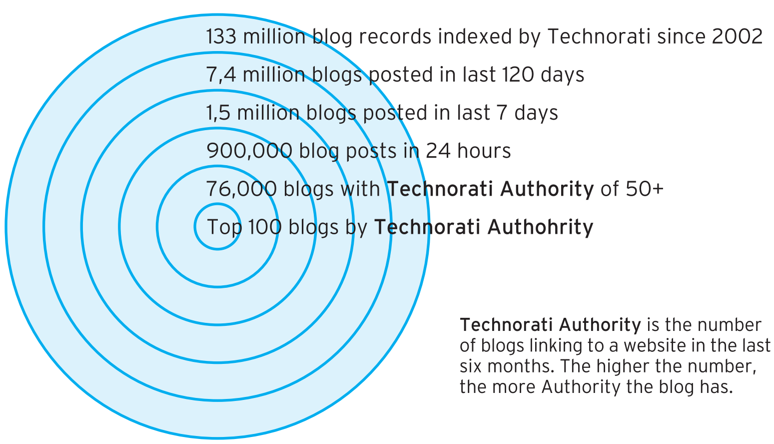
From this perspective, blogs can mainly be divided into individual, or personal, blogs and collective blogs in which a group of people contribute their knowledge on a particular subject. Apart from private individuals, as we have mentioned before, blogs are also written by enterprises or even by public administrations.

8.4.3. Statistics

An analysis of the blogosphere has to take into account two components: the number of blogs and the growth rate or frequency of publication, i.e., the number of posts.

According to the survey on *"ICT Equipment and Use in Households"* carried out by the Spanish National Institute for Statistics over the second quarter of 2008, out of over 19.5 million Internet users, 6 million had read blogs during the preceding three months and 1.9 million had created or modified their blog.

Figure 8.6. State of the blogosphere

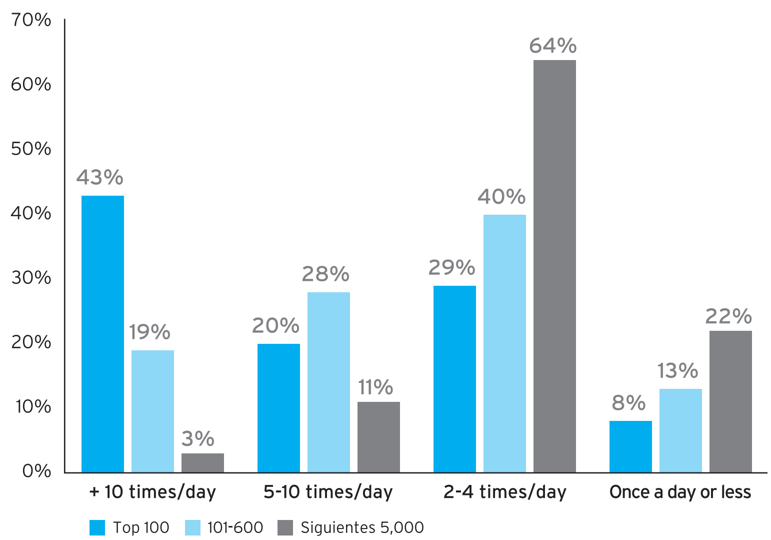


Source: Technorati 2008

One of the best known directories is Technorati which, in its "State of Blogosphere" report of September 2008 mentions 133 million existing blogs. Of these, 7.4 million had been updated in the previous 120 days, 1.5 million had been updated in the previous 7 days, and 900,000 posts had been included in blogs in the preceding 24 hours, that is, 3,500 new posts every hour, or 10.4 new post a second.

The following chart shows the rate of blog postings:

Figure 8.7. Rate of posts on blogs

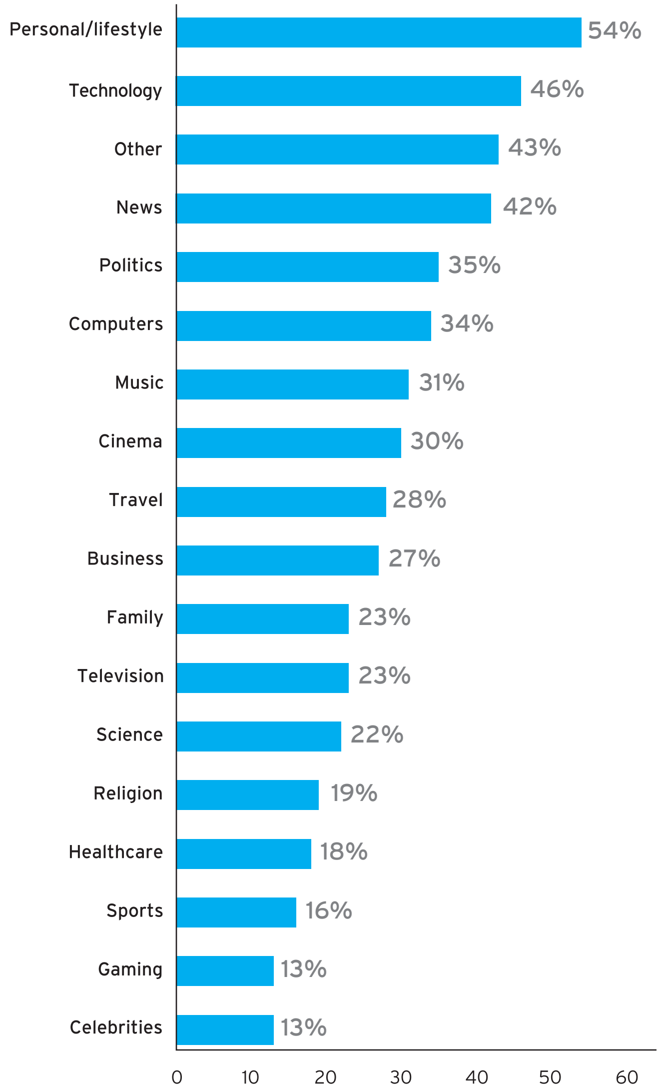


Source: Technorati, June 2008

The fact that 43% of the 10 most popular blogs receive over 10 posts a day is significant, although a high rate of user participation can also be observed in the less popular blogs, and in the group of 5,000 blogs trailing the 600 leading sites it can be seen that only 22% receive less than 2 posts a day.

