HAL
open science

Main drivers for the settlement of creative industries in Toulouse : the manager's view

Hélène Martin-Brelot, Michel Grossetti, Denis Eckert, Christiane Thouzellier

To cite this version:

Hélène Martin-Brelot, Michel Grossetti, Denis Eckert, Christiane Thouzellier (Dir.). Main drivers for the settlement of creative industries in Toulouse : the manager's view. Amsterdam : AMIDSt, 2008, 74 p. : bibliogr., tabl., carte, 2008, ACRE report 6.11, 978-90-75246-91-9. halshs-02567300

HAL Id: halshs-02567300

https://shs.hal.science/halshs-02567300v1

Submitted on 13 May 2020

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

acre

Main drivers for the settlement of creative industries in Toulouse

The managers' view

ACRE report 6.11

European Commission

CITIZENS AND GOVERNANCE IN A KNOWLEDGE-BASED SOCIETY

Hélène Martin-Brelot
Michel Grossetti
Denis Eckert
Christiane Thouzellier

Main drivers for the settlement of creative industries in Toulouse

The managers' view

ISBN 978-90-75246-91-9

Printed in the Netherlands by Xerox Service Center, Amsterdam
Edition: 2008
Cartography lay-out and cover: Puikang Chan, AMIDSt, University of Amsterdam

All publications in this series are published on the ACRE-website
http://www.acre.socsci.uva.nl and most are available on paper at:

Dr. Olga Gritsai, ACRE project manager
University of Amsterdam
Amsterdam institute for Metropolitan and International Development Studies (AMIDSt)
Department of Geography, Planning and International Development Studies
Nieuwe Prinsengracht 130
NL-1018 VZ Amsterdam
The Netherlands
Tel. +31 20 525 4044
+31 23 528 2955
Fax +31 20 525 4051
E-mail O.Gritsai@uva.nl

Copyright © Amsterdam institute for Metropolitan and International Development Studies (AMIDSt), University of Amsterdam 2008. All rights reserved. No part of this publication can be reproduced in any form, by print or photo print, microfilm or any other means, without written permission from the publisher.

Main drivers for the settlement of creative industries in Toulouse

The managers' view

ACRE report 6.11

Hélène Martin-Brelot
Michel Grossetti
Denis Eckert
Christiane Thouzellier

Other contributors
Jean-Marc Zuliani
Françoise Desbordes

Accommodating Creative Knowledge – Competitiveness of European Metropolitan Regions within the Enlarged Union

Amsterdam 2008
AMIDSt, University of Amsterdam

ACRE

ACRE is an acronym of the international research project 'Accommodating Creative Knowledge – Competitiveness of European Metropolitan Regions within the Enlarged Union'.

The project is funded under the Priority 7 'Citizens and Governance in a Knowledge-based Society' within the Sixth Framework Programme of the European Union (contract no 028270).

Coordination:

Prof. Sako Musterd
University of Amsterdam
Amsterdam institute for Metropolitan and International Development Studies (AMIDSt)
Department of Geography, Planning and International Development Studies
Nieuwe Prinsengracht 130
NL-1018 VZ Amsterdam
The Netherlands

Participants:

- **Amsterdam** (Amsterdam institute for Metropolitan and International Development Studies, University of Amsterdam, the Netherlands)
  Marco Bontje ~ Olga Gritsai ~ Heike Pethe ~ Wim Ostendorf ~ Puikang Chan
- **Barcelona** (Centre de Recerca en Economia del Benestar – Centre for Research in Welfare Economics, University of Barcelona, Spain)
  Montserrat Pareja Eastaway ~ Joaquin Turmo Garuz ~ Montserrat Simó Solsona ~ Lidia Garcia Ferrando ~ Marc Pradel i Miquel
- **Birmingham** (Centre for Urban and Regional Studies, University of Birmingham, UK)
  Alan Murie ~ Caroline Chapain ~ John Gibney ~ Austin Barber ~ Jane Lutz ~ Julie Brown
- **Budapest** (Institute of Geography, Hungarian Academy of Sciences, Hungary)
  Zoltán Kovács ~ Zoltán Dövényi ~ Tamas Egedy ~ Attila Csaba Kondor ~ Balázs Szabó
- **Helsinki** (Department of Geography, University of Helsinki, Finland)
  Mari Vaattovaara ~ Kaisa Kepsu
- **Leipzig** (Leibniz Institute of Regional Geography, Germany)
  Joachim Burdack ~ Günter Herfert ~ Bastian Lange ~ Katja Manz ~ Robert Nadler
- **Munich** (Department of Geography, Ludwig-Maximilian University, Germany)
  Günter Heinritz ~ Sabine Hafner ~ Manfred Miosga ~ Anne von Streit
- **Poznan** (Institute of Socio-Economic Geography and Spatial Management, Adam Mickiewicz University, Poland)
  Tadeusz Stryjakiewicz ~ Jerzy J. Parysek ~ Tomasz Kaczmarek ~ Michal Meczynski
- **Riga** (Stockholm School of Economics in Riga, Latvia)
  Anders Paalzow ~ Diana Pauna ~ Vjacheslav Dombrovsky ~ Roberts Kilis ~ Arnis Sauka

- **Sofia** (Centre for Social Practices, New Bulgarian University, Bulgaria)
  Evgenii Dainov ~ Vassil Garnizov ~ Maria Pancheva ~ Ivan Nachev ~ Lilia Kolova
- **Toulouse** (Interdisciplinary Centre for Urban and Sociological Studies, University of Toulouse-II Le Mirail, Toulouse, France)
  Denis Eckert ~ Christiane Thouzellier ~ Elisabeth Peyroux ~ Michel Grossetti ~ Mariette Sibertin-Blanc ~ Frédéric Leriche ~ Florence Laumière ~ Jean-Marc Zuliani ~ Corinne Siino ~ Martine Azam ~ Hélène Martin-Brelot
- **Milan** (Department of Sociology and Social research, University degli Studi di Milan Bicocca, Italy)
  Enzo Mingione ~ Francesca Zajczyk ~ Elena dell'Agnese ~ Silvia Mugnano ~ Marianna d'Ovidio ~ Carla Sedini
- **Dublin** (School of Geography, Planning and Environmental Policy, University College Dublin, Ireland)
  Declan Redmond ~ Brendan Williams ~ Niamh Moore ~ Veronica Crossa ~ Enda Murphy ~ Philip Lawton

Table of contents

Executive summary **1**

1 Introduction **3**

2 Sectors in the metropolitan region **5**

2.1 Short introduction of the sectors at the national level 5
2.1.1 Business and management consultancy activities 5
2.1.2 Motion picture, video, radio and television activities 7
2.1.3 Software activities - computer games, electronic publishing and web design activities 9
2.2 Description of the sectors in the metropolitan region 11
2.2.1 Business and management consultancy activities 11
2.2.2 Motion picture and video, television and radio activities 13
2.2.3 Electronic publishing, web design and computer games 15

3 Research design and methodology **19**

3.1 Qualitative research: Experience from previous quantitative study 19
3.2 Selecting cases and sampling 19
3.3 Interviews production process: Organisation and contents 21
3.3.1 Observations on times: From appointment to transcription 21
3.3.2 Interview guide: Types of researched information and ways to collect it 22
3.4 Data analysis: Steps of interpretation, problems and limits 23
3.4.1 General comments 23
3.4.2 Considering required competencies of selected companies 24

4 Results **27**

4.1 Measuring personal trajectory effects: Difference between selected sectors 27
4.2 Business and management consultancy activities 29
4.2.1 Overview of the interviewed firms 29
4.2.2 Overview of companies' networks 32
4.2.3 Recruitment aspects 33
4.2.4 Image of Toulouse for the sector: Advantages and drawbacks 34
4.2.5 Location factors inside the UAT 35
4.2.6 Expectations regarding policies 36
4.3 Motion picture, video, radio and television activities 38
4.3.1 Overview of the interviewed firms 38
4.3.2 Overview of the companies' networks 40
4.3.3 Recruitment aspects 43
4.3.4 Location factors (hard and soft): Image of the city for the sector 44
4.3.5 Location factors inside the UAT 46
4.3.6 Expectations in term of local policy for the sector 47
4.4 Web design and computer games 49
4.4.1 Overview of the interviewed firms 49
4.4.2 Overview of the companies' networks 51
4.4.3 Recruitment aspects 53
4.4.4 Location factors (hard and soft factors): Image of the city for the sector 54
4.4.5 Location inside the UAT 56
4.4.6 Role of local government 57

4.5 Main drivers for settlement of selected creative and knowledge activities 58
4.5.1 Personal trajectory and networks 58
4.5.2 Hard factors: Crucial for business development 59
4.5.3 Location inside the UAT: Soft factors and creativity 60
4.6 Discussion: Strengths and obstacles for a competitive knowledge and creative city 61
4.6.1 Image of the city and critic of hard factors by sector 61
4.6.2 Attitudes of local politics and soft factors: Getting prepared to improvisation 63

5 Conclusions and discussion 65

5.1 General conclusions of the qualitative research 65
5.2 Implications for competitiveness of the city 67

6 References 69

Appendix 71

EXECUTIVE SUMMARY

Within the ACRE research programme, the objective of this study is to understand why managers of selected creative knowledge industries chose to start an activity in the Urban Area of Toulouse (UAT). We try to estimate the relative importance of hard and soft factors that played a role in their location decision. Personal trajectory effects are also taken into account.

