

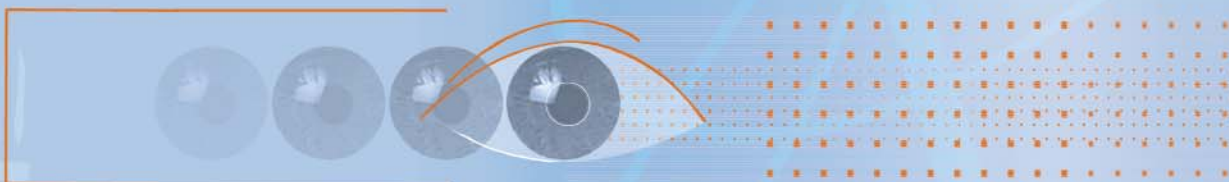


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Future of Creative Industries

Implications for Research Policy



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FORESIGHT WORKING DOCUMENTS SERIES

Future of Creative Industries

Implications for Research Policy

by Carmen Marcus

April 2005

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Cataloguing data can be found at the end of this publication.

ISBN 92-894-9022-5

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Printed in Belgium

PRINTED ON WHITE CHLORINE-FREE PAPER

Acknowledgements

Carmen Marcus works as a Seconded National Expert in the European Commission, Directorate General for Research, Science and Technology Foresight Unit of Directorate K – Social Sciences and Humanities, Foresight.

She wishes to warmly thank Paraskevas Caracostas, the Head of Unit, for his coordination and support during the whole work on this document.

The author expresses her gratitude for comments received on earlier drafts from Ian Perry and other colleagues from the European Commission, notably DG EAC and DG INFSO, as well as for the support related to statistics of Roya Kamran and the technical assistance of Fotini Chiou and Valerie Anderlin.

This working document can be downloaded from the website: www.cordis.lu/foresight/. The views expressed here are those of the author and may not in any circumstances be regarded as stating an official position of the European Commission.

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1. Overview of the field

1.1. Matters of definition

There is no unique definition of these industries. Starting with the very broad name, the notion may also be referred to as only ‘cultural industries’, ‘creative industries’, ‘future oriented industries’ in the economic terminology or ‘content industries’ in the technological vocabulary. US analysts use increasingly the term of ‘entertainment industries’ (Hesmondalgh, 2002). However, the terms ‘cultural’ and ‘creative’ industries are the ones most used in different analyses.

The concept of ‘cultural industries’ is generally based on a rather functional definition of culture than on a broadly anthropological one, culture being seen as “the signifying system through which necessarily (though among other means) a social order is communicated, reproduced, experienced and explored” (Hesmondalgh, 2002, p. 11). From this perspective the cultural industries activities have *primary aim to generate and communicate symbolic meanings*. Going one step further, analysts such as David Throsby consider a broader definition of cultural activities. Seeing them as a different form of creativity in their production, the cultural activities concern not only the generation and communication of symbolic meanings but additionally *their output embodies, at least potentially, some form of intellectual property* (Throsby, 2001, p. 4). Further developments towards a wider context of application led to a shift from the concept of cultural industries to the notion of creative industries, the understanding of the creativity concept itself moving from the activities having a strong artistic component to “*any activity producing symbolic products with a heavy reliance on intellectual property and for as wide a market as possible*” (UNCTAD, 2004, p.4).

1.1.1. Cultural industries seen as subset of the creative industries

Of great help in understanding the evolution of this complex cluster of activities is the analysis made by T. O’Regan on *cultural policy*, where the author investigates the cultural and creative industries models of the last twenty years and points out the gradual progress of the terms in the policy context - *from the cultural industries to the creative industries, more precisely towards considering the cultural industries as a subset of the creative industries*. (O’Regan, 2001, p. 19-20)

O’Regan points out a model used by different states and federal art agencies over the late 1980s and 1990s, citing an analysis by David Throsby. There is “a model of the *cultural industries* centred around the locus of origin of creative ideas, and radiating outwards as those ideas become combined with more and more other inputs to produce a wider and wider range of products”. The model has a core consisting in the traditional creative arts, surrounded by layers of other industries. The arts core includes: music, dance, theatre, literature, the visual arts, the crafts, as well as newer forms of practice such as video art, performance art, computer and multimedia art (Throsby, 2001, p. 112). The first layer around the core “comprise those industries whose output qualifies as a cultural commodity ... but where other non-cultural goods and services are also produced, such as the proportion of ... primary cultural goods and services is relatively lower than in the core arts case”. This area includes book and magazine publishing, television and radio, newspapers and film (p. 113). We could add here also elements of digital media (e.g. games). Finally, “the boundaries of the cultural

industries (...) catch industries which operate essentially outside the cultural sphere but some of those products could be argued to have some degree of cultural content.” These industries comprise advertising, tourism, architectural and design services (p. 113). The cultural industries model recognises both the role of subsidised industries and the commercial cultural ones, but favours the arts core of the cultural industries.

Over time, largely due to the accent placed upon commercial and economic development, *the middle and outside layers were moving to the core and the subsidised sector was pushed at the periphery, becoming a subset of creative industry policy frameworks* (T. O’Regan, 2001, p. 20). Both the subsidized and commercial culture became of interest as *creativity resources*. Such resources – of people, skills, talent and practice forms – “were to be harnessed, redirected, refashioned via a commercial and entrepreneurial spirit in an ever widening commercial application of creativity that involved much more than the existing commercial and subsidized cultural sectors”. **The creative industries model considers the cultural industries within a services framework; and configures culture as a “service industry” and “creativity an application”.** (T. O’Regan, 2001, p. 21)

An analysis of UNCTAD makes a difference between “upstream activities” (traditional cultural activities such as performing arts or visual arts) and “downstream activities” (much closer to the market like advertising, publishing or media-related activities) and argues that the second group “derive their commercial value from low reproduction costs and easy transfer to other economic domains. *From this perspective, cultural industries make up a subset of the creative industries*, while the even broader cluster copyright industries consist of both creative industries and distribution-based industries.” (UNCTAD, 2004, p. 4)

Referring to the same shift of terms from cultural to creative industries, Stuart Cunningham argues that *cultural industries notions* have been developed around the *cultures of nation states* and generally the term “has developed into the application of neoclassical economics to the art paralleled by a ‘rebadging’ of large, usually commercial industries such as TV, music and film, as ‘cultural’.” (S. Cunningham, 2001, p. 5) “There are undoubted continuities between cultural and creative industries, but ... creative industries are trying to chart a historical shift from subsidised ‘public arts’ and broadcast era media, towards new and broader applications of creativity... **Creative industries are less national, and more global and local/regional...** Their characteristic organisational mode is the micro-firm to small to medium-sized enterprise (SMEs) relating to large established distribution/circulation organisations”. (idem, 2001, p. 6)

Taking into account all the above arguments, we consider the creative industries as lying at the crossroads between the arts, business and technology (UNCTAD, 2004) and having the cultural industries as a subset (T. O’Reagan, 2001; S. Cunningham, 2001).

The creative industries can be defined as “those industries that have their origin in individual creativity, skill and talent and which have a potential for wealth and job creation through the generation and exploitation of intellectual property” (UK Creative Industries Task Force, 1997).

1.1.2. What type of industries does the sector includes?

The cluster of cultural and creative industries ranges from heavily industrialized fields to the less commodified ones, the second group being represented mainly by the traditional cultural activities but as well by the craft-oriented activities or design industry.

Heavily industrialized and commodified industries (according mainly to D. Hesmondalgh)

- *Advertising and marketing*
- *Broadcasting (the radio and television industries, including their newer cable, satellite and digital forms)*
- *Film industries (this includes the distribution of films on video, DVD and other formats, and on television)*
- *The internet industry, including website creation, portal providers*
- *The mobile content industry*
- *The music industries: recording, publishing and live performance*
- *Print and electronic publishing, including books, CD-ROMs, on-line databases, information services, magazines and newspapers*
- *Video and computer games*

Less industrialized cultural and creative activities

Traditional cultural activities:

- *The visual arts (painting, sculpture)*
- *The performing arts (theatre, opera, concerts, and dance)*
- *Museums and library services*

Other creative activities: *crafts, fashion, design industry and household objects*. They might include *architecture, cultural tourism, and even sport*.

1.2. Organizational features

The organization of the creative industries takes various forms varying from one industry to another. In classic economic circles, the road from the creation to production, distribution, consumption and conservation of creative goods meets individual and social actors with different roles in different creative realms. However, a distinction can be made between the profit-making and the non-profit sectors of the industry.

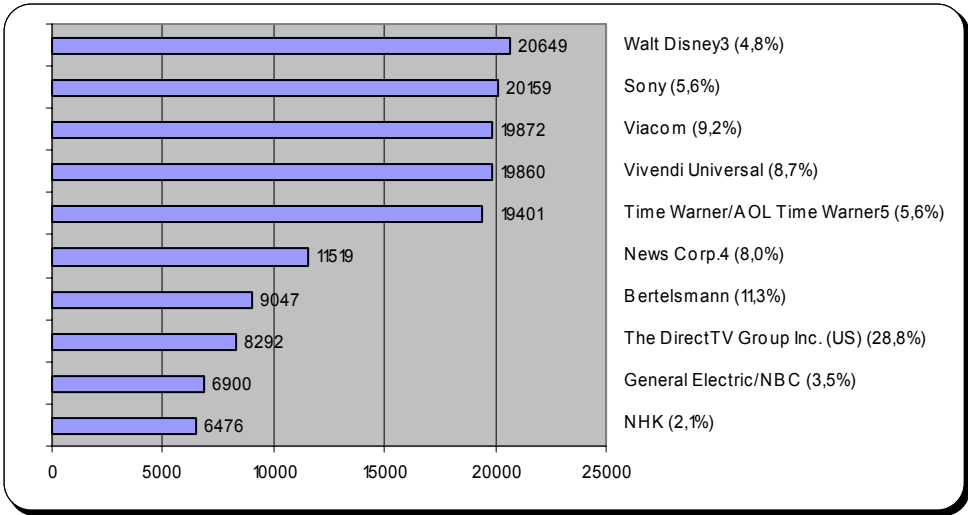
1.2.1. Conglomerations versus small firms

The *profit-seeking sector* is increasingly dominated by large conglomerates with functions both in the processes of production and distribution of the complex creative goods – such as films, books, records. Big companies like Sony, Disney, Time Warner, etc. deal with large-scale production, promotion and distribution of creative goods on a more and more internationally level. Balancing this there are small firms involved mainly in discovering new talents and promoting them on the creative market (Caves, 2000; Throsby, 2002).

One of the elements with profound effects on the organization of creative industries is represented by the *fixed costs* necessary for the creative goods production (Caves, p.224-225). The cost of a film negative is the same, independent by the size of audience. So is the cost of recording sound or of an opera performance. If they are too large compared to the market size, the revenue obtained will not cover them. When the market becomes larger, a *monopoly* seller will emerge. The same analyst shows that even if a potential competitor would push to decrease the prices, usual he cannot face the corporation which has the monopoly of the market. Further, if the market becomes even more enlarged we will meet an *oligopoly* (few firms). Caves gives the example of the few Hollywood studios that have the oligopoly of the film distribution. Once their distribution system is put in place, they have no additional cost for each film promoted and distributed except for the print and advertising for each new film. Therefore new competitors do not enter the market, due to the fact that they cannot compete with the distribution systems of the large firms. Perhaps this is the reason, continues Caves, why new studios like Dreamworks choose to distribute their films via Universal rather than on their own distribution network. Finally, if the market is enlarged to a great extent and the fixed costs remain constant, many other firms can find their own place but usually they will not have a high profit.

The tendency of concentration of creative goods producers and distributors is increasing, and we meet currently the *oligopoly model*, beside the film industry, mainly in record industry, book publishing, and toys and games. Figure 1 illustrates in this respect the first ten world leading groups in the audiovisual fields. Many conglomerates are more and more vertically integrated, tracking the creative goods from their production to the distribution channels, in order to deal internally with potential problems of one or another element of the production and distribution process.

Figure 1: Ranking by audiovisual turnover of the 10 leading groups worldwide in USD millions, 2003⁽¹⁾; in brackets: annual average growth rate 1996-2003⁽²⁾



Data source: European Audiovisual Observatory (2004) Yearbook – Film, television, video and multimedia in Europe, vol. 1, p. 26

Notes: (1) 2002 or latest available years (2) 1999-2003 for Vivendi Universal, 1998-2003 for The DirectTV Group Inc.; (3) at 30 September - including merchandising; (4) at 30 June; (5) For the period 1993-1998 the accounts of Time Warner Entertainment were deconsolidated from those of Time Warner; the figures represent the sum of them; in 1999 Time Warner became AOL Time Warner; turnover of the Warner Music Group not included in 2003

Another feature of the large corporations is that they tend to cover more than one sector of the creative industries and to work on an international scale. For example, Time Warner activities contain magazine and book publishing, production and distribution of cinema and TV films, distribution of sound recording, operating cable TV networks and systems. Viacom, Disney and News Corporation show similar spans (see as well table 1). Bertelsmann (Germany) and Pearson (Britain) undertake publishing activities in numerous countries (according to Caves, 2000).