As far as subject matter is concerned, personal blogs, accounting for 54%, are the most popular, as can be seen in the following chart. These are closely followed by technology-based blogs, which account for 46%.

Figure 8.8. Subjects of blogs



Source: Technorati

Other analysis services, apart from Technorati, are DayPop and Blogdex and in Spain there is Blogómetro, which was launched in 2003 in order to quantify the scope of the Spanish speaking blogosphere.

With regard to the Spanish market, it is significant to note that 70% of Internet users in Spain read blogs at least once a month (source:ONTSI). The most visited Spanish blogs, according to Alianzo (September, 2008), are Genbeta, El Blog de Enrique Dans, VidaExtra and MotorPasion (see image below).

Figure 8.9. Ranking of Spanish blogs (September 2008)

Source: Alianzo

8.4.4. Legal issues regarding the content

Most blogs opt for a free content dissemination model and in this regard Creative Commons licences, which allow users to copy and distribute blog content under a series of terms and conditions chosen by the author in line with his or her interests or preferences, are the most widely used. In Spain one of the most popular licences among bloggers is Attribution 2.5 Spain[10], which allows users to copy distribute and publicly communicate the work and also to create content stemming from the original with the sole condition that the name of the author is mentioned. [10] Other blogs, on the other hand, do not follow any specific system of authorship.

8.4.5. Challenges and opportunities

Nowadays blogs have become a business in themselves. Some of the most important business opportunities associated with blogs are:

- The creation of blog hosting and management enterprises .
- The development of software such as directories or search engines for indexing and listing the wide variety of blogs existing on the Internet.
- Blog consultancy: design of blogs as tools for enterprises, enabling these to position themselves on the Internet and effectively convey their brand to potential customers. Blogs are also an ideal platform for encouraging in-house communication among corporate professionals.
- The creation of enterprises engaged in gathering Internet-based information of interest to their

[10] http://creativecommons.org/licenses/by/2.5/es/

client enterprises. There are examples of these both in Spain and around the world. These enterprises generate qualitative Internet opinion surveys, mainly forums and blogs, on a particular enterprise, service or product.

8.5. CLASS NOTES AND MONOGRAPH EXCHANGE WEBSITES

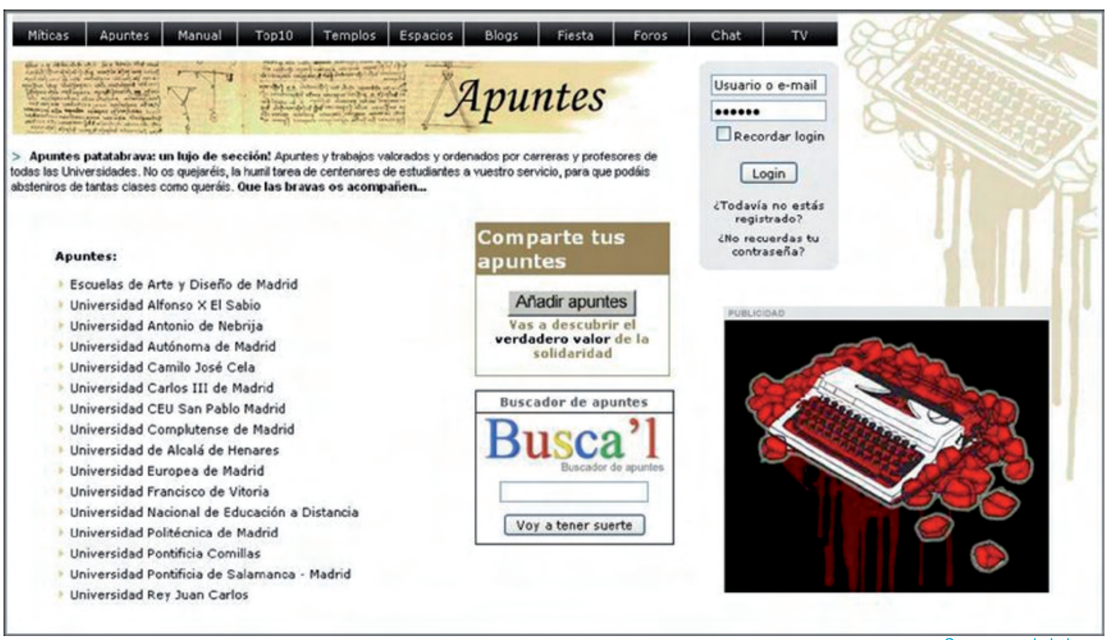
8.5.1. Description

This kind of website, based on the exchange of class notes and resources for students of various universities and other educational centres, has become firmly established within the educational community. Some of the most important websites of this kind in Spain are El Rincón del Vago and Patatabrava.com.

Other interesting initiatives, apart from the two aforementioned, are Apuntes21, Apuntesuniversidad.es (a project launched by the promoters of Patatabrava.com), Apuntesgratis.es or Monografías.com. The latter had, at October 2008, a total 41,822 registered resources divided into 36 general categories. The site also provides other services such as a *newsletter* to keep registered users up to date with all the new features, a discussion forum and a range of courses.

In many cases the website itself encourages users to create content and a list is complied of the most active students and those who submit most content, including a "Top 10" list, which includes the most participative faculties or schools.

Figure 8.10. Classification of class notes in patatabrava.com



Source: patatabrava.com

8.5.2. Authors of the content

The material consulted and downloaded from these websites belongs to the website users, who are usually university students who upload their notes to be shared among the members of the community. Other resources are directly owned by the website itself, which makes them available to the students to prepare documents or other kinds of educational activities.

8.5.3. Statistics

The leading websites of this kind can hold up to 70,000 free files classified under notes, assignments, summaries, problems, models, templates, etc.

The number of hits on these websites for exchanging class notes and other resources usually increases rapidly during the exam season and can reach up to 500,000 visits a day.