This report presents results of a qualitative research based on interviews with 20 managers and 7 experts in consultancy, audiovisual, web design and computer games sectors. These service activities are not representative of the local economy. Sample is composed of self-employed, small (staff 2-6) and medium sized (6-50) enterprises located in the center or in the periphery of the city.

Interview guide aims at understanding logics behind companies' location. Networks, including clients, subcontractors and business organisations and recruitments aspects are addressed. In the approach of hard and soft factors, location in Toulouse compared to other cities and position inside the UAT are distinguished. We also explore the importance of image of the city for the sector as well as opinions about the role of local governments.

Analyses confirm anterior results from a quantitative survey among creative knowledge workers (WP5). Main drivers for settlement are linked uppermost to personal trajectory effects and to hard factors referring to the level of economic development of the city. On the whole, 75 per cent of the interviewed managers had an anterior link with Toulouse, either through family or students networks. "External" managers, i.e. being born and having achieved higher degree outside the region, put forward reasons related to spouse's employment and mainly to business opportunities offered by the regional metropolis.

Soft factors mentioned for Toulouse refer to location in the South of France, climate and proximity to nature (sea and mountains). Though often present in discourses about advantages and drawbacks of the city, these elements never constitute an overriding reason for managers to settle their business in the city. The role of soft factors appears more clearly decisive as far as location of the company inside the UAT is concerned. The most creative activities, mixing arts and technology competencies (video, animation movie, 3D web design, computer games) seem to favor the historic core. Managers put forward accessibility and flexible working hours, but choice of a central neighborhood also relates to the image given to clients of the sector.

Whereas knowledge intensive activities benefit from a good visibility in Toulouse, emergent creative industries do not enjoy the same recognition and support from local governments. Recent success of local audiovisual companies in animation movie sector is only taken into account by regional administration. Some managers deplore not to be considered seriously, especially when their activity is linked to entertainment. A better understanding of what

characterises creative activities could help thinking the role they can play for urban development.

Individual freedom plays a key-role in artistic and creative trades, this being enhanced by the use of Internet and the improvement of distant work conditions. Companies in web design and computer games sectors tend to have more international links with clients or sub-contractors. Audiovisual managers, especially filmmakers specialised in institutional movies, also have to open businesses outside the region, as a few larger companies settled for a long time on the territory tend to lock access to potential local markets.

All businesses related to communication, composing actually the majority of the sample, generally mention the domination of Paris, or abroad Barcelona, for cultural and artistic invention and effervescence. According to interviewed managers, Toulouse is penalised by the lack of cheap high-speed train connections to the capital city and other strategic nodes in France and Europe.

Clients' projects in which selected firms are involved often require the combination of knowledge and creative competencies and resort to temporary contracts. This flexibility encounters heaviness of public administrations and complicated access to public markets. This is pointed out in many cases, especially by the smallest enterprises.

Selected sectors are not at the same level of development regarding institutional organisation. Audiovisual and web design activities still much rely on personal social networks, with overlapping of private and professional life of managers and workers. On the other hand, consultancy sector is already trying to structure around visible national or regional trade unions and professional associations.

1 INTRODUCTION

The ACRE programme addresses the relationship between creativity and competitiveness in thirteen cities in Europe. It relies on the collection of empirical data among highly skilled people active in selected creative and knowledge industries. This report presents the results of a qualitative research based on 20 in-depth interviews with managers who have created an activity in the Urban Area of Toulouse (UAT). The aim is to understand what has influenced the most their decision to develop a business in a creative knowledge sector at this particular location in France and at a certain place in the agglomeration.

Three types of activities have been chosen. The first two sectors refer respectively to the knowledge intensive and to the cultural industry, whereas the third one mixes elements of both cultural and knowledge sectors:

- Business and management consultancy activities (NACE 71.14)
- Motion picture and video (NACE 921) / radio and TV activities (NACE 922)
- Web design, electronic publishing and computer games production (NACE 72.22)

An overview of these sectors at the national, then at the metropolitan level, shows distinctive features regarding their insertion in the local dynamic (part 2). Results come from 7 preliminary interviews with representative experts of each sector as well as on data provided by the national institute for statistics (INSEE). These activities, that are not representative of the local economy, are characterised by high flexibility and crucial role of individuals in all decision-making processes. They also rely for a large part on immaterial resources and products.

In this study, we try to estimate the relative importance of different location factors that play a role in the decision making process of managers: **hard factors**, (i.e. classic factors such as the presence of adequate and specialised labour, accessibility, tax incentives…) and **soft factors** (among which the quality of space, the atmosphere of the city and region, the available high-quality residential space etc.). We also pay attention to **personal trajectory** elements such as the place of birth and the place of studies, which explain for a great part why people live somewhere. All this implies a specific methodological approach and an adapted interview guide (part 3).

Part 4 gathers results obtained in each sector and presents syntheses to put forward main drivers for settlements as well as strengths and obstacles for a competitive city.

First measurements widely confirm results from the previous survey on creative workers (part 4.1). Regarding trajectory effects 75 per cent of the interviewed managers have had an anterior link with the city through family links or students networks. Hard factors of employment and business opportunities have played a major role in the attraction of the 5

remaining "external" managers. Soft factors such as climate, proximity to nature and atmosphere of the city are mentioned but do not influence uppermost managers to settle a company in Toulouse.

The analysis is based on the apprehension of the interviewed firm's activities and networks by sector (parts 4.2, 4.3; 4.4). The sample is composed for a major part of small sized companies selling mostly made-to-order communication services, for instance reports (business and management consultancy), advertising movies (motion pictures, video, radio and television) or websites (web design, computer games). Networks are mainly shaped by relationships with different types of actors: clients, subcontractors, business organisations and institutions. Conditions for recruitment are addressed separately, putting forward the strengths and weaknesses of the agglomeration in terms of competencies and training. Location factors in Toulouse and inside the UAT are then considered regarding the importance of image of the city for the sector. To finish, managers' opinions about the role of local policies for their activities are restituted.

Among themes coming up whatever the sector (part 4.5), the importance of informal social networks in the functioning of creative industries is to relate to personal trajectory and to the importance of anterior social insertion of the interviewed in the city region. Among hard factors, isolation of Toulouse due to the lack of high-speed train connections to Paris and other places in France is deplored. The city core is favored by young and creative companies in the motion picture, animation movie and computer games sectors. Soft factors linked to atmosphere of neighborhood, including architecture, density of boutiques, cafés and restaurants are mentioned as important criteria for these emergent activities combining arts and technology.

Managers appear globally satisfied with material and immaterial conditions the city offer to their business. Selected activities generally benefit from the positive image of Toulouse at the national and international level, thanks to influence of aeronautics and space industries. However important critics come out from their discourses on local politics (4.6). It first concerns the global lack of interest and misunderstandings about new creative industries relying more on improvisation and entertainment than sectors traditionally supported. Second, heaviness and complication to enter local markets are also pointed out. Adding the high general level of taxes for private companies in France, this often conducts companies especially in the web design sector, to think about delocalising one part of their activity abroad.

2 SECTORS IN THE METROPOLITAN REGION

This part presents the current state of the selected sectors at the national and at the metropolitan regional level. The importance of Toulouse as a location for the sector at the national level differs according to each type of activities.

The evolution of the business and management consultancy sector (71.14) in the metropolitan region tends to follow the national tendency as this sector is driven for a significant part by government's decisions (e.g. law on working hours).