Table 1: Leading media groups worldwide – Turnover in millions USD and breakdown of turnover by activity, in % (2003)

Company	Turnover 2002 in millions USD	Film and Programmes	Video	Broadcasting & Cable Programming	Music	Publishing	Internet & Multimedia	Cable & Telecoms	Others
Sony ⁽⁵⁾	72081	10.1	(¹)	-	7.5	-	10.4	-	77.7
Time Warner	39565	27.7	(¹)	21.3	-	14	21.7	19.5	-
Vivendi Universal	32182	23.6	(¹)	16.3	19.5	23.6	2.2	35.5	2.8
Walt Disney	27061	27.2	(¹)	40.4	(¹)	8.7	-	-	23.7
Viacom	26585	15.4	22.2	58.4	-	(¹)	-	-	6.6
Bertelsmann	21219	(³)	(⁴)	26.5	16.1	38.9	(²)	-	21.7
News Corp.	17474	25.7	(¹)	41.5	(²)	27.5	(²)	-	5.3
Lagardere Media	10033	(³)	-	7.3	-	38.2	(³)	-	54.5

Source: European Audiovisual Observatory Yearbook (2004), vol.1, p.27

Notes: (¹) Included in “Films and programmes”; (²) Included in “Others”; (³) Included in Broadcasting & Cable Programming; (⁴) Included in Music; (⁵) Year at 31.03.2002.

Besides the conglomerates, which represent the big ‘promoters’ of the already consecrated artists, there are though small or independent companies having often a ‘gate keeping’ function for the new talents. In some fields such as the record industry, these companies, so called ‘pickers’, are oriented to identifying and promoting new styles of music and types of performers. In other fields, for instance art galleries, the difference between pickers and promoters is related to the extent and quality of auxiliary promotional services (Caves, 2000, p. 158).

Generally speaking, the profit seeking sector in the creative industries follows the institutional patterns of the ‘new economy’ as depicted by Florida in ‘The rise of the creative class’ (2002): the venture capital model is typical in starting new companies, which as they grow and become successful are often bought out by big companies. In this way, the entrepreneurs produced the creative work and bring it into the market. Another key feature of the new economy is the outsourcing of the manufacturing to specialized subcontractors – the so called modular manufacturing system. Within the creative industries this trend is met for instance in the film sector, where the specialized work carried out formerly by a big studio is now outsourced to independent services firms (editing, lighting, recording/sound, film processing, etc.) (see annex 1).

1.2.2. Non profit organisations (NPOs)

The *non-profit sector* embraces primarily the high culture area as the organizations within the sector have a major goal of producing cultural value (Caves, 2000; Throsby, 2002). According to Caves (idem, p.225-226) the non profit organizations are frequent in the fields

where the fixed-cost problem is harsh. But why NPOs would carry out activities without covering their costs? In fact, according to Caves, NPOs benefit from several advantages that explain their predominance in several creative industries, as maintaining over time a good quality of the goods/services offered and being more oriented to the quality of the product delivered than on the aim of minimizing the costs (as the managers of profit organizations tend to be).

Other hypothesis for the existence of NPOs in the creative industries sector, put forward by Throsby, is that such firms exist in response to unsatisfied demand for public goods. Alternatively, Throsby suggests that art firms can attract voluntary (individual and corporate) donations, government grants and subsidies, only if they are organised on a not-for-profit basis (2001, p. 117).

Caves shows that the NPOs completely dominate the *high-culture sector* (2000, p. 230-231). The performing arts involve high fixed costs and high variable costs for each audience member served, these two factors leading to high ticket prices. Beside them, book publishing, even if it is principally commercial, includes the university presses and other publishing managed by non profit organizations (in 1980s the non profit share was 12 percent in book publishing and 22 percent in magazines). Among the performing arts, symphony orchestras and opera companies are financed exclusively by the non profit sector (public or private).

Annex 1 depicts specific organization patterns for several fields of the creative industries: film industry, books and records, and toys and games, as well as giving some information on formal training, apprenticeship and the selection of the artists. This helps to get a better understanding of the sector's specificities.

1.2.3. Labour markets

According to Throsby (p. 120-122), the creative market has several characteristics which make it distinct from other markets. One of the foremost attribute is the higher **degree of uncertainty** in the arts than in most other careers, connected to general expected professional rewards or even to regular employment.

The industry contains heterogeneity of human resources categories. Firstly it can be made a distinction between cultural and non-cultural workers. The non-cultural workers can be probably considered to behave in conformity with conventional labour market theories of labour supply, wage determination, earnings distribution, and so on. However it is inappropriate to try to analyse the case for the cultural workers in these terms, argues Throsby, or even to analyze them as a homogenous group, due to the fact that inside this very category exist a considerable diversity of occupational status.

The four distinct features of creative labour market identified by Throsby are:

- The industry contains a **predominance of part-time workers** and **multiple job-holders**. Particular in the realm of performing arts there are full time workers receiving regular pay, but in most of the cases they are in the minority. Even if they are formally employees, they are likely to work on a sporadic basis or on short-term contracts. Many of the performing artists, writers, directors, visual artists, craftspeople, composers, designers and others can be considered self-employed

freelancers. Moreover, among them there are categories that earn no salary at all – writers, painters, sculptures – who could be regarded as ‘small business people’. Multiple job-holding is a very common formula as the cultural workers need a minimum income for survival and some degree of financial security.

- **There are extreme differences in income distributions.** On the one side we have the great majority getting very low rewards, significantly below other groups of workforce with similar human capital attributes. On the other side there are a relatively small number of stars with very high income.
- The level of **risk attached to expected rewards** is higher than in other professions. Among the factors leading to financial success, the analyses show that ‘learning-on-the-job’ plays a more significant role than the formal training and to the role of talent is attached elusive appreciations.
- A relevant issue for the differences between the arts realm and other industries is the one of “**art-for-art’s-sake**, the inner drive of the creative spirit, art-as-a-way-of-life” which offers to the artists non-pecuniary rewards.

Despite the low level of wages for the large majority of cultural sector, there is generally an oversupply of labour. For some, there is the temptation of becoming famous. For most, the non-monetary reward of being an artist represents an important argument. Some part of the excess can be attributed as well as to the actions of arts organizations attempting to keep “as large a pool of talent available as possible”, Throsby’s words.

2. The importance of the sector from the economic and social point of view

Creativity is a driver for the economic growth, being increasingly considered a key strategic asset for improving competitiveness in the knowledge based economy. This context favours the creative industries, which are estimated to account more than 7 percent of the world's gross domestic product and are forecast to grow, on average, by 10 percent each year (UNCTAD XI, 2004). According to the same source, in OECD countries they represent already a leading sector of the economy, with annual growth rates between 5 and 20 percent. For instance, in United Kingdom the sector generates revenues of over GBP 110 billion and employs 1.3 million people. The situation is similar in US (see <http://portal.unesco.org/culture>), whose export started to be led in 1996 by the cultural products (films, music, television programmes, books, journals and computer software), surpassing for the first time all other traditional industries, such as automobiles, agriculture, aerospace or defense. Over the period 1977-1996 the core copyright industry of the US grew three times faster than the annual growth rate of the economy. Creative industries are knowledge and labour intensive and foster innovation; the sector is considered to have a huge potential for generation of employment and export expansion. However, according to UNCTAD, its potential is currently not realized.

2.1. The new society and economy favours the sector's development

'Information' society, 'knowledge-based' society, 'risk' society or more lately 'creative age' are the most frequently used terms attempting to analyse the shift from the industrial society to a new form of social and economic organization. Novotny (2002, p. 10-11) gives the following definitions of knowledge society, risk society, and information society: The concept of *Knowledge Society* is focused on changing modes of production, by taking into consideration scientific, technical and economic aspects; a convenient label for the knowledge society might be that of post-industrialism. The *Risk Society* model concentrates on people, in other words on those who are affected by these changes, being a socio-cultural attempt that leads the reader to concepts such as post-modernism or post-Fordism. The 'Third Way' or *Information society* looks much more simply at analysing the implications of ICT for services related to final users. Finally, the most recent trends refer increasingly to the concept of *creative age*. Richard Florida (2002, republished 2004) emphasizes that society and economy is changing driven by the rise of human creativity, which becomes a decisive source of competitive advantage.

The work productivity has increasing dramatically under the influence of the new ICT technologies. Already in 1993, analysing the issue of unemployment, Caracostas and Muldur noted that the growth in productivity due to the advanced technologies and skilled labour in the Western countries led paradoxically to the under-performance of this efficient productive system, which became able to produce more goods and services than were needed for consumption in the rich, industrialised countries. One of the proposed solutions was to expand the consumption to other regions of the world, starting with the ones that were already on a growth path (such as Korea, Singapore, China, etc.). A complementary, more 'qualitative', solution was to develop *new spheres of consumption* for the consumers in industrialized (or already post-industrialized) societies. Referring both to the knowledge-related and leisure activities, the analysts considered that there is an immense field to be explored in order to encourage industrialized societies to produce new activities. In this context, the current massive growth rate of the creative industries is probably easier to understand.

On the other hand, many analysts consider that the technological changes are not the sole driver of the transformation of the economy and society. *The growth of complexity and uncertainty in social and economic life, the aim of innovation and competitiveness, the issue of wealth creation call for answers to complex issues* (Novotny, 2002), raising the **demand** for specialists' knowledge of all kinds, required by government, market, different groups and individuals. According to Gibbons (1994) the increasing demand goes in parallel with the increasing **supply** of knowledge producers - determined at the outset by the massive expansion of the higher education system. These two factors imbedded, continues Gibbons, create the conditions for the emergence of a new mode of knowledge production, characterized basically by its context of application, its transdisciplinarity and heterogeneity. Knowledge producers do not work exclusively in universities but also in industry and government laboratories, in think-tanks, research institutions and consultancies, etc.

Going one step further Florida notes that the working perimeter of professionals that develop knowledge (or simply ideas) is enlarging from the researchers' category to other types of *creative professionals*. They now represent a significant part of the economy, the *core part* being represented by the fields having the economic function to create new ideas, new technology and new creative content: science and engineering, architecture and design, education, arts, music and entertainment. Around this core there are other fields with professionals engaged in complex problem solving that involves independent judgement and needs a high quality of human capital: business and finance, law or health care (Florida, 2002, p. 8) (see table 2).

Table 2: Core industries of the Creative Economy, according to Florida (by market size in billions of U.S. dollars, 1999)

Sector	Global	U.S.	U.S. Share
R & D	545	243	44.6%
Publishing	506	137	27.1
Software	489	325	66.5
TV and Radio	195	82	42.1
Design	140	50	35.7
Music	70	25	35.7
Film	57	17	29.8
Toys and Games	55	21	38.2
Advertising	45	20	44.4
Architecture	40	17	42.5
Performing Arts	40	7	17.5
Crafts	20	2	10.0
Video Games	17	5	29.4
Fashion	12	5	41.7
Art	9	4	44.4
Total \$	2,240	960	42.8%

Source: Richard Florida, The rise of the creative class (2004), New York, Basic Books, p. 47

Florida argues that a profound social change is prefigured by the fact that we cannot any more distinguish one type of person from another using the old markers. We might assist in fact and participate in a “morph” between two values systems: the Protestant work ethic (considered by Max Weber the very spirit of capitalism) and the 1960s bohemian ethic. The first one is essentially mainstream and conformist, based on logic and structure, traditionally pursued within the structure of social institutions, like the large corporations dominant until the

twentieth century. In its logic, due to the fact that the individual is productive and efficient, the institutions will be productive and efficient. The bohemian ethic is more hedonistic and its form of discipline is mainly aesthetic. However, it has spiritual and socio-political dimensions but it tends to be more intuitive than logical, and more individualistic than conformist. Referring to the mix of the two value systems and their relation with technology development, Florida argues that:

“The rise of the Creative Economy is drawing the spheres of innovation (technological creativity), business (economic creativity) and culture (artistic and cultural creativity) into one another, in more intimate and more powerful combinations than ever” (Florida, idem, p. 201).