8.5.4. Legal issues regarding the content

In their corresponding legal notice these websites include a specific clause concerning the intellectual ownership of the contents made available to users, which are governed by the conventional system of acknowledging authorship but granting exploitation rights to said websites.

In other cases it is specified that the material included in the website are owned exclusively by the authors who, in turn, authorise the website to include it on their pages and identify them as the author.

8.5.5. Challenges and opportunities

One of the challenges posed by these document exchange websites is to include teachers among their assets to enhance the exchange of knowledge in such a way as to enable the creation of communities or spaces where students and teachers can share resources. This would be a potential opening for agents focussing their activity on managing and maintaining these spaces.

Likewise, these websites are an ideal platform for advertising certain user-specific services and products. The personalised advertising sector, or that which focusses on university-based consumers - particularly advertising related to academic products and training or to marketing IT equipment, mobile phones, etc. - has a great future on these class notes exchange websites.

8.6. SOCIAL NETWORKS

8.6.1. Description

A social network is a community of users who establish personal or professional relationships and who share knowledge and experiences. They are normally housed on open websites that are constantly under construction and which involve a group of people with common needs and interests coming together to exchange and strengthen their resources.

Social networks have rapidly expanded on the Internet (the leading website in this category claims to have over 100 million registered users and 24,000 applications, according to data released by the company itself), and are the leading exponents of the "Web 2.0", based on a philosophy of collaboration and shared knowledge management.

In the context of Web 2.0, which includes a group of social software applications, a wide range of social networks has emerged ranging from those based on content created through member collaboration and those that essentially manage relationships between people (this is, what is known as “networking”).

Leading examples of **personal social networks** that seek to extend ties of friendship between its members are MySpace, Facebook and, in Spain, Tuenti.

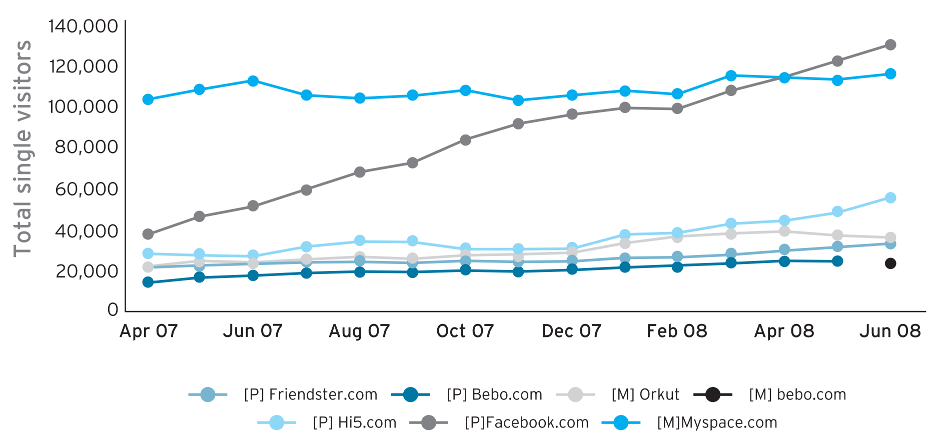
- **MySpace** is a website consisting of a series of user profiles that include networks of friends and groups, photographs, videos and music, as well as an internal search engine and message service through which users can communicate.

- **Facebook** is very similar to the latter, although it is more focussed on relationships and initially less on content.

- **Tuenti** is currently the flagship of Spanish social networks. The particular characteristic of this website, created by three young people in 2006, and what sets it aside from the rest, is that users can only access it through an invitation extended by a registered member. The rest of its features are basically the same as those of its "competitors".

The following chart shows the evolution of the number of users of the main personal social networks world-wide. An outstanding feature of this has been the spectacular evolution of Facebook, which, in little over a year (from April 2007 to June 2008), has grown from around 40,000 single visitors to over 120,000 (source: ComScore).

Figure 8.11. Evolution of single users of leading social networks, April 2007 to June 2008 (thousands of single users)



Source: ComScore

Apart from personal social networks there are also **professional social networks**, which have become the allies of head-hunting enterprises and a meeting point for fostering professional relationships and extending contacts. The main websites of this kind are:

- The expansion of LinkedIn has been significant: at May 2008 it had 24 million registered users from 150 different industries. It was launched on the Internet 5 years ago and since then has expanded throughout the world, adding English to its 5 available languages, which also include Spanish. Through this platform users can create a profile and maintain a list of contacts with other users with whom connection is established through an invitation accepted by both parties. The site also includes a list of suppliers for locating all kinds of services and allows candidates to advertise and search for employment.

- Xing, created in 2003, was listed on the stock exchange in December 2006. This network allows users to register and create their profile, providing information on their job field and specialisation, training, professional career and positions held to date. As in the case of LinkedIn establishing contact requires acceptance by both parties. Other services available on this platform include a weekly bulletin containing user news and a personalised schedule.

- There are also professional networks in Spain, such as Neurona and eConozco.

Figure 8.12 shows the main social networks according to number of hits per month (source: Compete, up to February 2008).
The "vertical social networks" (sites that bring together all aspects of a certain activity or business line) or those specialising in highly specific fields are gradually gaining importance. Several initiatives of this kind can be found in the Spanish market, including Catodicos.com, which brings together fans of a particular TV series, or eBuga for those interested in cars, dealerships and industry news. Another vertical network is the Spanish website nVivo, which has carved a niche for itself as a meeting point for lovers of independent live music.

The amount of personal information distributed through user profiles has prompted these websites to seek efficient advertising formulae to provide economic benefits. Segmental or personalised advertising is one of the most promising business lines, in addition to the commercial services some social networks provide for their users (for example, offering legal advice services on social networks focussed on investments).