At the opposite, the weight of the Urban Agglomeration of Toulouse (UAT) appears clearly weak in the motion pictures, video (921), Radio and TV (922) activities compared first to the overwhelming domination of Paris and second to the presence of more dynamic regions regarding those cultural sectors in France.

Selected computer-programming branches of electronic publishing, web design, and computer games (72.22) mix both knowledge and creative activities. Their rapid and recent development is narrowly associated to telecommunications networks (fixed or mobile) and services. Their location process is thus more largely footloose than in the case of film industry and consultancy that require respectively concentrated means of production and face-to-face relations.

2.1 Short introduction of the sectors at the national level

2.1.1 Business and management consultancy activities

This sector takes up again in Europe after a slump in 2003 and 2004. Bank and telecommunications activities, with more recently e-business are the most dynamic fields invested by the business and management consultancy sector.

Germany's contribution to the European turnover (61.6 billion euros in 2005, 14 per cent growth compared to 48.5 billion in 2004) amounts to 39 per cent, followed by the United Kingdom (27 per cent). France ranks third on this market (10 per cent) and registers a 9 per cent growth in 2005 (FEACO, 2006). One important change in the last past years is the market evolution from offer towards a growing demand of the clients.

Large industrial groups such as Danone, Air Liquide, Saint-Gobain, Lafarge, BNP, and Sodexo are important buyers of consultancy activities. It remains difficult in France to work with small and medium enterprises that are not used to call for external consultants. Growth rates are strongly related to the confidence in the general economic tendencies and to the presence of numerous medium venture businesses, which is the case in Germany and in the United Kingdom.

On the whole, a strong hierarchy regarding the size of the companies characterises this sector. Table 2.1 shows the presence of few international giants, a small proportion of medium businesses (6 to 250 employees) and an overwhelming proportion of very small businesses (self-employed until 5 employees).

Table 2.1 - Sector 74.14 in France: A large proportion of very small businesses (12/31/2005)

Number of employees	0 to 5	6 to 19	20 to 49	50 to 249	250 to 499	500 to 1,999	> = 2000	Total
Number of working enterprises	70,322	2,582	569	198	22	11	0	73,704
Per cent of total	95.41	3.50	0.77	0.27	0.03	0.01	0.00	100.00

Source: INSEE, 2005

In France, by the end of 2005, sector 74.14 counted 103,500 workers and 73,400 companies with a creation rate amounting to 20.6 per cent. The latest available data from the national institute for statistics (INSEE, Sirene NACE Revision 04/01/2008) shows a number of 105,000 firms practicing business and management consultancy activities.

According to interviews with the national trade union SYNTEC and other representatives of this selected knowledge-based sector (see 2.2.1), the creation process of businesses in France result mainly from market tendencies and economic policies occurring at the national level. A good example is given by the implementation of the law on working hours conditions (1998), compelling all companies to adapt from 2000 their production processes, recruitment conditions and job contracts from a 39 to 35 hours working week. This has entailed the development of many consulting businesses related to human resources management.

A second factor influencing the growth of business creations in this sector refers to decisions to support one or several fields of the national or regional economy (e.g. energy, telecommunications, transports...). In some cases, governments can finance half the costs of reports and studies required by a company to innovate.

Another phenomenon relates to economic troubles and the following redundancy period in the early 1990s. This has entails the multiplication of self-employed consultants, often 50 years old chief executives taking advantage of former professional networks and specialised sector knowledge to start an activity.

The short duration of very small enterprises is pointed out by interviewees, relating this to the blurred image the whole sector seems to suffer from. Associations and trade unions representing business and management consultancy activities struggle for the improvement of the whole profession image. For them it is damaged by a lack of transparency and information about consultancy services, their processes and costs.

Île-de-France dominates the consultancy landscape with nearly half of the sector enterprises concentrated on its territory (Table 2.2). Midi-Pyrénées region ranks 7th with less than 3 percent of the total number of firms in France in 2008 (3129 companies).

Table 2.2 - Distribution of firms of the 71.14 sector by administrative regions in France

Rank	Administrative region	Number of enterprises	Percentage
1	Île-de-France	49800	47,43
2	PACA	8645	8,23
3	Rhône-Alpes	8621	8,21
4	Overseas départements (D.O.M.)	4614	4,39
5	Aquitaine	3585	3,41
6	Nord-Pas-de-Calais	3138	2,99
7	**Midi-Pyrénées**	**3129**	**2,98**
8	Pays de la Loire	3112	2,96
9	Languedoc-Roussillon	2926	2,79
10	Bretagne	2475	2,36
11	Alsace	2162	2,06
12	Centre	2003	1,91
13	Picardie	1484	1,41
14	Lorraine	1470	1,40
15	Haute-Normandie	1315	1,25
16	Poitou-Charentes	1270	1,21
17	Bourgogne	1208	1,15
18	Basse-Normandie	986	0,94
19	Champagne-Ardenne	805	0,77
20	Auvergne	726	0,69
21	Franche-Comté	683	0,65
22	Limousin	504	0,48
23	Corse	342	0,33
	Total	105003	100,00

Source: INSEE, Sirene, NAF, Rev. 2008

2.1.2 Motion picture, video, radio and television activities

All around the world audiovisual activities are undergoing deep changes due to digital convergence and the rise of new media industries. The share of time spent to watch classical TV channels is decreasing to the benefit of Internet, mobile phone, computer and games related activities. Old mass media have to face the diversification of information, learning and entertainment means.

According to the European audiovisual observatory, the whole television industry is in difficult time since the beginning of the 2000s. It suffers from deterioration of the economy as a whole and from unexpected costs of transition towards digital television (huge investments required and rising costs of programme rights).

Studies generally underline the need for a greater transparency regarding company accounts, film producer's revenue flows and broadcaster investment in production "*that remains a black hole in most of the EU countries*" (Lange 2003). This being said, indicators such as the TV company revenue show that the United Kingdom (thanks to high level of funding of public service television, advanced development of digital television and the presence of many pan-European broadcasting companies) ranks first among European countries with 17.3 billion €

in 2003, compared to 13,6 billion € in Germany, 10,5 billion € in France and 7,6 billion € in Italy (Lange, 2005).

A yearly European average growth of 4.4 per cent is considered poor compared to two-figures growth rates the sector enjoyed during the 1980s and 1990s. In France, a higher average growth (5.7 per cent) is due to the increasing importance of thematic packages and channels at the start of the decade, but this is, as elsewhere, beginning to tail off (Lange, 2005). Different studies show that the French television system achieves relatively stable profit margins, (5.4 per cent in 2003, to be compared to -15.4 per cent in Spain and -17.5 per cent in Portugal).

Table 2.3 shows the share of each 921 and 922 sub-sectors in France in 2008.

Table 2.3 - Motion picture, video / radio and TV activities in France: Repartition by sub-sectors

NACE-REV1	NACE-REV2	Activities	Number	Per cent
92.11	5911B	Institutional and advertising video production activities	4,648	15.22
92.11	5911C	Cinema picture and video production activities	4,513	14.78
92.11	5920	Sound recording and music publishing activities	4,460	14.60
92.2	6110	Wired telecommunications activities	4,222	13.82
92.11	5911A	Motion picture, video and television programme production activities	3,574	11.70
92.13	5914	Motion picture projection activities	2,046	6.70
92.2	6010	Radio broadcasting	1,995	6.53
92.11	5912	Motion picture, video and television programme post-production activities	1,776	5.81
64.2	6120	Wireless telecommunications activities	1,479	4.84
92.12	5913B	Publishing and video distribution activities	841	2.75
92.12	5913A	Motion picture, video and television programme distribution activities	432	1.41
92.2	6020B	Thematic television programming and broadcasting activities	207	0.68
92.2	6130	Satellite telecommunications activities	181	0.59
92.2	6020A	Television programming and broadcasting activities	170	0.56
			30,544	100.00

Source: INSEE, NAF, Rev2, 2008

In France the whole sector is definitely marked by a strong centralism. Successive national governments from the 1960s have not promoted like in Belgium or in Italy a dense network of local televisions and radio relay stations. 2008 INSEE figures show that Île-de-France concentrates over 50 per cent of these 30,544 firms registered in one of the specialized fields covered by the audiovisual sector.