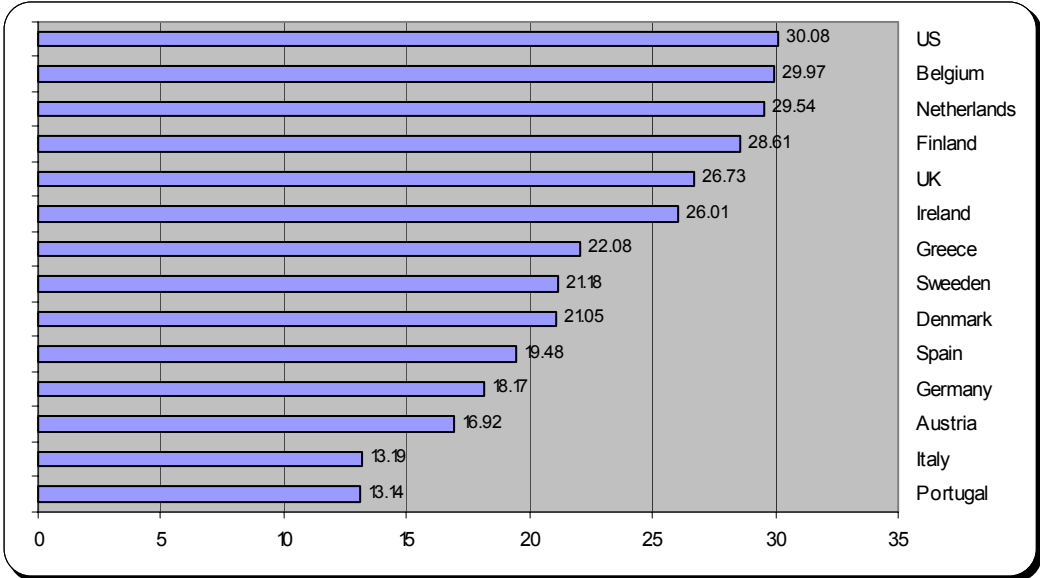
The economy is moving from “an older corporate-centered system defined by large companies to a more people-driven one” (Florida, idem, p. 5). *This means neither that the large companies will disappear, nor that the economy will be built only around small and medium enterprises and independent free agents*, continues Florida, but simply stresses that people represent the critical resources of the creative age.

Moreover, the organizational unit today is no longer the firm or other organizations, but the *place*. The corporations will locate in places where they have access to the talented people. On their side, the creative people will choose places which have both creativity and a business climate (Florida, idem, p. 6).

2.2. The rise of the ‘creative class’ and new patterns of consumption

The ever-increasing number of knowledge workers in the new economy (30% in US and around 25 % in several European countries according to Florida – see figure 2) is likely to lead to a *new social structure*, having in the middle the ‘creative class’, comprising the creative professionals enumerated above. This new class has its own life and leisure style and follow specific patterns of consumption.

Figure 2: The Euro-Creative Class Index: Creative Occupations as a percent of Total Employment (2000)



Source: Richard Florida and Irene Tinagli (2004), Europe in the Creative Age, Pittsburgh, Carnegie Mellon Software Industry Center, London, Demos, p. 14

Using the criteria ‘age’ and ‘income’, Florida tries a classification of leisure activities preferred by American people. Even if data are not definitive, they show several specific trends which might be found in Europe as well in certain measures:

- “High-income people between eighteen and thirty-four years of age (with incomes of more \$75,000) are more than two times as likely as the average person to scuba dive, snow ski, travel, plays tennis, fly frequently or jog, whereas low-income people in this age group (those with incomes of \$30,000 or less) are more likely to play home video games, horseback ride, fiddle with electronics, camp, ride a motorcycle or do automotive work.
- The same basic pattern holds for people in the thirty-five-to forty-four-year-old age group. High-income people in this age group are more than two times more likely than average to travel, ski or scuba dive, and more than one and a half times more likely to play tennis, golf, jog and enjoy wines. Lower-income people in this age group are more likely to horseback ride, play video games, collect stamps, ride motorcycles, camp and do automotive work.
- Affluent middle-aged Americans between the ages of forty-five and sixty-four are significantly more likely than average to own a vacation home, travel, enjoy wines, golf, sail and attends arts and cultural events, whereas lower-income people in this age group are more likely to spend time with their grandchildren, enter sweepstakes, sew and do needlework, collect stamps, coins and other things, read the Bible and engage in crafts.” (Florida, 2002, p, 173)

Corroborating with the fact that the wages and salaries of the creative class are bigger than of all the other classes - their members earn about twice in average that the members of the other two classes (table 3) - and interviewing members of the creative class, Florida reached at the conclusion that the members of creative class prefer *active recreation* for their spare time.

Table 3: Wages and salaries for the classes, 1999 (American population)

Category	Total Workers	Average Hourly Wage	Average Annual Salary
Creative Class	38,278,110	\$23.44	\$48,752
Super-Creative Core	14,932,420	20.54	42,719
Working Class	33,238,810	13.36	27,799
Service Class	55,293,720	10.61	22,059
Agriculture	463,360	8.65	18,000
Entire US	127,274,000	15.18	31,571

Source: Richard Florida, (2004), The rise of the creative class, New York, Basic Books, p. 77

With work which is mainly intellectual and sedentary, they try to recharge their batteries through physical activity. But they usually do not show significant interest in spectator sports, wishing to participate directly. They seek for a lot of experience per unit of time and they want adventure argues Florida further. While in the competitive sports (such as baseball) you are against the opponent, the adventure sports test you against your own limits or you against the task or nature. The spectator sports are attended mainly by the Working Class members. This fact is explained by Florida by their need to identify themselves with winners – due to the fact that in their standard life they do not win at all – and as well as a means of imitating the superior class, having an informed opinion on issues as why the x or y team is going to win.

The creative class members prefer the street-level culture to large venues, mainly because they feel this way entering a cultural community, not just attending an event. With Florida’s words:

“The culture is ‘street-level’ because it tends to cluster along certain streets lined with a multitude of small venues. These may include coffee shops, restaurants and bars, some of which offer performance or exhibits along with the food and drink; art galleries; bookstores and other stores; small to mid-size theatres for film or live performance or both; and various hybrid spaces – like a bookstore/tearoom/little theatre or gallery/studio/live music space – often in storefronts or old buildings converted from other purposes. The scene may spill out onto the sidewalks, with dining tables, musicians, vendors, panhandlers, performers and plenty of passersby at all hours of the day and night ... It is not just a scene but many: a music scene, an art scene, a film scene, outdoor recreation scene, nightlife scene, and so on – all reinforcing one another... Many of them also visit the big-ticket, high-art cultural venues, at least occasionally, as well as consuming mass-market culture like Hollywood movies and rock or pop concerts. But for them, street-level culture is a must” (Florida, 2002, p.183-184).

With weaker social ties to people or institutions (churches, organizations they work for, neighbourhoods or even family) and moving about creative centres, members of the creative class strive to define their own *identities*. Florida argues that the creation and re-creation of the self is a key feature of the creative ethos. Status and identity of the members of the creative class are not principally related to the goods they have, because living standards have grown so much that the material goods no longer represent a measure of the status. Rather the quality of what they experience defines the quality of their lives. The lifestyle of the creative class is a “passionate quest for experience” (Florida, 2002, p. 166).

2.3. The impact of the growth of the creative industries’ on local and regional development

The members of the creative class will choose to live in places where they can express themselves and define/validate their identity. According to Florida, these places have several features: (1) they offer *many employment opportunities*; as the creative class member do not expect to stay in a company for very long and as the career paths are increasingly horizontal, the place should offer a “thick labour market”; (2) they offer the *lifestyle* that people of the creative class seek for: cluster of entertainment activities concentrated in the same area; (3) there are appropriate venues for facilitating the *social interaction* (like coffee shops, bookstores and cafes); as the two other sources of interaction and stability – the family and workplace – have become less secure and stable, these venues offer the opportunity for human interaction; (4) they need to be *open to diversity*; the members of creative class often come from different cultures, and feel the need to find a peer group in which to be comfortable, a place stimulating the interplay of cultures and ideas; ‘a place where outsiders can become rapidly insiders’; as Florida argues: an attractive place doesn’t need to be a big city, but needs to be cosmopolitan; (5) the places needs to help us to validate our *identity*; while in the corporate-driven economies the people were identifying themselves with corporations they worked in or they were strong family ties and long-term friends, in the new economy – with weaker social ties to people or institutions – the place get the role of defining and validating the identity of the people.

“The combination of where we live and what we do has come to replace who we work for as a main element of identity. Forty years ago, some would likely identify themselves by saying ‘I work for General Motors’ or ‘I’m with IBM’. Today (...) ‘I’m a software developer and I live in Austin’ rather than ‘I work for Trilogy’. I travel by plane a lot and have noticed that the standard

conversation-starter has changed. Ten years ago, people were likely to ask, 'Where do you work?' Today it's 'Where do you live?'" (Florida, 2002, p. 229-230)

Florida argues against the statement that in the age of high technology “geography is dead”. Rather he considers that the place has become “the central organizing unit of our time, taking on many of the functions that used to be played by firms and other organizations” (Florida, 2002, p. 6).

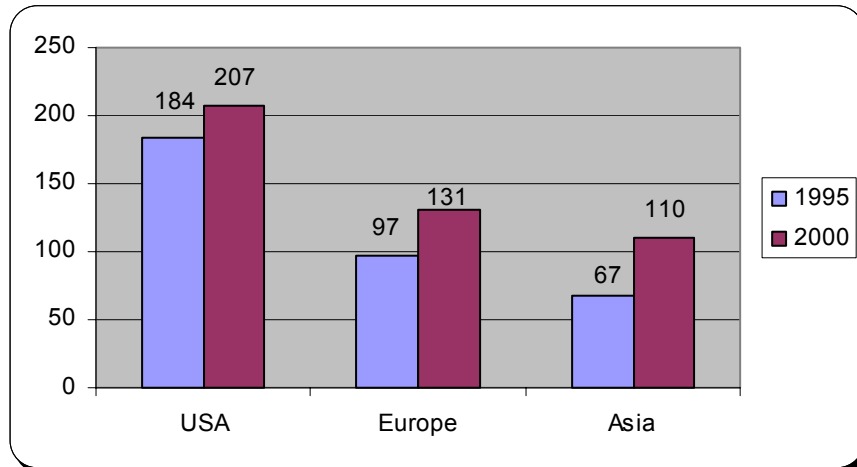
Analysing further the U.S. concentration of the creative class, the same analyst noticed that there is a general lack of overlap between creative class centres and working class centres. The regions with concentration of the service class rank at the bottom of the list for the creative class. Parts of the places where there is a concentration of the service class are tourist destinations, parts of them not. *The “new geography of class” influences the regions in terms of their competitive advantage.* Places having a concentration of the creative class will have significant advantage comparing with those populated mainly by the working or services class. The creative class centres are correlated with a high level of innovation, high tech industry and economic growth, while the others are being left behind.

3. European characteristics

3. 1. Europe versus other regions in the sector

Comparing the cultural markets, Europe is in the second place in the world, after US (see figure 3).