Figure 8.12. Number of users and hits per month on leading social networks (February 2008)

	Web	Monthly users	Monthly visits	Variation of total visits since February 07 (%)
1	Myspace.com	65,744,241	955,057,928	-1%
2	Facebook.com	28,563,983	326,418,930	77%
3	Classmates.com	11,978,068	22,488,912	11%
4	Myyearbook.com	3,019,762	20,022,490	284%
5	Bebo.com	3,540,465	19,282,335	3%
6	Blackplanet.com	2,109,069	13,746,246	9%
7	Hi5.com	2,424,699	11,828,458	1%
8	Linkedin.com	3,828,407	11,155,614	729%
9	Tagged.com	2,376,671	10,599,014	11%
10	Reunion.com	6,741,879	10,109,933	28%
11	Friendster.com	1,867,423	8,625,522	25%
12	Orkut.com	469,664	7,093,888	74%
13	Flixter.com	3,311,187	6,752,495	118%
14	Fubar.com	1,667,363	6,610,080	3,272,217%
15	Tickle.com	2,105,741	6,320,987	61%
16	Cafemom.com	1,572,890	6,009,659	495%
17	Xanga.com	1,897,345	5,939,039	-66%
18	Yuku.com	921,186	5,483,587	1.400%
19	Twitter.com	629,531	4,166,086	4.368%
20	Ning.com	1,181,109	3,816,990	4.803%

Source: Compete

8.6.2. Authors of the content

The authors of the content circulating among social networks are the members or users of the networks themselves. These in turn can be individuals, associations or collectives or enterprises and public institutions that use these networks as platforms for broadcasting and promoting their resources.

8.6.3. Statistics

Despite the fact that social networks constitute a new and constantly expanding phenomenon, there are several surveys analysing their scope, characteristics and uses world-wide. An analysis performed by ComScorese[11] shows that the greatest growth in the past year has taken place in the Middle East and Africa, with a 66% growth rate between

[11] http://www.comscore.com/press/release.asp?press=2396

Figure 8.13. Penetration of social networks according to country (2008)

Social network users by country and degree of penetration (2008)		
Social network users by country	Users (millions)	Percentage of the population
Australia	2.6	21.1%
Austria	0.6	11.5%
Brazil	11.4	9.6%
Canada	4.2	21.7%
China	39.0	4.5%
Czech Republic	0.8	12.7%
Denmark	0.6	21.9%
France	4.2	11.4%
Germany	8.2	15.6%
Greece	0.5	7.8%
Hong Kong	1.0	21.4%
Hungary	1.0	18.6%
India	11.8	1.8%
Italy	4.0	12.0%
Japan	12.4	12.2%
Mexico	5.1	8.1%
Holland	3.7	36.4%
Pakistan	1.8	2.2%
Poland	2.7	11.2%
Romania	1.4	10.0%
Russia	6.1	7.1%
South Korea	9.4	23.7%
Spain	**4.7**	**19.7**%
Switzerland	0.8	17.6%
Taiwan	4.0	25.8%
Turkey	3.3	7.8%
United Kingdom	10.6	29.1%
U.S.A	43.0	23.4%

Source: Universal McCann

June 2007 and June 2008. This has boosted the number of single users from 18.226 million to 30.197 million. Europe has experienced the next highest growth rate, 35% (from 122.527 million in June 2007 to 165.256 million in June 2008) followed by South America at 33% (from 40.098 to 53.248 million), Asia at 23% (from 162.738 to 200.555 million) and the USA at just 9% (from 120.848 to 131.255 million).

Another analysis, dating from April 2008, carried out by Universal McCann and published by eMarketer, studied the number of user and penetration of social networks (see figure 8.13). Holland and the UK registered a high rate of penetration of 36.4% and 29.1% respectively, while in other European countries such as France and Germany the figures are appreciably lower (11.4% and 15.6% respectively). These figures are exceeded by Spain which, according to the survey, has registered a penetration of 20%.

According to the same survey 43.2% of Internet users say they have used social networks at some time. Other surveys, such as that carried out by Xperience Consulting and Findansense in July 2008, show that 83% of young people use social networks, 82% upload photographs, 14% videos, and 25% are on more than one social network.

8.6.4. Legal issues regarding the content

The content and resources shared on social networks is very varied. Some of it is protected under Creative Commons licences, above all in the case of recommended internal network messages or posts, while others are not included under any kind of authorship system, a situation that could pose risks when granting authorship rights to a particular author.

There are some issues that could hinder the development of social networks. One of these concerns computer security and the risks, highlighted by some experts, implicit in the exchange of computer programmes not developed by the network administrators and which could contain malicious codes (virus).[12]

In addition to this there are also other legal challenges such as those related to respecting the privacy of users or members of these networks, or others concerning authorship or intellectual property of the content distributed through the networks.

8.6.5. Challenges and opportunities

The activity of social network users generates very valuable resources that could be channelled into business models, as in the case of viral marketing campaigns discussed in the chapter of video sharing websites. These make use of the widespread dissemination made possible by the large number of users of these networks and their connection with other users.

Another possible business opening in the context of this activity concerns providing members of these platforms with IT security. The growth of these networks, therefore, will pave the way for initiatives focussed either on developing software to guarantee IT security of social networks or on the creation of programmes to protect user privacy and personal data, above all in the case of minors.

Social networks are also an ideal channel for promoting products or services from enterprises or institutions interested in having a highly personalised advertising channel where users supply their personal data and consumer preferences.

According to an analysis by Informa Telecoms & Media, by 2012 the number of users accessing these networks from their mobile phone will exceed 300 million. In the light of this, another business opening would consist in making use of the increasing trend

[12] See: http://www.tendencias21.net/Las-redes-sociales-tienen-serios-problemas-de-seguridad_a2541.html

of accessing these social networks from mobile phones. The mobile phone market in Spain generated profits of €2.078 billion in 2007. In the past two years mobile phone services have gained 5.5% of market share with respect to the total revenue in the telecommunications sector, accounting for nearly 50% of the revenue last year (source:DigitalWorld 2008).

8.7. DIGITAL CARTOGRAPHY ON THE INTERNET

8.7.1. Description

Digital cartography is a tool that enables users to view the world in the form of 2D and 2D maps. The availability of this service over the Internet and the possibility of adding all kinds of related information has generated a series of new utilities where user participation provides much of the overall value of the digital content.