The Paris domination is actually obvious in the field of contents production. For instance, 74.5 per cent of cinema picture and video production activities (5911C) gather in Île-de-France, 59 per cent in the only commune of Paris. Over 62 per cent of motion picture, video and television programme production activities (5911A) are settled in Paris and its adjacent western *département* of Hauts-de-Seine that comes second in most of the audiovisual sub-sectors.

The unbalance between the capital city and the rest of the country is illustrated by the gap between the first and the second ranked[1] départements, Paris accommodating 32 per cent of the total number of existing companies and Bouches-du-Rhône (Marseille) only 3 per cent. Regarding this share and considering heads of the départements, Lyon (2.36 per cent), Lille (1.81), Bordeaux (1.69) and Cannes (1.64) do better than Toulouse (1.52) and Montpellier (1.49).

It is difficult to assess the impact of Internet, new IPTV operators[2] and related interactive services on a potential decentralisation process of the video and television production in France. The sector remains characterised by strong concentration logics to maintain financially viable systems. Innovations depend on a combination of techniques (video, computing, telecommunications) that allow to offer new multimedia services.

2.1.3 Software activities - computer games, electronic publishing and web design activities

Considering the whole computer services sector (NACE 721, 722, 723, 724, 725) in France, companies started to invest again in 2005 after two years of shrinking spendings in 2002 and 2003. Two groups dominate the sector of computer services in France (INSEE 2005):

- Computer consultancy activities (36 per cent of the companies and 40 per cent of the added value and employment),
- Software programming (43 per cent of the companies and 35 per cent of the added value and employment).

Analyses underline the domination of large groups and a majority of small enterprises: 90 per cent of the companies hire less than 10 employees and contribute to 18 per cent of the whole sector turnover. This is to compare to the proportion of firms with 250 salaried employees and more (0.4 per cent of the total number of companies) making 46 per cent of the sector turnover (INSEE 2005). Current concentration and merging logics are the most visible in the software segment.

2008 revised NACE classification allows distinguishing the two specific sub-sectors on which we focus in this report.

[1] Excluding Île-de-France and overseas French départements (Guadeloupe, Martinique, Guyane, Réunion).

[2] Some fifty IPTV operators have sprung up in Europe in the space of three years. They offer access to bouquets of television channels and often to video-on-demand services, usually combined with Internet access and fixed-line telephony services as part of a so-called “triple play” package, all transmitted in ADSL mode via the telephone lines (European audiovisual observatory 2007).

Table 2.4 - 2008 revised NACE classification

NACE_1_1_CODE	Description	NACE_2007_CODE	NACE_2007_Description	Comments
72,21	Publishing of software	58,21	Publishing of computer games	Publishing of computer games
72,22	Other software consultancy and supply	62,01	Computer programming activities	This class includes: Analysis, design and programming of systems ready to use: - development, production, supply and documentation of made-to-order software based on orders from specific users - writing of programs following directives of the user - web page design

Source: INSEE, NACE, Rev 2008

Computer games

Computer games industry is assessed to 27 billions euros in 2007 in the world (International Data Corp). The United States stand for three quarters of the market. New Zealand, Great Britain and Japan are the main competitors.

Drawn up by the growing demand of American public administrations (Army and Health), the business of "serious games" is enjoying a boom currently. In Europe, public sector is much less involved but private sector seems to be more dynamic than in the US. The orientation towards serious games implies strong changes in the strategy, the organisation and the culture of the studio.

France counts 67 publishers of computer games registered under the 58.21 NACE sector (INSEE 2008). With nine companies located in its region (13.4 per cent of the total), Rhône-Alpes ranks second in France after Île-de-France, which accommodates 62.7 per cent of the computer games publishers. Midi-Pyrénées counts only one computer game publisher (registered under this NACE code), located in Toulouse.

Made-to-order programs, web design activities

France counts 15,719 enterprises registered under the 62.01 NACE class. Over one third of these companies are located in the region Île-de-France (34 per cent). Other dynamic regions in France are PACA and Rhône-Alpes, each of them counting between 7 and 8 per cent of the companies of the sector. Midi-Pyrénées ranks fourth with 3.6 per cent of the firms located on its territory (2.3 per cent in the only département of Haute-Garonne).

2.2 Description of the sectors in the metropolitan region

2.2.1 Business and management consultancy activities

Inside the Midi-Pyrénées region 65 per cent of the 3,129 companies are concentrated in the département of Haute-Garonne and 57 per cent in the UAT. This shows the concentration logic of this kind of service companies in the most dynamic area.

Table 2.5 - Location of 74.14 companies in the UAT

	Number	Per cent
Toulouse	931	**52.4**
First Ring	594	33.4
Periphery	252	14.2
Total	1,777	100.0

Source: INSEE/SIRENE 2007

The Urban Agglomeration of Toulouse (UAT) counts around 1,780 enterprises in this sector. Table 2.5 shows how those companies spread with decreasing rates from the commune of Toulouse to first ring and the peripheral areas. In Appendix, Map 1 confirms a general concentration in the historic core, which accommodates most of the firms located inside the commune of Toulouse. Regarding the first ring, we observe a concentration of companies in the most important communes of the south-east (Saint-Orens-de-Gameville, Labège, Ramonville-Saint-Agne) where activities related to biotech and computer programming tend to cluster and of the west (Cugnaux, Tournefeuille, Colomiers, Blagnac) more dedicated to aeronautic activities.

Consistent with the situation at the national level, the sector is composed of a strong proportion of self-employed and small enterprises as shown in Table 2.6.

Table 2.6 - Size of the companies (71.14) in the Urban Agglomeration of Toulouse

	Number	Per cent
Self-employed	1,068	**60.1**
1 to 9 employees	345	19.4
10 to 49 employees	53	3.0
Over 50 employees	27	1.5
Total	1,493	84.0
Missing data	284	16.0
Total	**1,777**	100.0

Source: INSEE-SIRENE, 2007

Cross-table and correlation test on the size and location of companies in the UAT proves to be significant (Khi2*). Self-employed as well as small-sized enterprises (1-9 employees) tend to settle more frequently in the periphery whereas the largest companies tend to exclusively settle in the commune of Toulouse or the first ring (no company with 50 employees and more is located in the periphery).

According to a SYNTEC study, the average turnover of a self-employed consultant amounts to 120,000 €, but this should be taken as a high level of income compared to reality (from 60 to 80,000 €). The stronger presence of self-employed outside Toulouse and the first ring can be explained both by the research for lower rent prices and the distant work possibilities.

Next table shows the high proportion of individuals (36 per cent) in this sector, to which one should add a significant part of enterprises managed by a single person (EURL, EI) in the first category of enterprises (limited companies).

Table 2.7- Legal status of companies (71.14) in the UAT

	Number	Per cent
Enterprises	1,038	58.4
Individuals	637	35.8
Associations	71	4.0
Other corporate bodies	23	1.3
Foreign right corporate bodies	8	0.5
Total	1,777	100.0

Source: INSEE-SIRENE, 2007

According to Table 2.8, 64.4 per cent of the existing companies in the UAT have been created from 2000 on. Figures available for the last shortest period (2005-2007) foreshadow a current stronger growth in term of business creations.

Table 2.8 - Creation year of companies (74.14) in the UAT

Period of creation	Number	Per cent
2005-2007	567	31.9
2000-2004	578	32.5
1995-1999	301	16.9
1990-1994	174	9.8
<1989	156	8.8
Together	1,776	99.9
Missing data	1	0.1
Total	1,777	100.0

Source: INSEE-SIRENE, 2007

Trade unions are major local representatives of the business and management consultancy sector:

- SCIBER (*Syndicat régional des professions du conseil en Midi-Pyrénées*) is a trade union for consultancy professions in the Midi-Pyrénées region created in 1996. It aims at improving transparency of the consultancy sector that suffers from a fuzzy image. It also allows small consultant firms to meet around workshop, cocktails to break isolation of self-employed notably. Two former and current directors of this association, both self-employed managers have been interviewed (see part 4.1). SCIBER is part of the UFARCO a national federation gathering similar regional trade unions in the consultancy sector. Business associations of this sector favour a bottom-up strategy. They differ from the two following national trade unions that can have representatives in some regions.

- The CICF (*Chambre de l'Ingénierie et du Conseil de France*) is a national association with a regional chamber in the Midi-Pyrénées Region.
- SYNTEC is a national trade union that is only present in Midi-Pyrénées through the will of its national administrator Jean-Claude Merlane. Syntec Midi-Pyrénées counts only two subscribers until now: Vinci and Merlane Conseil.
- IDEEMIP is a federation of these three trade unions created to provide local institutions and authorities with a unique respondent regarding the consultancy profession.