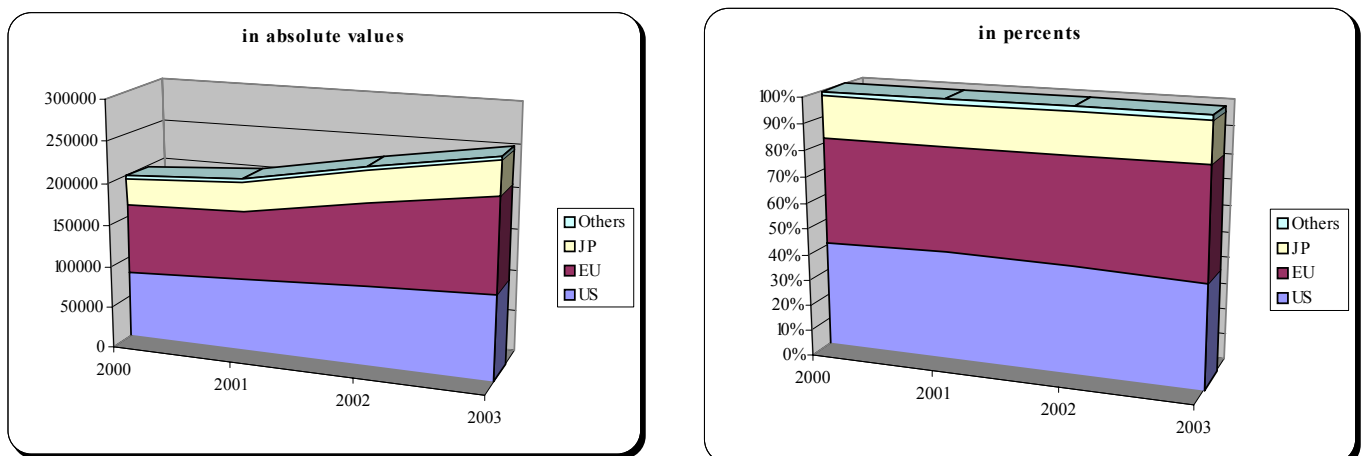
Figure 3: World cultural industry markets 1995 vs. 2000 (estimated in billion US\$)



Data: UNESCO, www.unesco.org/culture/en

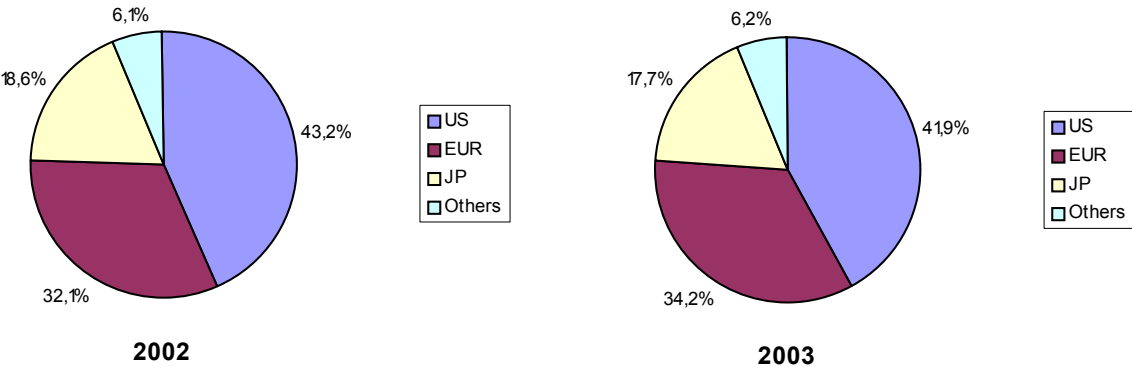
The same second position of Europe after US, nevertheless recording an increasing trend, can be found likewise in statistics concerning the audiovisual industries (figures 4 and 4.1.).

Figure 4: Breakdown of the audiovisual turnover of the 50 leading companies worldwide (by nationality of the companies) 2000-2003



Source: European Audiovisual Observatory Yearbook (2004), vol.1, p.33

Figure 4.1: Breakdown of the audiovisual turnover of the 50 leading companies worldwide (by nationality of the companies) 2002-2003



Source: European Audiovisual Observatory Yearbook (2003), vol.1, p.33

3.2. European consumption features

A Eurobarometer survey carried out at the request of Eurostat (European Commission), on EU-15 Member States in 2002, shows that Europeans watch television in proportion of about 98%, over 85% read newspapers and over 80% read magazines. 60% of them listen to the radio, more than 50% read books. If we take a look further at what programmes they likely watch on the television and listen on the radio, we come at the conclusion that **news, films and music** take the first places within their preferences (figure 5 and 6).

3.2.1. The quest for information

The fact that over 80% of the people read newspapers and magazines, combined with 88.9% watching news on television and 52.9% listening to news on the radio, brings us to the conclusion that people in Europe seek first of all to be **informed** on what is happening around the world.

Figure 5: What do European watch on television?
(as a % of the population watching television)

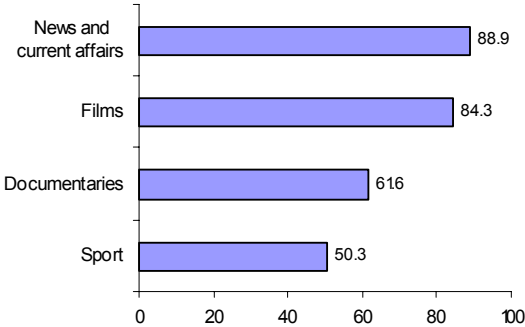
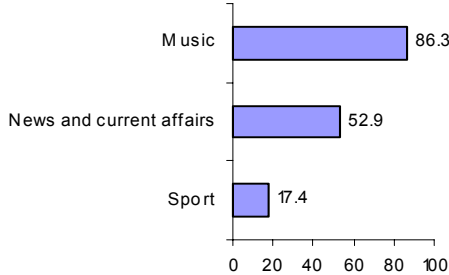


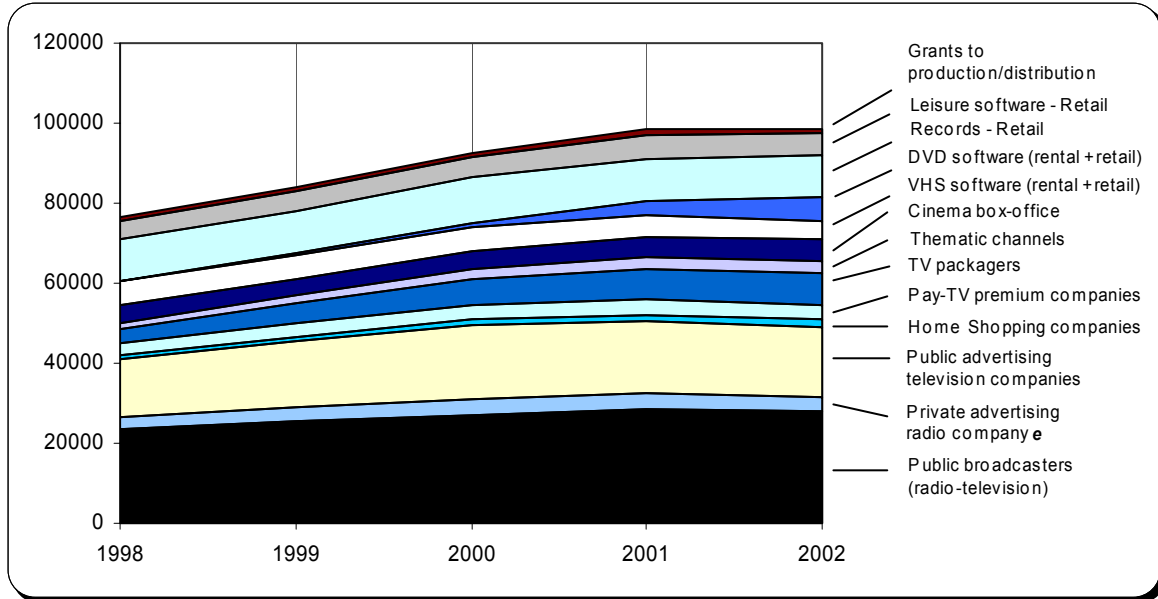
Figure 6: What do Europeans prefer listening to on the radio
(as a % of the population listening radio)?



Source: Eurobarometer survey (2002), Europeans participation in cultural activities, p. 2

European Audiovisual Observatory statistics (figure 7) confirm that watching television takes first place in terms of budget share.

Figure 7: Size of the audiovisual market of the European Union, in EUR million, 1998-2002

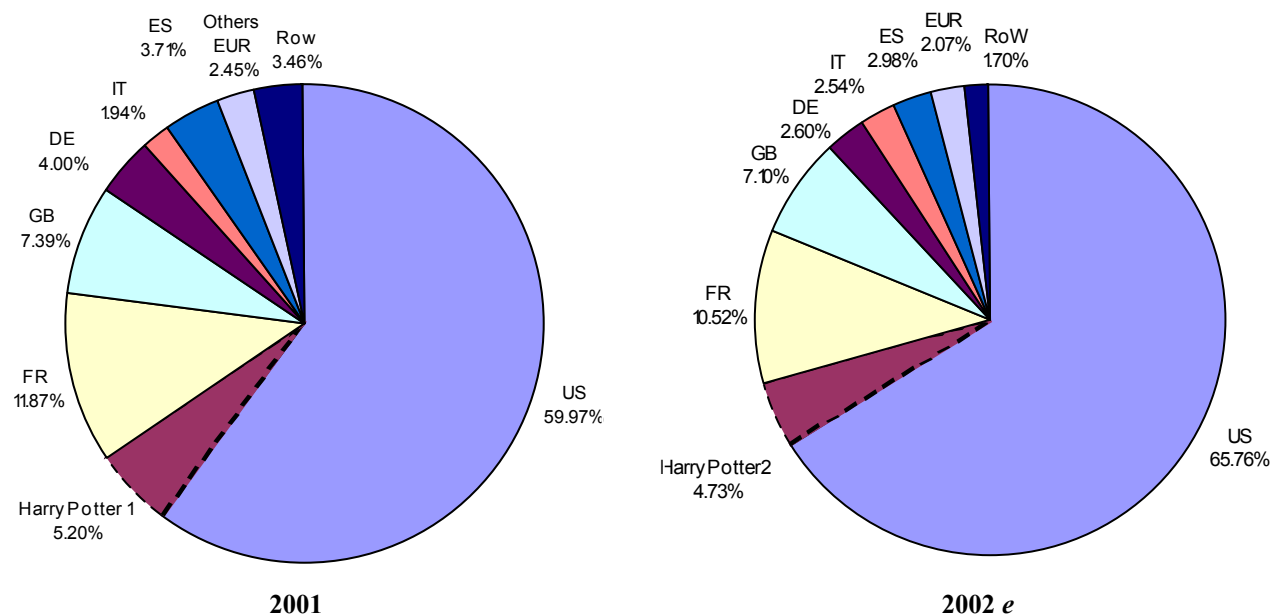


Source: European Audiovisual Observatory Yearbook (2004), vol.1, p.30

3.2.2. Europeans and films

A lot of what European watch on the TV is *films* and also they go to the cinema a lot. Going at the cinema appears to be on the first place among the cultural activities preferred to be practiced by the Europeans, according to the Eurobarometer survey. The EAO statistics show that the most watched are American movies, followed by the French and British films (figure 8).

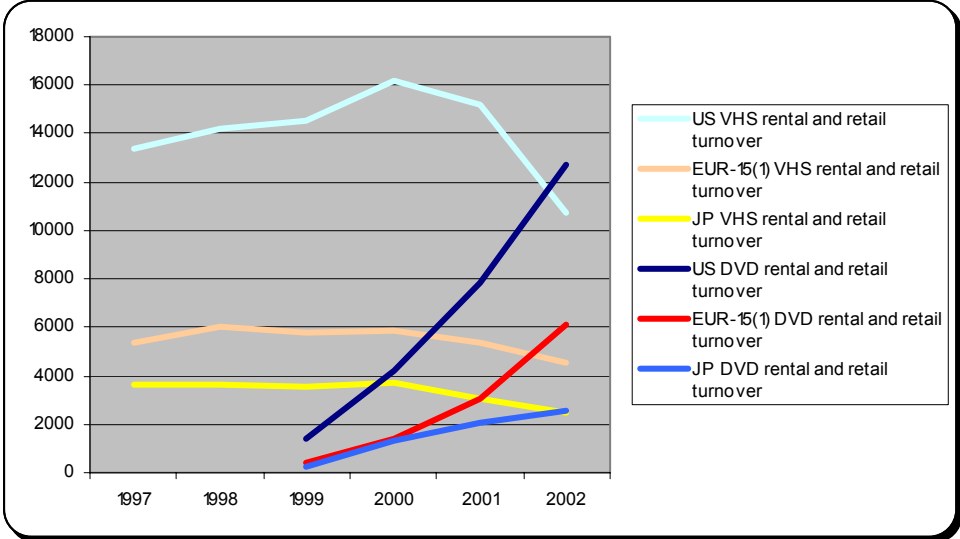
Figure 8: Breakdown of cinema admissions in the European Union market according to the origin of films, 2001-2002 e



Source: European Audiovisual Observatory (2003) Yearbook – Film, television, video and multimedia in Europe, vol. 3, p. 52
 Note: for the year 2002 the values are estimated

Movies also are watched as well on the video cassettes and increasingly on DVDs. Even if the DVD sales and rental only started quite recently, it has already overtaken the VHS cassette sales in all the three analysed regions (European Union, United States and Japan) (figure 9)

Figure 9: Video and DVD rental and retail turnover in European Union, United States and Japan, 1997-2002, in EUR million



Data: European Audiovisual Observatory (2003) Yearbook–Film, television, video and multimedia in Europe, vol. 3, p.69-73
Note: ⁽¹⁾ EUR-15 data do not include LU

3.2.3. Europeans and music

Listening *music* is among the very first preferences of Europeans (figure 10). More than half of the interviewees preferred to listen to rock and pop music, and only 28% classical music (figure 11). These percentages are found again among the people having attending concerts during the given period of 12 months: 50% of them attended a rock or pop music concert and only 23.9% have been to classical music concerts.