Within the sector on cartography we differentiate main suppliers of cartographic maps from secondary suppliers who enhance these maps with simple additional services (for example, a street map that locates addresses) or more complex services (superimposed layers showing buildings of interest, levels of contamination or traffic, etc. from satellite images). These services, characteristic of Web 2.0, allow users to take part in the information generating process by providing additional information such as their own photos, comments, suggestions, links, etc.

Secondary providers include the main Internet website that provide users with a variety of services and where personalised street maps have given way to real location-based information networks with a range of possibilities ranging from route planning to viewing photos of buildings, localising the head office of enterprises, making virtual tours, uploading personal photographs or sending comments. In the future this could create the equivalent of a virtual world (e.g. Second Life[13]) on top of real-world scenarios where enterprises could created virtual spaces to mirror their own physical offices. All this is due, in part, to the ease with which these websites allow users to upload their own information (which is integrated as a new mashup[14] application through connection with an API[15]) together with an open use policy that encourages the development of improvements and new utilities to add to existing services.

Other geographic content included in these kinds of tools come from the public sector: sources include, for example, city council town planning departments, which at times combine property registry maps with satellite and aerial digital images in zone planning management, or even from webcams permanently located in some areas, such as Extremaduravista.

8.7.2. Authors of the content

The maps and the secondary layer-based content are, a priori, owned by the enterprises providing access to the basic services. In this case, users are mere spectators and have a limited capacity to contribute. With the advent of mashups (integration of geographical services through API applications) more advanced users have started to develop their own applications in order to meet new needs, which has resulted in both enterprises and users, to a greater or lesser extent, creating content.

Finally, mention should be made of initiatives that have started to create personalised maps, open and user-developed, such as OpenStreetMaps[16].

13 http://secondlife.com/
14 http://es.wikipedia.org/wiki/Mashup_(aplicaci%C3%B3n_web_h%C3%ADbrida)
15 http://es.wikipedia.org/wiki/API_(inform%C3%A1tica)
16 http://www.openstreetmaps.com

8.7.3. Statistics

The number of people visiting the online maps available on leading Internet websites accounts for slightly under 5% of Internet users, with Google monopolising 60% of this traffic (source: Alexa[17]). As far as use is concerned, it is important to mention that in 2007, in Spain, 74%[18] of Internet users had consulted this kind of content during the preceding month.

An example of the importance of the sector is the price at which companies in this sector are valued: Tomtom, for example, purchased Teleatlas for nearly €1.800 billion, and Nokia bought Navteq for €6.456 billion.

8.7.4. Legal issues regarding the content

Generally speaking private users have full use of these services as long as they are not for commercial use. Likewise, enterprises can use the services in-house, but external use is only allowed if it comes through a specific API.

8.7.5. Challenges and opportunities

The use of digital maps on the Internet is starting to experience significant growth. Thanks to the integration of applications encouraged by the use of public APIs, geographical referencing is extending to nearly all websites, bringing about a real revolution in these services. Interactivity, for example, has become the aim of enterprises such as Panoramio, created in Spain and purchased by Google, which allows users to include their own photographs in Google's map services (Googlemaps).

Other interesting developments using this technology is that related, for example, to the control of fleets and monitoring parcel delivery services or the localisation of low price petrol stations.

8.8. CONSUMPTION OF DIGITAL CONTENT

Although the subject of this report is the existence of certain websites and their impact on industry, in this chapter on content generated by the Networked Society it is advisable to include a brief analysis of the consumer, as in many cases this coincides with the profile of the content creator.

8.8.1. Consumer profile

Nearly two thirds of the population of Spain uses some kind of digital content. There is a slight difference between male and female consumers: 68% of men use these contents compared with 61% of women.

With regard to content type, of all consumers of digital content, music is the most popular (78% of consumers), followed by films (73%) and at a considerable distance behind come those who consume photographs (36%) and video games (20%).

As regards the location where consumption takes place, the home (either the user's own home or that of family and friends) is the place preferred by 88% of consumers - this illustrates the strong relationship between digital content and leisure activities.

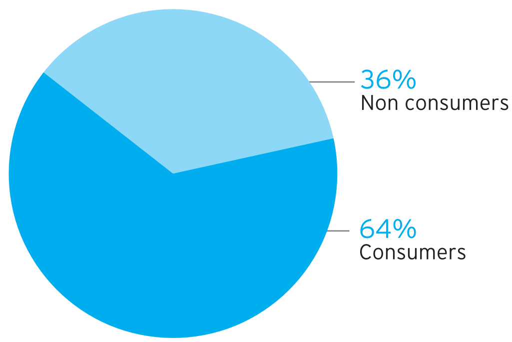
8.8.2. Non-consumer profile

According to the survey on the use and consumption

[17] http://www.alexa.com/data/details/traffic_details/maps.google.com

[18] http://www.aimc.es/aimc.php?izq=audiencia.swf&op=dos&pag_html=si&dch=03Internet/32.html