Interviewed representatives (SCIBER and SYNTEC) underline the difficulties to obtain precise data on the sector's evolution. They point out high individualism characterising the profession and the short-term viability of many consultancy businesses.

2.2.2 Motion picture and video, television and radio activities

Gathering the eight départements of the administrative region, Midi-Pyrénées counts hardly 2.9 per cent of all the companies registered under former 921 and 922 codes in France (see 2.1.2). 420 companies out of 863 present in the region gather in the département of Haute-Garonne. With 247 companies (2007), the UAT concentrates nearly 60 per cent of the departemental number of existing businesses. This concentration logic towards dense areas can be observed inside the UAT, as over two third of companies are located inside the commune of Toulouse (Table 2.9).

Table 2.9 - Location of motion picture and video / TV and radio activities in the UAT

	Number	Per cent
Toulouse	165	**66.8**
First Ring	58	23.5
Periphery	24	9.7
Total	247	100.0

Source: INSEE-SIRENE, 2007

Maps 2 and 3 (see Appendix) allow distinguishing 205 enterprises of the motion picture and video sector (921) on the one hand and 42 companies specialised in television and radio activities (922) on the other hand. Historic center is clearly favoured by companies although no cluster logic can be identified for this sector inside the UAT.

Table 2.10 - Size of companies (921-922) in the UAT

	Number	Per cent
Self-employed	113	45.7
1 to 9 employees	92	37.2
10 to 49 employees	11	4.5
Over 50 employees	7	2.8
Total	223	90.3
Missing data	24	9.7
Total	**247**	100.0

Source: INSEE-SIRENE, 2007

The proportion of self-employed amounts to nearly 46 percent (Table 2.10). This can be explained by the strong tradition of temporary contracts in this sector, which allows limiting the number of permanent employees. A couple of firms with 10 employees and more are leaders on some local markets, for instance institutional movies ordered by large public or private companies.

Considering sub sectors the département of Haute-Garonne comes third (if one excludes Île-de-France and overseas regions) after Bouches-du-Rhône and Savoie for the sound recording and music publishing activities (NACE 5920). Toulouse is indeed much more known for music than for video activities. Besides the classical orchestra of the Capitole, Toulouse acquired fame in the French pop music of the 1980s, accommodating many studios, artists (Bernard Lavilliers) and successful bands hailing from the city (Gold, Mader, Image).

The region is also recently distinguishing itself in one specific sub-sector of video and motion pictures activities, namely cartoons and animation. Two filmmakers from Toulouse and one from Albi have had their production presented at the European cartoon forum 2007. This success has prompted those filmmakers to associate inside an existing lobbying association called APIAMP (*Association des producteurs indépendants audiovisuels de Midi-Pyrénées*). This one gathers independent production directors at the regional level to defend interests of the profession. Next table shows a rather high proportion of associations (37.7 per cent) in the UAT, which might reveal the fragility of audiovisual activities in the UAT.

Table 2.11 - Legal status of companies (921-922) in the UAT

	Number	Per cent
Enterprises	136	55.1
Associations	93	37.7
Individuals	15	6.1
Other corporate bodies	2	0.8
Foreign right corporate bodies	1	0.4
Total	247	100.0

Source: INSEE-SIRENE, 2007

Table 2.12 - Creation year of companies (sectors 921-922) in the UAT

Period of creation	Number	Per cent
2005-2007	41	16.6
2000-2004	62	25.1
1995-1999	58	23.5
1990-1994	44	17.8
<1989	42	17.0
Total	247	100.0

Source: INSEE-SIRENE, 2007

On the other hand, one can notice a good stability of nearly 60 per cent of firms created in the UAT before 2000, 35 per cent of them existing for 25 years or more (Table 2.12). The creation rate is higher over the period 1995-2004 (about 25 per cent) than previously in the 1990s and 1980s (around 17 per cent). The number of creations between 2005 and 2007 is already equivalent to 16 per cent, which lets imagine rather good perspectives for this sector.

One of the major problems of the region regarding the development of the motion picture and video activities is linked to the lack of diffusion structures. Those ones are all concentrated in Paris. For movies makers, especially in the documentary branch, this entails the research of projects and supports outside the region.

Neither the Département of Haute-Garonne nor the commune of Toulouse has developed specific actions towards the audiovisual sector. The support of the *Conseil régional* (Regional Council) of Midi-Pyrénées appears crucial for most of the sector's companies. Unlike other regions, Midi-Pyrénées has kept in charge most of the actions towards the sector. Three fields of intervention are relevant at the regional level:

- Education to image designed to secondary sections (*lycées*) and specialised schools like Les Arènes, ESAV (*Ecole supérieure de l'audiovisuel*, University of Toulouse Le Mirail).
- Aids to events like the festivals Cinespaña, Résistance, Gindou. The *Cinémathèque* de Toulouse receives aids from the Département and the Région in the same proportion.
- Aids to creation for writing, development, production and diffusion. The Region allocates 1.5 million euros to those types of action. This credit line is increasing according to a wish of the elected body to overtake and rank the region among the first ten in the next two years.

2.2.3 Electronic publishing, web design and computer games

According to INSEE database 2007, the UAT counts 491 companies registered in the selected sub-sectors (NAF 72.22 including electronic publishing, web design and computer games. The companies' creation rate in the UAT has increased from the turn of the millenium on (Table 2.13). This corresponds to the growth of Internet as a global communication tool and the demand of companies regarding new means of communication, advertising and sale.

Table 2.13 - Creation year of companies (72.22) in the UAT

Period of creation	Number	Per cent
2005-2007	140	28,51
2000-2004	173	35,23
1995-1999	77	15,68
1990-1994	39	7,94
<1989	62	12,63
Total	491	100

Source: INSEE-SIRENE 2007

Selected sub-sectors benefit from specific assets in Toulouse as the computer industry is sustained by a large local pool of highly trained workers composed of engineers and computer specialists (Peyroux et al. 2007). This computer industry also benefits from a large density of clustered establishments: aeronautics clusters in the northwest (airport zone of Blagnac); electronic and computer clusters in the southwest (industrial park of Basso Cambo); space computer (la Plaine) and biotechnology clusters in the southeast (scientific park of Rangueil and technopole of Labège), multi-nodal logistic platform in the north, plus Cancéropole project for biotechnologies, pharmacy and medicine activities.

Figures for the selected sub-sectors (Table 2.14) and Map 4 (Appendix) confirm general tendencies observed for the whole computer services sector in the UAT (INSEE 1999, WP2). Main concentrations are to be found in the centre of the urban area and establishments' location matches the geographical distribution of industries, education and research institutions. Map 4 shows a concentration in the historic core as well as in the southwestern part of the city in the neighbourhoods of Saint Simon, Le Mirail[3], Basso Cambo. The first ring accommodates an important proportion of companies in two major communes of the SICOVAL[4]: Labège and Ramonville-Saint-Agne. Firms also spread out in the northern part of Toulouse, from west (Blagnac) to east (Balma). One observes a more complete meshing of companies over the communes located in the northern part of the UAT in the direction of Montauban. Farther in the periphery, companies are located along the main axes of communication towards Spain (Carcassonne, Tarbes) and towards Albi (north-east) and Agen (north-west).

Table 2.14 - Location of companies (sector 72.22) in the UAT

	Number	Per cent
Toulouse	252	51.6
First Ring	180	36.9
Periphery	56	11.5
Total	488	100.0

Source: INSEE-SIRENE, 2007

As mentioned in other studies on computer activities in the UAT, the size of companies remains modest. Table 2.15 shows that companies employ generally few permanent employees. A lot of free-lance workers intervene as subcontractors in the fields of graphic design and programming. Specialised schools for 3D graphic design (ETPA, Saliège, Aries) provide UAT's companies with the bulk of interns and potential workers in the web design sector.

Table 2.15 - Size of companies (sector 72.22) in the UAT

	Number	Per cent
Self-employed	348	70.9
1 to 9 employees	54	11.0
10 to 49 employees	21	4.3
Over 50 employees	15	3.1
Missing	53	10.8
Total	491	100.0

Source: INSEE-SIRENE, 2007

[3] Companies settling in this zone benefit from special helps from public governements (ZFU). In exchange they must recruit a significant part of their staff among inhabitants of those outskirts.