Figure 10: How frequently do Europeans listen to music? (as a % of the EUR-15 population)

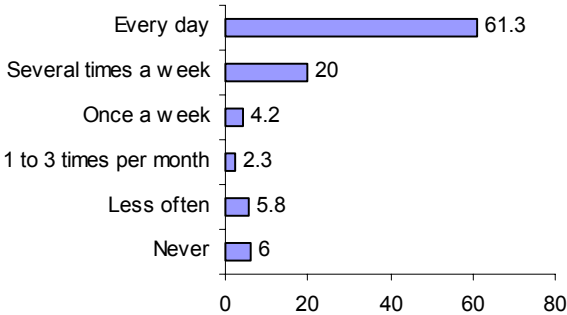
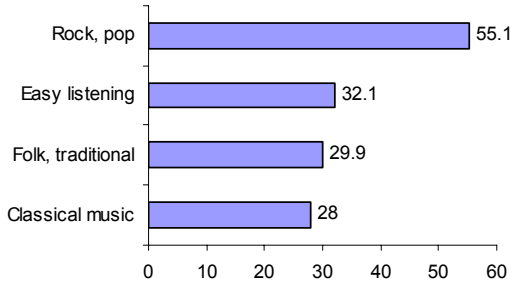


Figure 11: Type of music listened to by Europeans (as a % of the population listening to music)

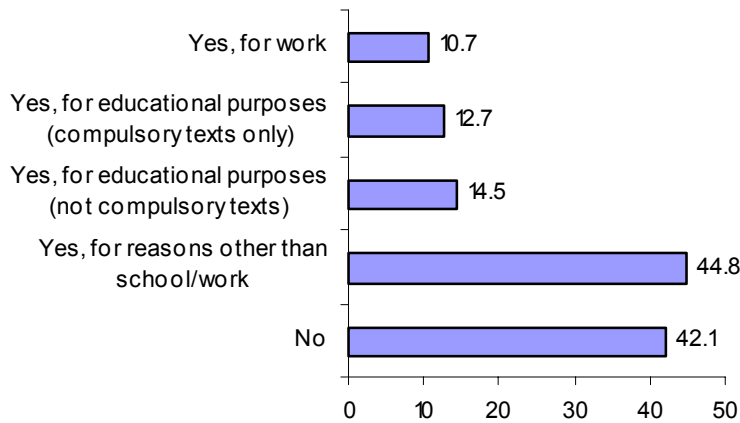


Source: Eurobarometer survey (2002), Europeans participation in cultural activities, p. 7-8

3.2.4. Book reading

Beside the high percentage of Europeans reading newspapers and magazines, more than 50% *read* at least one book during the given period of 12 months covered by the Eurobarometer survey. Most of them (44.8%) read books for reasons other than work or study (figure 12).

Figure 12: Have Europeans read any books in the last 12 months (as a % of the EUR-15 population)?

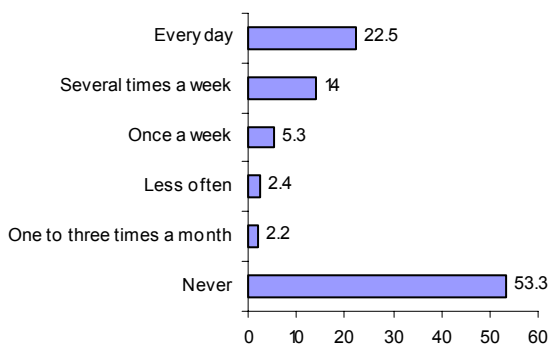


Source: Eurobarometer survey (2002), Europeans' participation in cultural activities, p. 5

3.2.5. Computer and Internet usage

Within European Union nearly 50% of the population use computers (figure 13).

Figure 13: How frequently is the computer used in the European Union (as a % of the EU population)?



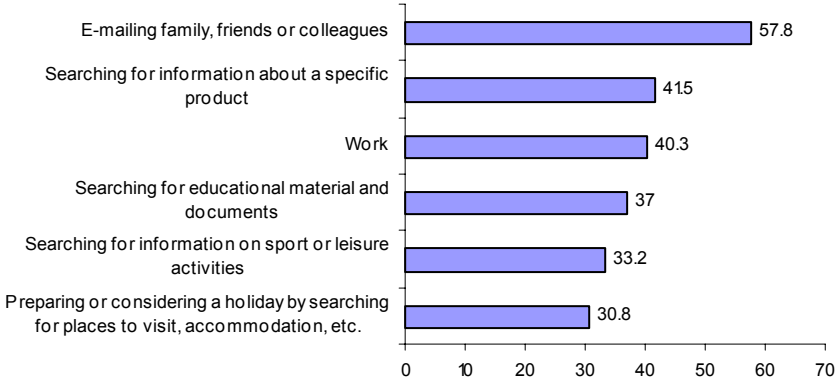
Source: Eurobarometer survey (2002), Europeans' participation in cultural activities, p. 3

In EU-15, 40% of the *households* had access to the Internet in 2003 comparing to only 18.7% in 2001. The percentage of the *enterprises* having access to the Internet is bigger: 87% in 2003 comparing to 70.3% in 2001.

The Internet is used for various reasons: from communication via e-mail, searching information on specific products and for work to leisure activities (figure 14). It is interesting

to note that 37% of usage is ‘searching for educational material and documents’ which complements and even overtakes the searching of books for educational purposes.

Figure 14: What do Europeans usually use the Internet for? (as a % of the population using the Internet)

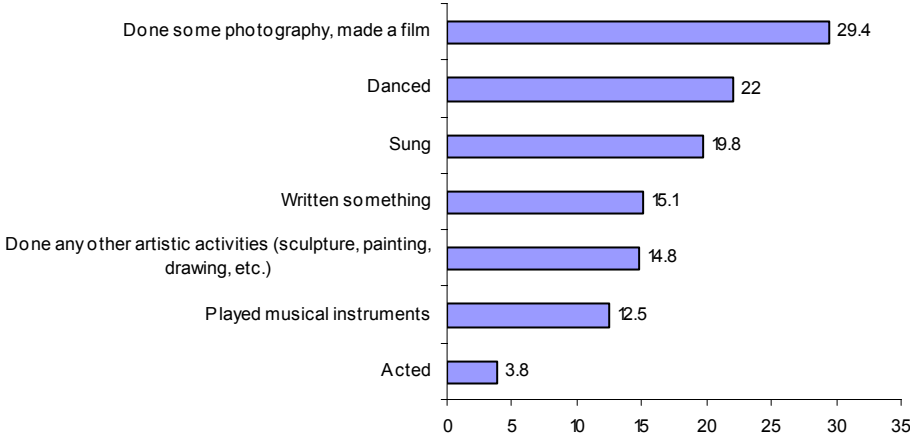


Source: Eurobarometer survey (2002), Europeans’ participation in cultural activities, p. 4

3.2.6. Practicing artistic activities

As can be seen in figure 15, the Europeans are fairly active in practicing different artistic activities.

Figure 15: Practicing artistic activities in the EU (as a % of the EU population)



Source: Eurobarometer survey (2002), Europeans’ participation in cultural activities, p. 11

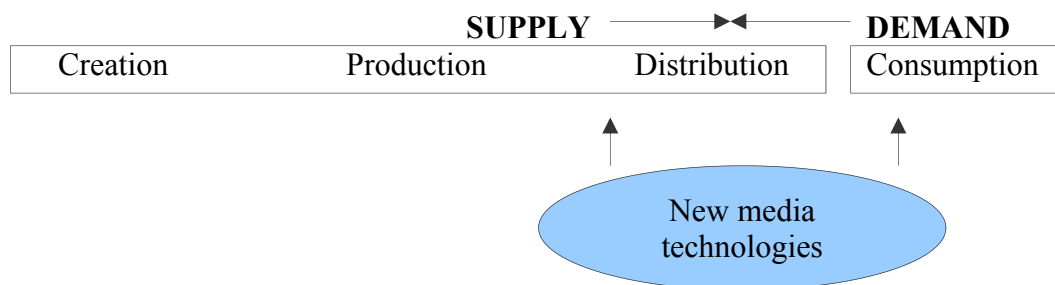
According to the same Eurobarometer survey, in a period of a given twelve months, from among the 29.4% of Europeans that have done some photography or made an amateur film Swedes is on the first place (60.4%), followed by the Dutch (47.3%), the Germans (4.2%) and the Austrians (38.9%). From the proportion of 22% interviewees that have danced, Swedes, Greeks, Austrians and Finns are the leaders.

4. Technological development relevant to the sector

4.1. Digitalisation as a driver on both production and consumption patterns

Technological change represents an important driver of both production and consumption patterns within the creative industries. The current influence of technology on this sector has been the effect of computer technology and advances in video and sound reproduction (Throsby, p. 118). The new technology had big impact in the fields intensively using the *new media technologies* based on *digitalisation* – e.g. television, compact discs, videocassettes and more recently DVDs – but less in others or even insignificantly in fields such as performing arts.

Figure 16: Digitalisation as driver for both production and consumption patterns (an illustration)



The new technologies have also a continuously impact on the *demand* side of the creative industries (Throsby, idem, p. 119). *The primary effect of the new channels of distribution (such as Internet and P2P – ‘peer to peer’) is increased overall consumption.* The expansion of consumption very much reduces the marginal cost of adding a consumer and the consumer enjoys a much larger range of consumption experiences. One side effect of this trend seems to be the creation of superstars, whose fame hardly can be explicable only in terms of talent, argues further the same analyst. Referring especially to the future of arts industry, Throsby argues that *Internet as a “locus” of art consumption and the digital economy as an important domain of cultural interchange are likely to have large effects on the structure, conduct and performance of this field.*

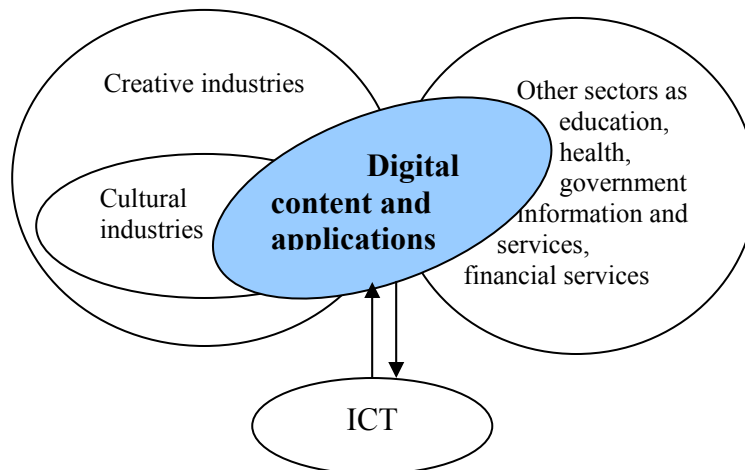
4.2. Changes of the value chain under digital encoding

ICT and its digital encoding are creating a new, wider, and more complicated *value chain* for production, distribution and consumption (Creative industries cluster study, 2002). An important aspect to be taken into account is that even if digitisation arises in many industries, only a few sectors have a fully digital value chain. Therefore, the policy responses should avoid generalisations, each industry requiring specific analysis and policy developments. The impact of digital forms will require new business models and ways of working and new skills and infrastructure. Each of these industries preserves specific characteristics, whilst at the same time sharing common features with others within a digitised value chain. At the same time they increasingly will share common infrastructures (such as digital telecommunications networks) and common inputs (such as skills and digital equipment) (idem, p. 13-15).

4.3. The issue of digital content

On the other hand, digital *content* and applications are key inputs for the ICT sector. The content is assured mainly by the *creative and cultural industries* as well as other sectors like *education* (e.g. digital programme materials, online distance learning), *health* (such as telemedicine), *government information and services*, *financial services* (such as online banking, insurance), *business services* (e.g. legal and accounting services, advisory).

Figure 17: An illustration of the sectors that work with digital content and their interdependence with ICT



Source: An adaptation of the figure ‘Mapping content production industry systems’ of Australian National Office for Information Economy study (2003, fig. 1.3, p. 9)

Digital production influences the creative industries and actually all the industries using digital content, on the following issues: *content management systems, increasing interactivity which changes the role of the end user, and the user environment; the impact of distribution channels and the power of intermediaries* (Creative industries cluster study, 2002)

An important issue related to digital content is the protection of **digital intellectual property**. According to UNESCO (<http://portal.unesco.org/culture>), copyright legislation – which allows authors freely exploit their work – is complemented by neighbouring rights that protect performers, recording producers and broadcasting organizations. The holders of the neighbouring rights enjoy the exclusive right of reproduction, distribution and public communication of their performances /CDs/DVDs /broadcasts.