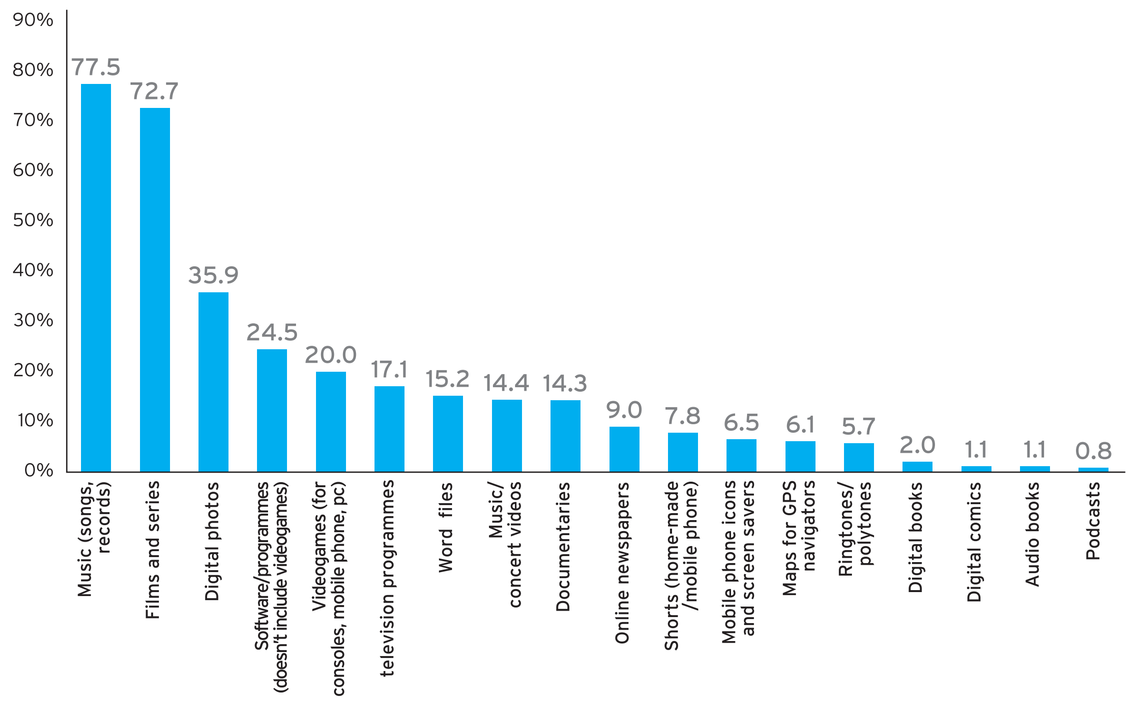
Figure 8.14. Consumers vs. non-consumers of digital content in Spain



Source: ONTSI, "Uso y consumo de los contenidos digitales" survey

of digital contents carried out by the ONTSI, 83% of those who do not consume digital content confirm their intention of continuing in this situation for the next 12 months. The commonest reasons given for this are lack of interest (25.2%) and difficulties encountered with the use of devices for accessing

Figure 8.15. Percentage of digital content consumed by users



Source: ONTSI, "Uso y consumo de los contenidos digitales" survey the content (11.4%). The sum total of these two reasons accounts for 30% of the population as a whole (consumers and non-consumers of content).

Also significant is the fact that 9% of the population do not consume digital content simply because it "doesn't interest them". This could be an opening for incorporating hitherto excluded segments of the population into the Networked Society by identifying new content that could interest them.

Finally, with regard to the profile of the non-consumer of digital content there are significant differences depending on the age group of the consumer: while in the 15 to 24 year age group the percentage of non-consumers is 5%, this figure reaches 65% in the case of over 65s. In each age group, however, around 25% of non-consumers do not identify their reasons for abstaining.

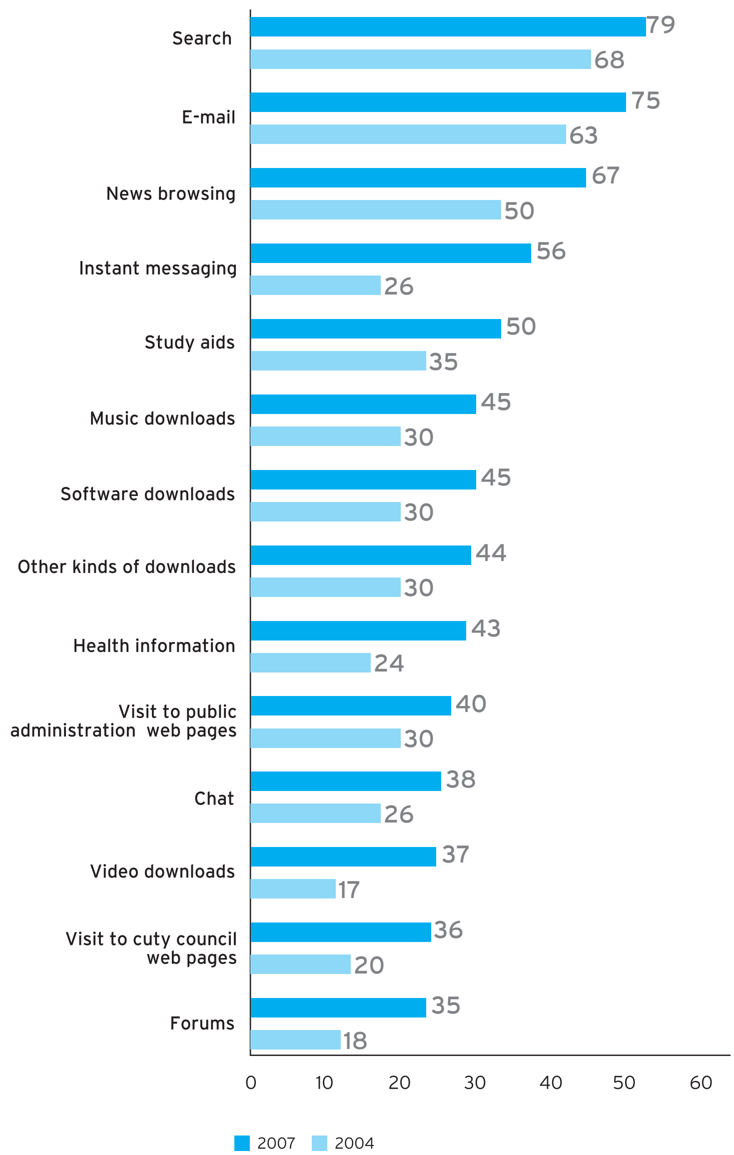
8.8.3. Profile of the 7 to 14 year old consumer

With respect to the under-14s, the consumer analysis illustrates the success of efforts to involve the younger generation in the digital content industry: around 97% of children between the ages of 7 and 14 consume digital content. The contents most used are films, 72%, followed by music, 64% and video games, 53%. As far as devices for playing video games are concerned, the most popular are consoles, both portable and otherwise.

8.8.4. Access to digital content compared with other Internet uses

As a comparison, the following chart shows a classification of the most popular Internet services (including those that involve the consumption of digital content). As can be seen, the search for information using various search engines and directories and the use of e-mail (79% and 75% respectively) is still more widespread than, for example, reading the news (67%).