[4] SICOVAL: *Syndicat Intercommunal pour l'Aménagement et le Développement des Côteaux et de la Vallée de l'Hers*

Only two games publishers have been found in the UAT, one of them being registered in a different NACE sector (642: telecommunications). Regarding serious games, three types of information show their relative importance in the current debates on regional economy:

- A *Game Consort* has been created recently to promote synergies between scientific, politic and industrial milieus. Although national, with head-office in Paris, this association has roots in Toulouse, as it is initiated by a young PhD from IRIT and includes several research units from the region.
- This initiative is supported by the main association acting for digital economy, located in Toulouse (Interview 21/03/2008). Created in 2000 it counts 250 adherent firms in 2008 and aims at helping small businesses to be part of the local economic dynamic. It is also partner of events related to ICTs all over the Midi-Pyrénées region, supporting for instance the following initiative related to serious games and other thematic projects mentioned thereafter.
- The promotion of serious games is part of the economic development strategy of Ariège, a Midi-Pyrénées département located in the south of Toulouse. Local authorities have created in 2004 *Ludovia*, a yearly summer school dedicated to professionals working in French-language educational and learning-through-play multimedia. The project is based on the share of knowledge between industries, education and research institutions. The indirect aim of this event is to attract companies and develop a cluster for these activities in a rural environment.

This type of local economic development policy is to compare to actions combining ICTs and health that are developed in the Tarn, another agricultural département located in the eastern part of Toulouse. One can also mention, west of Toulouse, the geomatics technology centre initiated since 1997 by the Gers Chamber of Commerce and Industry.

One should stress however that these thematic projects, though important, seem not sufficient to really attract business and employment on weakly dense territories in Midi-Pyrénées. It generally remains difficult for authorities, whatever their scale of intervention, to prevent Toulouse from polarising most of the working and entrepreneur forces. These observations refer to the role of various territorial administrations (communes, intercommunalities, *départements* and *région*) and their ability to cooperate regarding economic development. This has been pointed out by interviews with the Regional Council of Midi-Pyrénées involved in the development of broadband networks on the whole territory and the Regional agency for the development of information society (ARDESI), acting for the promotion of Internet access through the implementation of *Cyberbases*.

Creative sub-sectors on which we focus on in this study can be described as fragile among traditional computer activities present in Toulouse. One source of fragility is the small size of companies and their relative isolation from the main innovation circuits. This prompts local actors to favour their insertion in R&D projects, allowing for instance access to intensive calculation centers used uppermost by academic research teams (CALMIP/CICP).

3 RESEARCH DESIGN AND METHODOLOGY

3.1 Qualitative research: Experience from previous quantitative study

As underlined earlier in this report, the selected sectors are not representative of the local economic structure. The choice of in-depth interviews of a small number of managers (about 20) fits to a first qualitative exploration of creative industries in Toulouse.

One objective is to understand the drivers behind the decision of managers of selected knowledge and creative sectors to settle in Toulouse. We try to assess the relative weight of two major factors acting in the places attraction process:

- **« Hard » factors**, referring to traditional, material, infrastructures, transports and job market related advantages;
- **« Soft » factors**, such as the physical environment, the overall friendliness and the tolerant atmosphere of the city.

In this research process, we have also used anterior experience and results from the previous quantitative study conducted among 200 workers of selected creative and knowledge industries in the UAT (work-package 5 of the ACRE programme, 2008). One important outcome was linked to the importance of a third major category of reasons explaining the location of people and activities in a city: the **personal trajectory effect**. This factor has been measured by considering the place of birth and the place of studies of the respondents. We actually found high proportions of people hailing from the city-region, and thus a rather low mobility of creative and knowledge workers in Toulouse.

This result leads to put the weight of soft factors into perspective and this has actually implications in terms of policy recommendations. As a consequence, a special attention has been paid during interviews on trajectory elements (place of birth, place of studies, family links in the region…) that could be crucial to explain managers' location decision. Results of this analysis are described in part 4.1 of this report and we try to relate them to other striking features like the importance of personal social networks for the company's activity.

3.2 Selecting cases and sampling

Three types of resources have been mobilised:

- The INSEE SIRENE database purchased in 2007 to implement ACRE surveys on knowledge intensive and creative sectors covering 342 municipalities of the urban area of Toulouse. It counts 1,770 companies for the 71.14 sector, 247 companies in 921-922 sectors and 491 companies in the 72.22 sector.

- Most of the contacts have been directly taken with companies after looking at their websites. Former WP5 contacts have also been activated.
- LOP partners have been asked by the end of January to give names of managers that could be interviewed. Two of them have been also directly solicited to be interviewed. Own internal academic networks have also been useful to get interviews with two managers in the consultancy and radio sectors.

Experts' interviews have been useful at the beginning of the research process to get recent information on the evolution of the selected sectors (Table 3.1).

Table 3.1 - Business organisations and administrations (interviews Feb-May 2008)

Sector	Organisation	Location
ICT	Regional Council, Regional association for the development of information society	Toulouse
Motion picture and video	Regional Council Culture and Audiovisual	Toulouse
ICT	Association promoting digital economy	Toulouse
Management consultancy	National trade-union	Labège
Management consultancy	Regional trade-union	Préserville
Services for firms	Chamber of Commerce and Industry of Toulouse	Quint-Fonsegrives
Urban cultural affairs	Municipality of Toulouse	Toulouse

Companies have been selected by considering three major criteria related to their activity, staff (self-employed; 2-5; over 6 employees) and location either in the core or in the fringe of the urban area (Table 3.2).

Table 3.2 - Firms selected according to sector, location and size (interviews Feb-May 2008)

NACE Sector	Company	Main activity	Location	Staff
71.14 Business and management consultancy	(A)	Business radio	Toulouse	30
	(B)	Territorial development consultant	Ramonville-Saint-Agne	21
	(C)	Communication agency	Toulouse	2.5
	(D)	Communication agency	Beauzelle	4
	(E)	Web agency	Toulouse	2
	(F)	Consultant in European affairs	Toulouse	0
	(G)	Business consultant	Mondouzil	0
921-922 Motion picture and video, Radio and Television	(H)	Audio services	Toulouse	8
	(I)	Film making post-production	Portet-sur-Garonne	0
	(J)	Communication agency	Balma	12
	(K)	Animation movie making	Toulouse	4
	(L)	Distribution of sports films	Toulouse	2
	(M)	Music recording studio	Blagnac	6
	(N)	National rock radio	Toulouse	70
72.22 Web design, computer games, electronic publishing	(O)	Web agency / Web solutions	Montberon	8
	(P)	Web agency (3D)	Toulouse	5
	(Q)	Web agency / Gaming	Toulouse	9
	(R)	Web agency / Web solutions	Saint-Jean	0
	(S)	Web agency / Web solutions	Toulouse	0
	(T)	Web agency / Web solutions	Ramonville-Saint-Agne	8

Our sample counts only one company from the 922 sector. Several reasons explain this decision. First, radio and TV sectors account for only 17 per cent of the whole audiovisual sector (921 and 922) in the UAT. Second, small local radios, that constitute the bulk of this sector's companies, often belong to the associative sector. Furthermore we have feared the risk to get too obvious answers on the location decision as a local radio or TV exists generally to address local information. We have thus preferred to select the case of the national radio settled in Toulouse to the one of the local tolosan television (TLT).

Extra interviews have been realised with two associations, both active in the cinema sector. These interviews are used as complementary points of view over the situation of creative sectors, i.e. animation movie and interactive video in Toulouse.

3.3 Interviews production process: Organisation and contents

3.3.1 Observations on times: From appointment to transcription

All the 29 interviews (20 managers, 7 experts, 2 creative associations) have been conducted from the beginning of February to middle of May 2008. We called companies directly, asking to talk to the founder or manager in order to make an appointment. Then an e-mail was sent to recapitulate information given by phone and confirm the date of the interview. The rate of positive answer is globally very high, as we had only four rebuffs out of about 40 phone calls.