The advent of digital technologies and especially of the Internet and P2P distribution led to a shift of distribution channels from traditional to new channels. However, a substantial part of that increase has until now taken place through channels that are illegal or semi-legal in most European countries, and outside the traditional media distribution networks. The most affected sectors are the music and publishing industries, audiovisual and software production. Great attention is given to this issue by most of the companies and organizations involved in the sector. Well known conferences as IBC (the largest European conference in the field of broadcasting – see www.ibc.org) reserve important time for the issue of digital content protection, showing that fields as film, broadcast, video, games and software industries are

making content protection as their current number one priority. Moreover, the software and hardware companies make new alliances between them and together with trade bodies, trying to face up to piracy through a three fold strategy of: technical solutions, legal means and educational initiatives.

The overall legal market seems however also to be growing - see for example sales data for DVDs (figure 9), online music and music-quality ring tones for cell phones. Channelling the growth of online content distribution into legal channels will be a major challenge to this sector in the next few years, for instance through interoperable DRM (Digital Rights Management) schemes.

4.4. Convergence of technologies

Different analysts consider that perhaps the most important implication of digitalisation is that it makes different media potentially able to be interconnected. A study carried out by the Australian authorities (NOIE and Department of Communications, Information Technology and the Arts, 2002, p. 14), points out that the analogue technologies are usually strongly vertically integrated but horizontally separated. The service and its infrastructure come across together because an infrastructure can produce only one service. Newspapers provide text, telephones carry voice, etc. In the case of digital technologies, a digital network can cover a range of services: video, voice, text, transactions. Therefore there is the possibility for horizontal integration and potential common use of the infrastructures and technologies. According to Hesmondalgh (2002, p. 222), there are mainly two serious drivers from the basis of a high degree of convergence of media technologies: the *Internet* and *digital television*. Mobile content should be added currently as a major convergence technology for the near future, including mobile TV, premium SMS services, ring tones/music, mobile Internet.

4.4.1. Internet and mobile content

According to Miles (1998) a new phase of the Internet is represented by webcasting, which adds audio and video dimensions to the current mainly text-based web pages. The advantages of webcasting are numerous, as Miles points out: from the (i) enlarged capabilities of a TV, radio, satellite receiver, support interactive videos and live transmission or alerts sent directly to or from an institution, to the (ii) increasing audience at global level and to the (iii) possibility of using different receiving devices (TVs, radios, PCs, pagers, telephones and remote devices).

According to the same source, there are essentially three types of webcasting:

- **Streaming technology:** delivery of audio and video signals over the Internet (the signals can be live - in real time, recorded or delivered on-demand).
- **On-demand** represents the possibility to time-shift information received through the streaming technologies. In other words, one can receive the audio/video stream and view it at any time. "On-demand technology gives us remote control to a Web page and lets us control our own audio and vide choices and delivery schedule" (Miles, idem).

- **Push technology:** through it, the information is delivered to a person either because he/she have requested it or because someone else thinks that he/she is likely to be interested in it.
- **P2P and swarming distribution** is added lately to the above types of webcasting. A swarming P2P distribution network turns all consumers into distributors, thus decentralizing the distribution. As a result, this method requires only a minimum of server and network capacity for the central publisher compared to the traditional webcasting, but instead the methods demands a certain upload capability for the users. Distribution can be live or on-demand. In the future, there is a possibility that digital Internet-originated distribution will also bypass the normal Internet and use direct device-to-device distribution in ad hoc networks, pending on appropriate copyright and payment schemes.

As one of the future directions, push technologies are foreseen to become more interactive, taking into account the users' past behaviour and their response or lack of it.

The challenges for the future are related nearly with all the steps necessary for the webcasting process (table 4), and the changes are occurring at a high speed. For instance, the signal can be already generated in digital format (Sony and Panasonic just released in 2004 new professional digital cameras, enable to bypass the conversion process from analogue to digital).

Table 4: Broadcast Technology and Requirements

TV Broadcasting Steps	Webcasting steps
1. Generate signal	1. Generate signal
2. Transmit signal to TV station	2. Convert signal from analog to digital (encoding)
3. TV station broadcasts signal	3. Compress signal to send over telephone lines or an Internet connection (compression)
	4. Transmit compressed, digitized signal to an Internet service provider (ISP) and replicates
	5. ISP clones the signal (i.e.,stream) and broadcast it over the Internet
Requirements	Requirements
❖ Broadcast equipment	❖ Webcasting equipment
❖ Air time (purchased from network)	❖ Communication link to ISP
❖ Program content Transmission/tower	❖ Program content
	❖ Bandwidth (leased from ISP)

Source: Peggy Miles, *Internet world™ guide to webcasting*, 1999, p. 33

However, according to Miles, there are principally two factors relevant to proper broadcasting on the Internet: **the speed of the servers** that send out the signal (as the number of websites visitors is increasing continuously, the servers need to be more and more powerful) and **the amount of bandwidth**¹ provided by the data-carrying capacity of telephone lines or cable TV to enable multiple users to view the programme.

Bandwidth is still one of the main issues related to the future of Internet. For the time being most people are still connected to the Internet by using 56 Kbps modems and telephone lines, with a low bandwidth that leads to slow reception of electronic data. The new technologies addressing this problem and increasing bandwidth significantly include the connection to the Internet using fiber optic lines and via cable TV and satellite. In this context, if today the Internet is used mainly for e-mail (90% in US, 58% in Europe), followed by information on different issues, work, reading, leisure (video and computer games primarily), the trends foreseen for the new technology might further dramatically increase the time used for leisure on the Internet, such as receiving on-demand music or films, watching news, etc.

However, the discussion on need for network capacity for providers applies to a lesser degree when using new swarming distribution methods, where an increased number of users actually will decrease the need for upload capacity among end users. The processing capacity on both user and server side remains important as compression levels continue to increase.

Other drivers emerge from the Internet and mobile markets that might be mentioned are the Personal Video Recorders (PVRs/time-shifting digital devices) and networked recording devices. They pose a possible major disruptive technology, given the change shown in usage patterns among adopters.

4.4.2. Digital television

According to Noll (1999, in Gerbarg, 1999, p. 8-11), the technological trends and drivers in television can be summarized mainly into:

- **High definition television (HDTV):** allows a much better image quality through picture with improved spatial resolution, achieved by doubling the number of scan lines to about 1000;
- **Wide screen television:** while standard television (STV) has an image that is four units wide and three units high, with an aspect ratio of 4:3; the new standard is 16:9; High definition television uses an aspect ratio of 16:9 offered by the wide screen television, contributing mainly to the improvement of image quality. At this time sport and cultural content represents the main market driver for HD content.
- **Digital television (DTV) and compression techniques** are important for creating more capacity for content as well as for a better storage of it:
 - On the one hand DTV offers immunity to noise and signal degradation, and therefore the conversion of the previous analogues programmes into digital format creates the opportunity for better storage. It is generally considered that the programme content will be progressively more produced, captured and stored in digital format, because digital technology assures protection against noise, distortion, and deterioration over time or due to successive copying.

¹ Bandwidth is the maximum amount of data that can travel over a communications path in a given time, usually measured in bits per second. (<http://www.learnthenet.com>)

- On the other hand, the digital television should allow the broadcasters to send many more programs to each viewer; in effect, the new digital environment creates more *capacity for content*.
- **Interactive television:** gives access to the Internet through the TV set (WebTV); so far the only one which has had any success is teletext but only in Europe. However, the digital television (DVB) with interactive content already has some significance in markets such as the UK market.

The switch-over to DTV systems often coincides with a change towards HDTV and wide screen television, although all digital TV variants can carry both, standard definition television (SDT) and HDTV. In several countries, there are already regulations in place regarding the year when they have to switch from analogue to digital television. For instance, in Australia this is foreseen for 2004, in US for 2006, France – 2005, Germany – 2008, Italy and Greece - 2006.

The emerging audiovisual environment assumes that the future digital networks are expected to be invaded by the Internet - both in programme production and delivery. Moreover, delivery networks will need to handle quality from HD/surround sound to handheld services. Handhelds are already served with audio/video content by digital telephone delivery, but the coming out of delivery using broadcast channels it is expected to change the landscape (see www.ibt.org). It can be noticed also a general emergence of webcasting and P2P distribution of TV. Mobile television (using 2.5G, 3G or DVB-mobile as distribution methods) are emerging in front-runner markets like the Nordic countries and South Korea.

One of the current challenges is to complement the explosive development of digital technologies (which allow the broadcasters to send to the viewers many of programmes simultaneously), with digital content. According to Carey (in Gerbarg, 1999) ***the content will represent the main driver of widespread adoption of digital television***. The content might include “video-on-demand movies, theme channels, multicasting or the distribution of the same content on different channels at different times, Internet content on TV sets, video segments on personal computers, interactive shopping and games, and program guides for hundreds of channels”(idem, p. 87). According to Carey, the issue of content raise questions as those related to the necessity of new business models for digital TV and concerns on who will control content.

There are analysts who foreseen ***digital technology as a possible threat for the public television***, regarding both *funding pressures* and *programming challenges* (Poon, in Gerbarg, 1999, p. 237). Poon argues that being under financial pressures of insufficient public funding, and seeking to become entrepreneurial, the public television find itself in a tension between financial independence and maintenance of its non-commercial status. To all of these is adding now the transition to the digital technologies, with supplementary and increasing costs connected to programme purchasing and production in a digital environment. Moreover, continues Poon, public television’s programming is no longer as unique as it used to be. Cable channels for niche audiences such as Discovery and others, compete directly with public TV by offering similar sorts of programme and being apparently preferred by the audience.

5. Possible research needs based on current policy challenges

The present analysis leads us to several considerations on possible research needs. These have been identified starting from the analysis of the findings, as well as taking into account European and other regions/countries policy recommendations, or those of international organizations such as UNESCO or United Nations.

1. The impact of technology on the creative industries

As the UK Creative Industries Mapping Document 2001 points out, technology has often a dramatic impact on the economic landscape, driving the creation of whole new industries (as it is the case of video gaming sector), but also disrupting the business models of established industries. In this context there are several possible research needs on:

- **Changing of industries value chain under digital coding.** ICT and its digital coding are creating a new, wider, and more complicated *value chain* for production, distribution and consumption (Creative industries cluster study, 2002). An important aspect to be taken into account is that even if digitisation is used in many industries, only few sectors have a fully digital value chain. Therefore, the policy responses should avoid generalisations, each industry requiring specific analysis and policy developments. The changing of value chain creates the **need for new business models** (UK's Department of Trade and Industry, 2003) which are required to answer to the new technology challenges. In the same context, the need for **improved data management for business and creative applications for digital technologies** was identified as a national research priority in Australia.
- **Protecting intellectual property rights** is considered as a significant requirement for policy development in the new economy. The issue is identified in a couple of policy documents like the UK's Department of Trade and Industry document on the future of UK creative industries (2003), being underlined that even if early measures have already included legislation and technical procedures to inhibit piracy, the debate about whether should be a stronger policy response continues. **A particular area of major interest in the near future will be how to combine the need to support bottom-up production, creativity and consumer rights, at the same time as innovation and the intellectual property rights of producers and distributors.**
- **The issue of convergence** raises a lot of questions about appropriate policies to be developed in the field.
- **The challenge of developing content for the new digital technologies** is increasingly understood as a central concern of the audiovisual companies.
- **The Internet as future locus of art consumption.** The current work, for instance on increasing bandwidth, foresees the future development of services like interactive television, movies-on-demand, and so on, which

will have an important impact on the structure, conduct and performance in the creative industries sector.

- **New distribution channels** – like P2P, mobile online content and ad hoc device networks are considered areas of particular challenge.

2. Establishing priorities for promoting cultural industries; developing sector strategies; identifying factors that have an impact on the sector development

There is a specific request of the European Parliament (2003), which “calls on the Member States and the Commission, in consultation with professionals in the sector, to identify *priority actions to promote cultural industries*”. The issue can be found in other countries strategies in different forms. For instance, the Singapore Creative Industries Development Strategy includes the need for research on the key issues and challenges intersecting with the growth of creative industries and on identifying gaps and challenges impacting the development of the creative industries.

The issue of industry fragmentation led to the need of developing strategic analysis and policy recommendations for each sector of the creative industries, due to their particular specificities. According to UNESCO, it is impossible to provide “one-size-fits-all” solutions, being important to define a global development policy specifically for each sector.

For this purpose high level expert groups could usefully be set up for each sector (audiovisual production, performing arts, book and magazine publishing, etc.). Their work could use *foresight instruments* such as developing scenarios for supporting each sub-sector’s strategy, taking into account specific drivers as organizational instability, human resources status, the changing of industry value chain under digital coding, financial support (e.g. the funding crisis of performing arts), new business models including private and public support, the protection of domestic capabilities, etc.