Figure 8.16. Most used Internet services. (% of users, January-March 2007)



Source: ONTSI

09

Conclusions

The present White Paper contains an analysis of the digital content industry in Spain; this analysis may be used as objective information serving as a reference for all the agents (associations, companies, administration, etc.) that are part of the digital content industry.

Quantitative and qualitative analyses of the industry have been carried out in order to conduct this study and different **sources of information** have been used for the purpose:

- On one hand, information has been compiled from multiple sources available, including analysts' reports, INE statistics, and industry studies conducted both by company associations and by public administrations or companies specialising in market studies, in addition to other sources of information, such as news or press releases.
- Additionally, the situation of the industry in different countries has been analysed, with special attention being paid to neighbouring countries (European Union) and to countries where, in global terms, the industry is currently most highly developed.
- Finally, industry experts and players collaborated in the preparation of this study. Numerous interviews were conducted and meetings were held to gather the their opinions and ideas and include them as an essential part of this White Paper, thus providing an enhanced and more faithful overview of the digital content industry in Spain is provided.

The **principal conclusions** drawn from the analyses of the different sectors comprising the digital content industry in Spain are outlined below.

- The **video games** sector in Spain has great potential; it is the fourth largest market in Europe in terms of sales and forecasts are that it will continue to develop in line with strong world growth. However, Spanish video game production is still at a fledgling stage and the market is dominated by international products. With regard to consumption platforms, there has been a tendency for some years now towards games based on online platforms and platforms for mobiles.

- The **music** sector both in Spain and in the world is undergoing a process of transformation to digital, which is bringing both obstacles and new opportunities for development. Thus, music consumption is constantly growing, although changes in patterns of use and consumption are hindering the monetisation towards which the new business models and distribution channels (Internet and mobile) should contribute. As regards the products available in the sector in Spain, music in Spanish language still has a very significant presence, though it is the large multinationals that account for the lion's share of sales.

- The **audio-visual** sector has displayed considerable growth in Spain in recent years, with domestic players that are comparable in size and profitability to other European markets. The recent technological changes have led to the emergence of new handicaps for the development of the sector, such as audience fragmentation or audience migration to media with business models that have yet to be defined. However, new business opportunities for the future are also emerging, such as television via ADSL and mobile or interactive television services. The analogue model continues to dominate in the radio sector, although new consumption modalities point to the evolution towards digital radio.

- The **publishing** sector has grown at a constant rate in all markets (press, books and magazines) in recent years, although the adoption of digital models is not being carried out marketwide.
    - The press subsector has registered greater development in its online aspect, and although online press revenue is still small, the increase in hits on digital newspaper websites and the growth of advertising investment in this medium point to future growth of the online business.
    - With regard to books, the online market is not very developed as yet (only 1% of total sales), although the increase in sales for digital books in other media (mainly DVD and CD-Rom) points towards a rising trend.
    - The online magazines market is still at an early stage of development; online magazine consumers do not as yet account for a very significant proportion of sales.

- **Advertising** in Spain has grown constantly and significantly in recent years, with great dependence on television as the main advertising medium. However, television is expected to continue to diminish in importance as an advertising medium and gradually yield to the new digital media (the Internet). Thus, for Spain, with a lower percentage of investment in advertising via the Internet than other European countries and with leisure time spent on the Internet on the rise, advertising via the Internet and other interactive media is the major growth driver for the sector in the future.

- The **film** sector in Spain and world-wide is displaying a degree of stagnation; this is a consequence of traditional business models affected by new habits of consumption. However, under the umbrella of the new technologies, new business opportunities are emerging, especially web-based ones, which might counteract the stagnation of these traditional models in the future. Domestic production continues to grow in terms of the number of feature films and production companies; the activity of players, however, displays a lack of balance (few players active in a major way), and the market is dominated by the foreign multinationals, which are larger and, in general, deliver product in a more solid and continuous way.

- Despite not being a sector *per se*, the digital content created in the framework of the **Networked Society** is growing at a very strong rate thanks to high user participation (individuals, companies, public entities, etc.), making up some of the most frequently visited websites world-wide and, on many occasions, becoming the origin of new associated businesses and new industrial sectors.

In the preparation of this study, many of the collaborating experts and industry players were in agreement as regards some of the **keys for the development** of the future digital content industry in Spain. The major points are outlined below.

- The content industry is immersed, world-wide, in a process of **transformation to digital**. Although this transformation does not entail the disappearance of traditional business models, this will be key for growth in the industry.

- In a context of increasing globalisation and openness, the digital content industry must be **internationalised** in order to develop. Traditional barriers such as distance or availability lose significance for an industry whose end product, due to its digital format, can be distributed for consumption almost immediately to practically anywhere in the world. The future of the industry is global. In fact, the Spanish digital content industry is currently dominated to a large extent by foreign multinational companies (especially in music, films and video games).

- **Professional training** is of major importance for the development of the digital content industry. As it is a recent industry, qualifications and specific training do not exist in most countries, and the few countries that currently take advantage of the skills of their professionals as a competitive edge are beginning to stand out from the rest.

- There is **uncertainty at present regarding digital business models** ; the transformation in patterns of use and consumption has not gone hand in hand with the adaptation of online business models. Therefore, clear business models for the online aspects need to be identified, on the basis of which the industry should be developed in the future.

The analyses and opinions set out in the present paper are merely a reflection of the current state of the digital content industry in Spain. As it is a fledgling industry and one that is in a state of constant transformation and growth, conditions, both internally and externally, may change. That is why the importance of ongoing analysis and reflection on this industry and its future must be stressed.

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Note on Methodology

A large number of different information sources were used in the preparation of the present paper. Despite the existence of different sources, the digital content industry has no official sources. We have therefore resorted to using sources that were deemed as the most reliable, in addition to traditional industry content sources, as a launch pad for the transformation towards the digital industry. Methodology of the major sources used in the preparation of the present report:

- Global Entertainment & Media Outlook 2008-2012 PricewaterhouseCoopers.
  - Historical information obtained from author's and confidential sources.
  - Identification of all factors conditioning the behaviour of the industry analysed.
  - Future forecasts based on the analysis of the dynamics of each segment and for each region and on the different factors affecting its behaviour.