Table 3.3 - Type of contacts, duration and delay to obtain an interview

Activity	Intermediary	Interview (min.)	Delay
Computer	Direct	95	2 weeks
	Direct	110	1 week
	Direct	85	2 weeks
	Other manager	84	1 week
	Direct	60	2 weeks
	Direct	68	2 weeks
	Direct	70	1 week
Consultancy	University	114	1 week
	Direct	78	3 weeks
	Direct	74	5 weeks
	Other manager	65	4 weeks
	Other manager	113	1 week
	Other manager	107	1 week
	Other manager	84	2 weeks
Movie TV Radio	Direct	62	16 weeks
	Direct	77	1 week
	Direct	85	2 weeks
	Direct	52	2 weeks
	Representative	74	3 weeks
	LOP	66	8 weeks
	University	65	2 weeks

Table 3.3 shows the period of time between the first contact and the date of the interview. Delays to obtain an interview are the shortest in the computer industry. It is also easier to contact them directly. More intermediaries are necessary to get contact in the consultancy and in the motion picture sectors.

Average duration of interviews varies according to the sector. It is interesting to notice that interviews in the creative movie sector are the shortest (69 minutes). This duration can be compared to the average of 91 minutes interviews in the knowledge intensive sector of consultancy. Computer services occupy an intermediary position with an average of 82 minutes.

Only one manager in the computer sector preferred not to be recorded. Except this case, we have been able to record and fully transcribe all the interviews. No subcontractor has been employed to do this, as transcribing is considered as part of a qualitative research process. It helps the researcher to further produce an in-depth content analysis. Attention is payed to discourses and their structure according to a previously established interview guide.

3.3.2 Interview guide: Types of researched information and ways to collect it

The aim of the study is to explain managers' choice to settle in the metropolitan region of Toulouse. This implies to construct an interview guide covering the different dimensions that are focused on in the ACRE project: places (at different scales), people (social networks), economic activities and policies. Special attention had to be paid to the relationship between the image of the city and the firm's sector. This question indirectly relates to one final aim of the whole research programme, namely to provide local authorities with solid information on creative activities and their development conditions in specific milieus and territories.

We then used a mainly biographical approach, asking the interviewees to sum up their personal and professional career before coming to Toulouse. This allows apprehending questions on main drivers for settlement into the more general framework of interviewees' life.

The interview guide is widely based on the identification of three major types of reasons that are generally put forward to explain the location of a company: personal trajectory, hard and soft factors. Each of these reasons refers to a set of questions that are asked during the interviews or spontaneously mentioned by managers.

At the end of the interviews process, several types or groups of information had to be collected for each firm. Researched or given answers refer to simple questions about the company's functioning. This one depends on internal and external conditions required for the production of goods or services (labour force, premises, markets, clients, providers...). Some pieces of information, necessary for further comparative studies on the subject, have been so far as possible systematically collected.

They first concern the **firm's history:** date of creation and major events structuring its growth (first clients, premises, recruitments, takeover etc.). In the fourth part of the report,

presentation of the results includes short portraits of the interviewed firms, giving an overview on their activity and position within their sector.

Then **firm's environment** includes actual and potential client-bases, sub- and co-contractors, competitors and local institutions. Details that are used to work on typologies and profiles, cannot be comprehensive. However we have tried to organise information about at least two topics with on the one hand, data on the spatial distribution of clients (in the UAT, the region, the country and abroad) and on the other hand elements on rent prices and turnovers.

Regarding now location factors, **personal trajectory** of the manager is determined by elements on the place of birth and the place of studies. It can be completed by information on the manager's occupation before the firm's creation. The objective is to establish if the manager had or not anterior links with the metropolitan region, either through family, friends or professional relationships. Distinguishing two profiles of local and external managers allows better apprehending and measuring the actual role of hard and soft factors as conditions to attract or retain activities in the metropolitan region. This represents a contribution to the analysis of past and future mobilities of creative workers in the UAT.

Considering **hard factors** leads to compare Toulouse with other French cities of the same size and to assess satisfaction with the global economic dynamism of the city. This implies to talk about the availability of offices and facilities for business (clusters, exhibitions, meetings, incentives...), the quality of transports systems (inside and outside the urban area), the presence of a qualified labour force, the level of training institutions etc. This is closely related to the image of the city as a whole, which entails to mention the role of **soft factors**. These ones relate to subjective opinions regarding the global atmosphere of the city. Information collected at this stage of an interview proves to be crucial to analyse location factors inside the urban area and collect opinion on specific neighborhoods.

The following topics came generally at the end of the interview time and allowed to conclude on perspectives for the future. To collect opinions on **policies for the sector**, managers were asked to tell what could be improved to increase their competitiveness. This is narrowly linked to next and final open question on **what stimulates or slows down creativity** in general and in their sector.

3.4 Data analysis: Steps of interpretation, problems and limits

3.4.1 General comments

After transcribing the recorded interviews, the analysis has followed different stages. Once trajectory elements have been highlighted, we have focused on the company structure, functions and networks.

The networks analysis is based on the company's environment composed of the clients, the labour force, the competitors and the institutions. The limit of such a qualitative approach by

face-to-face interviews is to give only a partial view of this environment. Identified links are those put forward by managers during the interview.

Some basic data are easy to collect and to code in a comparative objective. Other information is more difficult to catch and to organise clearly through a table or a drawing for instance.

What elements can fit for a typology? One problem is linked to the non-representativeness of the sample regarding repartitions of activities and employment in the UAT. Another difficulty comes from the fact that several companies can be classified in different NACE sector according to their activities. The case is particularly striking for all the web-related activities. This is due to the shift towards digital convergence that happens in the sectors the ACRE programme deals with, i.e. web, video and communication industries. Limits between 72.22 (web and video games), 921/922 (image and sound activities) and 74.14 (business and management consultancy) NACE sectors definitions are fuzzy.

3.4.2 Considering required competencies of selected companies

One characteristic of the selected companies is the large part of immaterial base (thoughts, ideas, knowledge, artistic sensitivity, sociabilities...) on which their business rests on. To satisfy their clients' needs in a world of image and communication, they need to combine several types of competencies that refer to specific milieus and acquaintances networks.

Table 3.4 - Core activities of the selected companies

Company	Web solutions	Strategic intelligence	Image consultancy	Art and design	Sound and video
(E)	X		X	X	x
(Q)	X		X	X	X
(P)	X		X	X	X
(O)	X	X	X	X	
(T)	X		X	X	
(J)	X		X	X	X
(R)	X		X	X	
(S)	X	X		X	
(D)		X	X	X	
(C)		X	X	X	
(K)			X	X	X
(I)			X	X	X
(L)					X
(M)				X	X
(H)	X	X			X
(N)				X	X
(A)		X	X		X
(B)		X			
(F)		X			
(G)		X			

If we try to create a new typology of the selected companies, beyond the NACE criteria, we can identify five major types of know-how describing the best the core activity of the firm: web solutions, strategic intelligence, image consultancy, sound and video, arts and design. This results from the consideration of types of services, competencies and techniques offered by the firm (Table 3.4).

Different types of competencies can be mobilised by one company either by permanent employment contracts (X) or by resort to subcontracting freelancers services (x). Horizontal reading of next table discloses combined profiles and this could help ranking companies from the most creative (i.e. including a large part of artistic and cultural creation) to the most knowledge-based ones (using few artistic resources). 85 per cent of the interviewed companies present a combination of minimum two to maximum four fields of competency. That gives an idea of the added value of the sold products and services.

Whereas 6 companies from each selected NACE sector (72.22, 921/922, 74.14) compose the initial sample, we find actually more companies oriented towards the following core activities:

- **Image consultancy** (including communication advice, strategic positioning process, creative writers, graphic design, consultant in advertisement campaigns, press agent). This category embraces a majority of companies (12 out of 20).
- **Artist and designers** (including drawers, musicians, writers, scene managers, designers, puppets makers...). 11 companies hosts these types of labour force and 3 extra firms can be added to this category as they sell indirectly this know-how by subcontracting freelance workers.
- **Web solutions** (including web design of showcase or trading websites, referencing process, computer programming services, software installation, network administration, training...). We count 10 companies offering those types of know-how.
- **Image and sound recording** (including advertising and institutional film, making and post production, broadcasts for television, radio or cinema). Nine companies are concerned by these techniques.
- **Strategic intelligence** (market researches, territorial development, competitiveness, economic, environmental and social expertise, implementation of business directories...). Only three companies can be identified and be put apart as having no artistic or web-related activity.

Thus we need to focus on the central question of the location choices. Settlement in the center or in the periphery is an important distinctive element to be taken into account for a typology. To have a more complete and precise image of the city's competitiveness and attraction factors, one method would have been to find former tolosan people living in France or abroad and analyse their reasons for having left Toulouse for an other city. This is not part of this research programme but could be suggested as a perspective to obtain further results on creative cities.