3. European map of cultural industries

The European Parliament, in its resolution adopted in September 2003, calls the Commission “to elaborate a thorough study with a view to creating a **European map of cultural industries**, taking into account the forthcoming enlargement of the EU, **on the cultural, economic, legal, technological and educational aspects of cultural industry**”. It is worth mentioning that, within Europe, UK is the only country that developed maps of the creative industries, done in 1999 and 2001.

4. Development of statistical indicators for data collection in general and measurement of the economic impact of creative industries in particular

Given the large diversity of the creative industries sectors, the absence of accurate data collection and classification is considered to be acute and not able to provide a robust basis for policy making (UNCTAD XI, 2004). According to the same source, an important function of the international community would be to develop methodologies and statistical classifications and indicators, which permit the collection of reliable data for estimations of the economic activities of the sector.

A useful study would aim **to analyze what has been done so far in development of such statistical indicators and classifications and propose a future system of indicators to be used at the European level.**

The need of developing European indicators on cultural industries and gathering data is underlined by the European Parliament Resolution (2003), which urges the Commission:

- “to bring Eurostat cultural industries statistics in line with international standards”,
- “to collect data on employment, intellectual property rights, index of competitiveness, new products and exports” for the sector, and
- “to search for additional and systematic information on the use or consumption of cultural products, by enhancing the responsibilities of the European Audiovisual Observatory and other specialized bodies”.

Specific needs were identified in different countries related to data collection and classification: the Singapore Creative Industries Development Strategy (2002) set out the objective to “define and measure the economic impact of the creative industries in Singapore, with benchmarking studies against other regions”. In United Kingdom, the Creative Industries Mapping Document (2001) mentions among the issues with impact on the creative industries growth potential, the need of “continuing to improve the collection of robust and timely data on the creative industries, based on a common understanding of coverage”.

Regarding data collection and classification it has to be noted that Eurostat (The Statistical Office of the European Communities) is already engaged in an important effort to modify NACE classification and Structured Business Collection of data and DG EAC (Directorate General of Education and Culture of the European Commission) has provided substantial input on it. Also, the European Audiovisual Observatory represents a valuable source of information in the audiovisual and related sectors; in this respect, the ‘new media’ is among the topics that Observatory will take into consideration in view of the updating of the scope of its researchers.

5. The issue of cultural diversity and of the circulation and exchange of cultural products

Cultural diversity is an important issue on policy agendas of UNESCO, UN, and the EU. In 1995 a report of UN/UNESCO World Commission on Culture and Development made a parallel between biodiversity and cultural diversity, calling for “concerted action to address development challenges and to sustain cultural diversity in a global world” (www.unesco.org). Discussions continue in different circumstances, underlying that: “Just as policies of biodiversity preservation are needed to guarantee the protection of natural ecosystems and the diversity of species, only adequate cultural policies can ensure the preservation of the creative diversity against the risks of a single homogenizing culture” (idem). Moreover, in the XIth session of UNCTAD (2004) it was stated that: “Cultural diversity is considered to be one of the key pillars of sustainable development and a basic human right”.

Article 151 of the Treaty establishing the European Community states: “The Community shall contribute to the flowering of the cultures of the Member States, while respecting their national and regional diversity and at the same time bringing the common cultural heritage to the fore”. Moreover, the Project of the Treaty establishing a Constitution for Europe (2004)

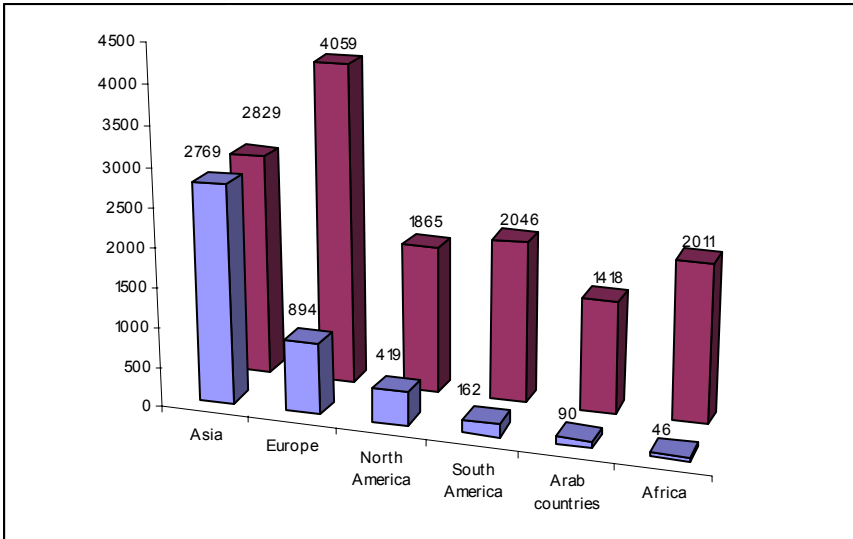
promotes the cultural and linguistic diversity as principles of the Union, which means a considerable advance. According to the Constitution, the Union “shall respect its rich cultural and linguistic diversity, and shall ensure that Europe's cultural heritage is safeguarded and enhanced” (article 3 – the objectives of the Union – paragraph 3). Also the Charter of Fundamental Rights (part II of the Constitution) makes two references to the cultural diversity; the first one in the preamble: “The Union contributes to the preservation and to the development of these common values while respecting the diversity of the cultures and traditions of the peoples of Europe”; and the second one in the article II-82: “the Union shall respect cultural, religious and linguistic diversity”.

Considering the high importance given to the issue of cultural diversity, the European Parliament is calling on the Commission and the Member States “to examine **best practices**, throughout the EU **with a view to promoting cultural diversity**.”

Circulation and exchange of cultural goods is an important issue linked with cultural diversity. The European Parliament Resolution on Cultural Industries (2003) points out that “so far no research has been done into the variety of measures in the Member States and the Accession Countries on indemnity and insurance policies; calls on the Commission to draw up such a report.”

The issue of cultural diversity, promoted on a large scale by European and world wide policy organizations and supported by appropriate legislation, highlights the importance of **protection of domestic productivity**. According to UNESCO, the cultural local supply is pressured by a *de facto* monopoly from multimedia conglomerates; various types of policy restriction are needed and promoted to support domestic production and avoid the standardization of tastes and behaviour. Among the regulations in force regarding this issue are, for instance, the articles VIII and IX of GATS and articles IV and XIII of GATT, the international agreement provided by the UNESCO’s 2001 Universal Declaration on Cultural Diversity, or TV Without Frontiers Directive of the EU – the last one requiring broadcasters to reserve 50% of their airtime to European productions. The concept of “cultural exception” is, according to UNESCO, another example among the ways of protecting domestic capabilities and promoting cultural diversity. The current proportion of locally produced versus imported films, for instance, show the large domination of imported productions in the world regions, excepting Asia (figure 17).

Figure 17: Ratio of locally produced versus imported films, by region



Source: UNESCO Survey on National Cinematography (March 2000) (<http://portal.unesco.org/culture>)

In this context, the European Parliament Resolution (2003) “calls on the Commission to **examine the effects of increasing concentrations** in ... the cultural industry and media sectors, and **to ensure that these do not lead to the disappearance of the independents and do not alter the diversity of creativity** by producing an increasing uniformity in production and distribution”

Exploring the possible ways of promoting **intercultural dialogue** represents another possible research need. According to UNESCO (<http://portal.unesco.org>), even if there are international regulations for the free circulation of cultural goods (e.g. Florence Agreement), representing positive driving forces for intercultural dialogue, “the domination in this area might turn dialogue into monologue”. The current challenges are considered by UNESCO not to be limited anymore to the struggle of traditional big producers of cultural goods, but to affect the whole international community.

6. Building research capability is a need identified by the European Parliament Resolution on Cultural Industries (2003), which calls the Commission “to increase research capabilities in the various areas of culture”. The trend is seen as well in other regions of the world, such as New Zealand, whose strategy foresees the setting up of tertiary research centers, well linked with industry.

7. Understanding better the idea of creativity as a factor conducive to innovation

The need to understand the factors leading to highly creative and innovative ideas and concepts is highlighted in a number of countries, and even being raised to the rank of a national research priority in Australia. It is considered that the understanding of the factors conducive to innovation and its acceptance can maximize the creative and technology capability of a country or region. In the same context, the UK future studies foresee the analysis of the historical evolution of the idea of creativity, and the identification of how the history connects with our modern understanding of business and cultural processes.

8. Matters of definition and organizational features

The European Parliament Resolution on Cultural Industries “urges the Commission (...) to examine whether it is possible to draw up a **definition for cultural and creative industries**, defining the sectors to be included while taking into consideration their cultural, exchange and economic dimension and also including associations and architectural professions”.

The human resources for the sector are looked at in a number of analyses that consider that the potential of the sector to contribute to employment generation can be harmed by the organizational instability, heterogeneity of the human resources statutes, and precarious forms of job security. A research study could be developed by focusing on possible solutions for human resources, from the training period and apprenticeship up to the labour market.

Moreover, the UK’s Department of Trade and Industry document (2003) identified the research need for “**a deeper understanding of production inside creative firms** – how these firms are organised and managed and how creativity is made operational and routine.”

9. The influence of innovation on the consumption patterns represents a research issue of clear policy relevance. The subject approached by Florida (2002) is still identified as a

research need in documents related with the future of creative industries, like the one from the UK's Department of Trade and Industry (2003): "how do we all as consumers actually use new products and how do we organise our lives in relation to cultural consumption and the introduction of new technologies?" The new patterns of consumption offer big opportunities for **local and regional development**. The degree of openness to diversity and implicitly to immigration or the developments of a 'street-level' culture are just a few issues that could be approached.

10. Raising public awareness on the creative sector is another possible research need. The Singapore strategy underlines the importance of raising awareness on the economic potential of the creative cluster, while the UK one emphasizes the importance of awareness on intellectual property rights for longer-term creativity.

11. Supporting creative education and training

Creative education and training are considered key issues for long term growth in the creative industries, by the governments of countries like UK or Singapore. Developing creative skills is an important issue at different educational levels: primary, secondary or tertiary. Also business skills are increasingly necessary for the sector professionals. Important subjects for research could be for instance those related to the introduction of 'digital pedagogy', which is foreseen for the future. This issue raises questions on "what really works in the classroom, especially since in education (...) the consumer is rarely the person who pays" (UK's Department of Trade and Industry, 2003).

12. Supporting collaboration among researchers and firms

Bringing firms and research providers closer is considered by countries as New Zealand as an effective means **to consolidate focused research effort over the long term.**

Annexes

Annex I. Specific organisation patterns

After the artist starts to get known to the producers of creative goods (film producers, art galleries, etc.), they are likely to start to sign contracts with the producer, sometime directly, other time mediated by their agents. The royalty contracts differ from one field of culture to another, as do the general organization patterns of the creative goods production and distribution. We will describe further the specific organization models for several fields of the creative industries: film industry, books and records, and toys and games.

1. Film industry

According to Caves (2000), during the first half of the 20s century the big studios resembled a stable oligopoly (MGM, Paramount, RKO, Twentieth Century-Fox, United Artists, Warner Bros etc.). In contrast with this pattern the today's system is based on specialized service firms, the functions performed previously by the many departments of a studio now being carried out by independent service companies.

The first stage in producing a movie is the screenplay writing. For this step, a contract between the dealmaker (independent producer or agent) and writer is signed or an external literary form can be used as well as the story source. After that, the producer recruits the director and the principal actors and many other specialists are hired. The flexible specialization system requires numerous inputs to produce a film. The inputs are selected by the coordinator (usual the producer) and come together in a one-off deal (table 5).

Table 5: Specialized service firms in Hollywood film production

	1966	1974	1981
Production companies	563	709	1473
Rental studios	13	24	67
Properties firms	66	33	184
Editing	4	31	113
Lighting	2	16	23
Recording/sound	20	33	187
Film processing	43	76	55
Market research	3	5	24
Artists' representatives	242	359	344

Source: Caves, 2000, p. 97

Currently the main functions still retained by the studios are the film *financing and distributing*. A producer might choose between studio and independent financing. In the first case, they put up the cost of producing the film and to distribute it using its own distribution channels. A common share is 50 percent to the studio and 50 percent to the producer (Caves, 2000, p. 112). At the end of the production process, a composer records a musical score which is added to the soundtrack.

The film distribution starts in cinemas, followed by the sale on video cassette (replaced more and more by DVDs), showing on pay TV, then cable and network TV.