- Anuario (yearbook) 2007 ADESE (Spanish Association of Software Distributors and Publishers): see www.adese.es/pdf/anuario-memoria-2007.pdf for more details.

- TMC annual report 2007: for more details on calculations and information reports see the report at www.cmt.es/es/publicaciones/anexos/Informe_anual_CMT_2007_web.pdf

- Libro Blanco de la Prensa Diaria (white paper on daily press) AEDE (Association of Spanish Daily Newspaper Publishers): see www.aede.es/documentos/notaprensa2008.doc for more details on the methodology employed.

- Estudio Infoadex de Inversión Publicitaria (Infoadex survey of advertising investment): visit: www.infoadex.es/estudios/resumen2008.pdf for more details on the preparation of this study.

- Marco General de los Medios en España 2008 (General Framework of the Media in Spain) by AIMC (Association for Research into Communication Media):
  visit www.aimc.es/aimc.php?izq=estudios.swf&pag_html=si&op=uno&dch=06otrosestudios/61.html for further information.

To quantify the different markets in the digital content industry, different information sources were used; in the case of data obtained in dollars, the exchange rate used was 0.79703 dollars to a euro.

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Glossary

3D: three-dimensional, in three dimensions.

3G: third generation of mobile telephony standards (UMTS).

ARPU: *Average Revenue per User*.

ADSL: *Asynchronous Digital Subscriber Loop*. Internet connection standard that uses the subscriber telephone loop (copper pair).

API: communications interface between software components.

Blogroll: collection of blog links.

B2B: *Business to Business*, it refers to transactions between companies.

B2C: *Business to Consumer*, it refers to transactions between companies and consumers.

Broadband:name given to the array of Internet access technologies that transmit information using several channels to increase effective transmission speed.

Banner: Internet advertising format consisting of the insertion of a piece of advertising on a web page.

Blockbuster: successful production. applied to films, TV productions, video games, etc.

Briefing: a document summarising the basic information necessary to carry out a campaign.

CD/CD-ROM: *Compact Disc-Read Only Memory*.

Cannibalisation: a phenomenon that occurs when a product makes another product obsolete, its sales increasing at the expense of those of the other product, which fall.

Commodity: homogeneous or low differentiation product, the sales of which are based almost exclusively on the price.

DRM: *Digital Rights Management*.

Dual licensing: It refers to the distribution of software by dual licensing schemes (two different sets of licences), one normally being open and the other with restrictions.

DVB-H: *Digital Video Broadcasting - Handheld*. Standard for the distribution of the TV signal specially adapted for portable devices.

DVR: *Digital Video Recorder*.

DVD: *Digital Video Disc*.

e-Administration:used to denote the presence of the public administration on the Internet (online services, websites, etc.).

E-learning: E*lectronic Learning*.

EBITDA: *Earnings Before Interests, Taxes, Depreciation and Amortisation*.

EMEA: *Europe, Middle East and Africa* .

GPRS: English *General Packet Radio Service*; it is the principal communications protocol of second generation (2G) mobile telephony.

GRP: *Gross Rating Point*. Advertising audience measurement of a medium equivalent to 1 per 100 of the potential total audience universe. Duplications are not considered for these purposes.

Html: Predominant mark-up language for building websites.

R+D: research and development.

R+D +i: Research, development and innovation.

IPTV: *Internet Protocol TV* . Television the signal of which is transmitted digitally via the Internet.

Mashup: website or web application that uses content from other web applications to create completely new content.

Moviesodes: episodes or series adapted for the mobile telephone.

Open Source: open source code. Software distributed and developed free of charge.

PC: *Personal Computer*.

PDA: *Personal Digital Assistant*, initials commonly used to refer to electronic diaries.

P2P: *Peer to Peer*. It refers to content distribution networks via Internet in which all participants (network nodes) are of equal importance (all nodes behave simultaneously as clients and servers).

Podcast: sound file distributed via the Internet through content syndication (users subscribe and receive the new podcasts when they are broadcast).

PPV: *Pay Per View*.

Product Placement: positioning a product in content for advertising purposes.

SME: Small and Medium Enterprise

Spam: unwanted electronic mail.

STB: *Set Top Box*. It is a device used to connect a television set to an external signal source. It is commonly used to receive a television signal in cable networks.

Streaming: technology enabling content to be displayed without having to download it onto a device.

AAGR: Average Annual Growth Rate.

DTT: Digital Terrestrial Television

ICT: Information and Communications Technology

UMTS: *Universal Mobile Telecommunication System*. Third generation mobile telephony standard.

Web 2.0: it refers to the second generation of web-based services and communities, which enables collaboration among users (wikis, social networks, etc.)

Webcam: video camera that is connected to a device with an Internet connection, so that the images may be accessed online, electronic mail, etc.

Wi-Fi: *Wireless Fidelity*. Marketing name used for the family of local wireless network standards 802.11.

Wiki: collaborative website that may be edited by various users. The users of a wiki can create, edit, delete or modify the content of a web page, interactively, easily and rapidly.

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Tables and figures

Digital content is playing an increasingly important role in stimulating and developing modern economies and societies. The digital content industry, a sector that has been growing steadily in recent years both in Spain and the rest of the world, has been attracting enormous interest from the population as a whole and particularly from entrepreneurs and other agents (creators, producers, editors, distribution companies, aggregators and operators), both because of the industry's short term growth potential and the enormous impact it has on citizens' habits and attitudes to leisure, work and daily life in general.

In Spain, where nearly two thirds of the population already access digital content, new ways of using and marketing network content are creating new business opportunities and social initiatives hitherto beyond the scope of traditional models. This new wide-ranging outlook for digital culture continues to open up new spaces for communication and transfer of information that are directly transposed into greater wealth and well-being for all citizens.

Aware of the importance of digital contents in our society, Spanish Telecommunications and Information Society Observatory (ONTSI) publishes this Main Figures for Digital Content, in order to provide enterprises, institutions and citizens with a reference tool and an opportunity to reflect on the current situation and future prospects of each sector of the digital content industry in Spain. The Paper will no doubt be a valuable source of objective information for all interested agents, and will be continued with future editions.