The film distributor has to deal with various exhibitors as well as to promote the movie to the customers. According to Caves (p.161) these two tasks are interdependent. The revenue share between distributor and an independent exhibitor is usually 70-90% against 30-10%. As the exhibition is longer, the proportion moves in the favour of exhibitor. However, the tendency to *vertical integration* of the film distribution is increasing obviously, being fulfilled by the studios. One reason for the studios' concentration is the appearance of other distribution channels beside the theatres and therefore the need to deal with more and more actors (see table 6). In this respect, the big conglomerates are starting to include different distribution channels among their activities, as it was illustrated in table 1.

Table 6: Sources of distributors' revenues:

	1983	1993
Cinema gross rentals	39.2	18.6
Videocassettes	13.4	47.7
Television	47.4	33.7

Source: Caves, 2000, p. 168

2. Books and records

The typical royalty contract for the trade-book sector stipulates that the author will receive 10 percent of the book's retail price, with the gross profit split about 58-42 between publisher and author. When the contract is mediated by an agent, the agent will have a conventional 10 percent of the author's royalty (Caves, 2000, p. 54). For the world of music, the royalty rates between 11 and 13 percent for a new artist, 14 to 16 percent for artists in the middle range and 16 to 20 percent for superstars (idem, p. 62).

As methods of sales promotion, the booksellers and the records companies use several types of *certifiers*, which inform potential buyer about the features of a new product. One of them is the *review* of trade-books and in this respect a few review media exert great influence, for example the New York Times Book Review (idem, p. 148); however only a relatively small number of books are reviewed. In the case of potential blockbuster books, particular sorts of promotion potential are the campaigns of *promoting authors' tours of TV and radio talk-show circuits*. However, in the case of records company, the print reviews do not have much influence. The recording itself is put on air on different types of media, providing the necessary information to the record buyer. Common certifiers for books and records represent the *bestseller lists*, considered as 'mechanical but objective certifier'. The creator of bestseller list must identify the most popular items based on sales of the books and sales and broadcast of recordings. For the record industry the *hit lists* (as there is Top 40 Hits), which started to become important since radio broadcasters begun to rotate the play of records from the list, are common (idem, p. 152).

With regard to the physical distribution of books, Caves (idem, p. 154) notices the decline of independent bookstores in the favour of chain bookstores and others in the period 1991-1996 in US (table 7):

Table 7: The share of booksellers (in %)

	1991	1996
Independent bookstores	32	18
Chain bookstores	22	25
Book clubs	17	18
Mail order	5	4
Discount stores	7	9
Warehouse clubs	3	6
Other	15	19

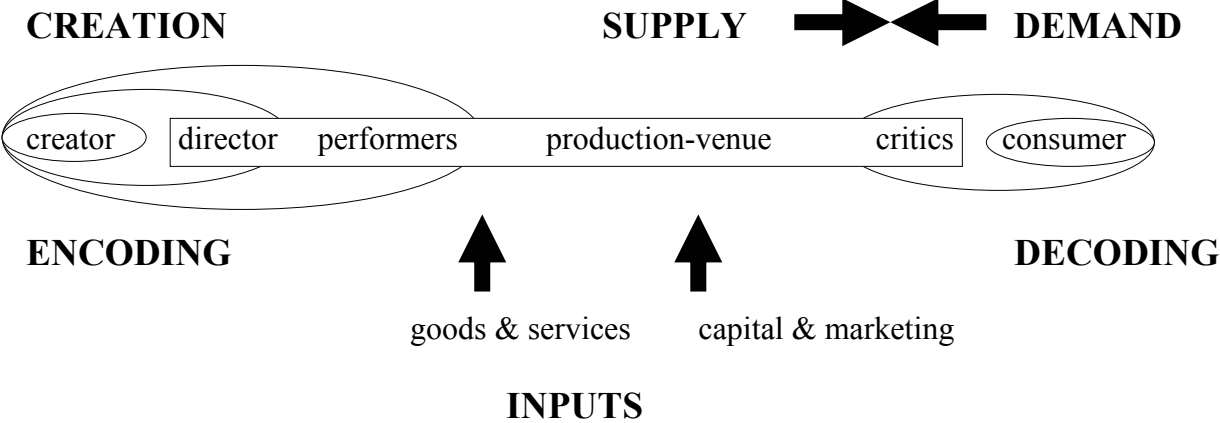
Source: Caves, 2000, p. 155

Both in the book publishing industry and in the record industry there is a *concentration of producers*: in 1993 the four largest book publishers received 30 percent of total wholesale book-publishing revenues. This effect is even more pronounced in the record industry, in 1993 the six largest record companies distributed about 80 percent of all records (idem, p. 157)

3. The issue of ‘cost disease’ in the performing arts

A long debate in the economics of arts has been the low influence of technological development on performing arts, leading to the so called ‘cost disease’ phenomenon (Caves, p. 229, Throsby, p. 119, citing Baumol and Bowen). In the long term the real income of people grows because of the innovation that increase the quality of goods and services as well as because of the increasing productivity based on technological advance, which reduce the cost and the time to produce them. The rise of productivity has the effect of diminishing the labour hours, inclusively in several creative industries. However, it is not case for all of them. The performing arts seem to be the losers in this game, as the number of hours and resources needed for a performance is the same as it was used to be. As a result, the real wage rises in the whole economy cannot be compensated by the increasing of productivity in the performing arts (and to a lesser extend in other art realms) as in other sectors of the economy, pushing to an ever-increasing gap between costs and earned revenue in art organisations in general and in performing arts in particular, at a pace driven by the labour productivity in the rest of economy.

Figure 18: Performing arts value chain



Source: Richard Brecknock, 2003, p. 2

Throsby shows that the implications of the cost disease phenomenon have been clarified over the thirty five years so since Baumol and Bowen first put it forward. The problem is more acute in performing arts than in others because many of the project costs in this field are fixed and the productivity rate is quite stable. The individual and social actors of the creative industries have been trying to evade the problem using production and distribution adjustments: technical changes were introduced in scene design, sound or lighting facilities – enabling larger audience for a live performance; media reproduction technology extended consumption much further; the number of performances have been increased in the case of performing arts or by substituting creative products in visual arts; partnerships between art organisations and corporate enterprises have been continuously developed. Beside these factors, rising consumer incomes and changing tastes led to an increasing demand for arts, even if the demand is spread non-equally among the different art forms. According to Throsby, the gap will never increase so much as to be terminal for the sector: “the combined impacts of production adjustments, increased demand and generally rising level of unearned revenue have countered any tendency towards a secular rise in deficits among art companies, suggesting that although the cost disease will doubtless continue to present such companies with difficult problems, it is unlikely to be terminal” (Throsby, 2001, p. 119). However, even if the cost disease effect is not terminal to the high culture realm in general and performing arts in particular, it still might shrink the sector, legitimising the necessity for public subsidy and financial support from other sources.

4. Toys and games

As Caves shows, lots of new toys are created and distributed on the market each year (about 6000 just in the US market). Some remain on the market on long time (Barbie, etc.) other disappear after only a few years (Cabbage Patch Kids), but most of them disappear after one season. About 60 percent of toys are sold in the last quarter of each year. The promotion of toys registered a shift from the retailed channels to the massive promotion television campaigns, with effects not only on the level of promotion but also on its substance. That is because they can be presented in action directly to the child, while the retail channels message was addressed mainly to the adult buyers. The toy innovation is made mainly by companies which are designers of toy and by the independent professional designers. The traditional royalty rate received by an independent designer is 5 percent of net wholesale revenue realized (according to Caves, 2000, p. 211-213).

For video games, the producers offer a combination of a hardware console and the games software which will be played on it. In 1998 the U.S. market was dominated by Sony (51 percent of hardware - focused on older players) and Nintendo (41 percent – oriented to the 10-to-14 age group). The price differentials are explained by the following: Nintendo’s games are on cartridges – quite expensive to produce, but fast playing; Sony’s games are on CDs – cheap to produce but slower to play. While console selling gets thin profit margins, the games make much bigger profits. As a consequence, Sony sell a large number of CD-based games for moderate prices, Nintendo a smaller quantity of very popular games but at higher prices (Caves, idem, p. 215).

5. Formal training, apprenticeship and selection of the artists

The very **input** used in the production and distribution of creative goods is the **work/talent of the creator**. The formal training of the artists takes place normally in tertiary level establishments, differentiated by field of art. Primarily in the sectors closer to the artistic sphere and essentially in the realms which are creative above all - as visual arts - *a tension between creativity and craft* in artistes' training has been perpetuating over time (Caves, 2000, p. 25). The students are prepared to pursue careers "more as a priestly calling than as a professional activity" (p. 24). This attitude represents a vital feature of the training process in visual arts universities and in music academies, the instruction preparing the future artist only for the highest career possibilities. As Caves cites one voice teacher, "without the fantasy of being great you could not even begin".

Caves shows that in effect, this approach has proved to be highly risky and does not take into account the very low possibility that the student will pass the successive gates to achieve its goal. The conflict in artist training can be found again afterwards in artistic practice, most evident in fields like ceramics and photography. However, the contemporary art universities and academies combine the idea of an artistic calling with the use of modern facilities and equipment. They offer the student a permanent contact with peers, in order to help mutual learning and make them used to the future competition in the creative market.

Still in the fields more closed to the artistic realm (visual art universities, academies, etc.), the formal training is followed by a period of **apprenticeship** – with different organisational forms from one art form to another. The most visible type of organization during the apprenticeship period can be found in the visual arts. Here it is important the workplace of the artist to be located in the vicinity of other artists, gatekeepers, in other words the actors involved in the field. Usual there is the loft rented by the artist in areas such as Montmarte in Paris or SoHo in New York, the location permitting the development of interpersonal contacts, spending time looking at the work of other artists. According to Caves (2000) the artist's tasks in the period of apprenticeship are "to build her body of work and the skills and the sensitivity needed to produce it, and to get it known and accepted." (p. 26).

Caves argues that the key point on understanding the clustering of young artists is not only *la vie boheme*, but the possibility to have a continuous dialogue on the actual major issues and new ideas. In this context, an important idea is the one of seeing the **art** – similarly as the research work – **as a process of creative problem-solving**: "the original and talented artist is the one successful at spotting novel problems and solving them in fruitful and compelling ways" (idem, p. 22). For this process they need to communicate, to exchange ideas with peers as well as with potential promoters of their work.

The **selection** of the artists is made by intermediaries – agents and dealers – having a gate keeping function for the young talents. A great help for dealers in recognising promising artists is the art community itself, which grades and ranks the young talents, producing the *A list/B list* ranking in a particular field. The organization patterns of agents are different from an art realm to another: for visual arts the intermediaries are mainly the art galleries, for classical music the competitions that have flourished around the world. In the case of popular musician, after a training which is often informal (e.g. garage bands); the grading and ranking function begins only when he seeks paying engagements (idem, p. 35). While the free-lance musicians interact in paid sessions and develop contacts participating in auditions and openings, the groups start to have engagements in less pretentious clubs, playing popular

songs and trying in parallel to promote their own compositions. For the case of trade-book authors, the gatekeepers are the agent or directly the publishing-house editor.

Annex II: Symbols and abbreviations

Country codes

BE	Belgium
DK	Denmark
DE	Germany
EL	Greece
ES	Spain
FR	France
IE	Ireland
IT	Italy
LU	Luxembourg
NL	Netherlands
AT	Austria
PT	Portugal
FI	Finland
SE	Sweden
UK	United Kingdom
EUR-15	European Union (15 Member States)

Other abbreviations

na not available

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European Commission

EUR 21471 – Future of Creative Industries - *Implications for Research Policy*

2005 — 46 pp. — 21.0 x 29.7 cm

ISBN 92-894-9022-5

The creative industries comprise a large variety of fields, from those heavily industrialized such as advertising and marketing, broadcasting, film industries, Internet and mobile content industry, music industries, print and electronic publishing, and video and computer games, to the traditional fields of visual arts, performing arts, museums and library services. The sector is increasingly important from the economic point of view representing already a leading area of the economy in the OECD countries, with significant values of annual growth rates. Also, according to different cited sources, the creative sector could bring a significant contribution to the knowledge-based economy as it is knowledge and labour intensive and fosters innovation, with a huge potential for generation of employment and export expansion.

This Working Paper identifies possible research needs for the creative industries. The technological challenges occupy a central place, approaching issues such as: the change of industries value chain under digital coding and therefore the need for new business models, the challenge of developing content for the new digital technologies, the Internet as future locus of art consumption, or the new distribution channels – like P2P, mobile online content and ad hoc device networks. Beside the technological challenges, issues such as cultural diversity and the circulation and exchange of cultural products are placed among the current concerns of the cultural policy.