4 RESULTS

What are the drivers behind the decision of managers of creative and knowledge intensive industries to settle in the urban area of Toulouse (UAT)? Results of interviews analyses rest on two types of assessments. One aim is to measure the relative weight of trajectory, hard and soft factors in the managers' decision. Another goal is to put forward distinctive features of the three selected knowledge and creative activities.

A first part focuses on trajectory factors, considering managers' places of birth and studies, but also their diploma and anterior activities before creating the current company. Those data are completed with information on gender and on the date of creation of companies (4.1).

We are then able to concentrate on the role of hard and soft factors in the location decision of managers in each of the selected sector: business and management consultancy (4.2), motion pictures, video, television and radio activities (4.3), web design and games (4.4). Short portraits of the interviewed firms allow better understanding their trade and market. Details on staff, clients and sub-contractors are used to draw information on the networks in which companies are involved. Spatial organisation of the firms' activity is also influenced by competition and cooperation logics. This conducts to deal with the questions of the image of the city and policies for the sector.

A synthesis of the main drivers for settlement combines results obtained for managers on the one hand and companies on the other hand (4.5). Strengths and obstacles of Toulouse as a competitive knowledge and creative city are put forward to finish (4.6).

4.1 Measuring personal trajectory effects: Difference between selected sectors

In this study, selecting people with or without anterior trajectory links with the city is crucial to better apprehend the role of hard and soft factors in the location process of companies in the UAT.

Main criteria to determine past links with the city are the places where managers are born and have studied. Family links as well as friendship and personal social networks constructed during the higher education stages are supposed to play a crucial role in the decision to settle or stay somewhere. This is related to the question of integration processes in a regional metropolis.

Table 4.1 synthesises elements of the manager's trajectory, i.e. the places where he/she is born and has studied, the type of education he /she has received and his/her occupation before creating the company.

Table 4.1 Elements on managers' personal trajectory until the creation of the company

NACE Code Sector	Manager	Place of birth	Last degree	Education	Prior experience	Creation
71.14 Business and management consultancy	(A)	Tulle	Toulouse	AL +5 Communication	Employee	2004
	(B)	Toulouse	Toulouse	AL +5 Management	Political assistant	1988
	(C)	**Nice**	**Paris**	AL +4 Management	Associated manager	1999
	(D)	Toulouse	Toulouse	AL +2 Graphic arts	Associated manager	1998
	(E)	Toulouse	Paris	AL +5 Arts and ICTs	Wed designer	2004
	(F)	**Strasbourg**	**Paris**	AL +2 Law, Russian	Political assistant	2002
	(G)	**Paris**	**Paris**	AL +3 Economy	Manager	1982
921-922 Motion picture and video, radio and Television	(H)	Toulouse	Toulouse	AL	Musician	1998
	(I)	**Montréal**	**Rennes**	AL +3 Video	Theater, scene	2003
	(J)	**Paris**	**Tours**	AL +2 Social career	Video reporter	1991
	(K)	Perpignan	Toulouse	AL +5 Mathematics	Teacher	2000
	(L)	Toulouse	Toulouse	AL +5 Marketing	Probationer	2005
	(M)	Gaillac	Toulouse	AL +1 Mathematics	Music composer	1995
	(N)	Toulouse	Toulouse	?	Radio	1998
72.22 Web design, computer games, electronic publishing	(O)	Albi	Albi	AL +2 Agri-business	Associated manager	1999
	(P)	Rodez	Toulouse	AL +2 Trading	Probationer	2002
	(Q)	Bordeaux	Toulouse	AL +3 Computing	Self employed	2007
	(R)	Toulouse	Paris	AL +2 Video	Sound recorder	2007
	(S)	Marseille	Toulouse	AL +5 Finances	Probationer	2004
	(T)	Toulouse	Toulouse	AL +4 Geography	Self employed	2000

First analyses on the whole sample show a strong proportion of "local managers", since 55 per cent of the interviewed are born in the administrative region of Midi-Pyrénées (40 per cent in the UAT) and 60 per cent have studied in Toulouse.

In bold appear "external managers" that are neither born nor have studied in the region. They represent 25 per cent of the sample. If we look at the reasons they put forward to explain their location in Toulouse, one finds that **none of them has made a decision resting on the only base of soft factors**. Personal trajectory and hard factors have uppermost driven their decision to locate in Toulouse.

In three cases, the main reason can be assimilated to personal trajectory effects as it relates to the spouse's employment (C and G) or to own past acquaintances (I). The arguments put forward by the two remaining managers (F and J), who chose Toulouse among other cities to move and then settle a business, mainly relate to classical hard factors: size of the city, economic dynamism, workforce, good aerial connections (J) and proximity to a border (F).

> *'I decided to move elsewhere because I could not stand the Parisian life anymore... I wanted to be in the South and when you got some information on the economy at that time (1990s): Bordeaux was not enough developed, Marseille economy was stricken, Nice? No... Toulouse proved to be the place with an economic activity... there was also easy flights between Paris and Toulouse (...) I remained the first two years without developing the activity regionally, and one day, I decided that I would stay here'. (J)*

Regarding soft factors, the location in the South of France, associated to the climate and proximity to sea and mountains has also played an important role in the case of (G):

'I came to Toulouse because I got married there; my wife had family there. If she had decided to go to Strasbourg I don't know if I would have followed here...' (G).

Looking at general differences between the three selected sectors, following statements can be made:

- Managers of the **business and management consultancy sector** appear more mobile than in the other sectors. 3 out of 7 are from external origin by their place of birth and study. Furthermore, 4 out of 7 (57 per cent) have studied outside the metropolitan region, and precisely those ones have graduated in Paris. Regarding the education received, one can observe that they have higher level of education in general. Regarding gender, this sector presents a better balance as it includes 3 women (43 per cent of the sample)[5]. Three have had an anterior experience as associated manager before creating their current company. This plays an important role in the constitution of the current company's networks.
- In the **motion picture, video, radio and TV sectors**, two managers out of seven are from external origin, being born and having studied outside Toulouse. This sample, where men dominate, is characterised by a greater variety of diplomas and anterior experiences. Companies tend to be older in this sector, as 5 out of 7 exist for more than 5 years (created before 2002).
- Managers in the **web design and games industry** show the lowest mobility, as none of them is from total external origin. No woman is present in the sample. This sector also counts the highest proportion of companies created recently: 5 out of 7 firms have been created after 2002.

4.2 Business and management consultancy activities

4.2.1 Overview of the interviewed firms

Table 4.2 - Interviewed firms in sector 71.14

Company	Main activity	Location	Creation	Status	Size	Turnover
(A)	Business radio	Toulouse	2004	SAS	30	1000
(B)	Territorial development consultant	Ramonville-Saint-Agne	1988	SARL	21	1500
(C)	Communication agency	Toulouse	1999	SARL	2.5	140
(D)	Communication agency	Beauzelle	1998	SARL	4	300
(E)	Web agency	Toulouse	2004	SCOP	2	60
(F)	Consultant in European affairs	Toulouse	2002	Self-emp.	0	60
(G)	Business consultant	Mondouzil	1982	Self-emp.	0	

Firms interviewed in this sector are small businesses running from one to 30 workers with low turnovers compared to giants of the sector (Ernst & Young, Andersen Consulting…) that have their seat in Paris.

[5] In France entrepreneurs population is made of 26 per cent of women and 74 per cent of men (Insee, Sine 2002).

In our sample, we can distinguish two medium growing businesses in two very different branches: the newly created sector of the business radio on the one hand, and the territorial economic development on the other hand. They are settled in peripheral zones of the agglomeration offering large office spaces and advantages in terms e.g. of parking facilities. The size of these companies (20 to 30 employees) might explain this location choice but personal reasons like the proximity to the manager's residence also have an influence.

Then three small businesses practicing communication consultancy are identified. Two of them located in the historic chore of Toulouse insist on the importance of this location choice. Even if they count a large diversity of sectors among their clients, those companies explain it is important to tend to specialise in one specific type of activity (green products or the electronic music) to gain confidence among the clients.

Discurse of managers differs also according to the age of the company. The importance of networks is pointed out in every case and even more in the third group of companies identified in this sample: the self-employed. Both know each other and are involved in trade-union activities to make the business and management consultancy sector evolve at the local and national level.

Two growing medium businesses

(A) is an agency specialised in communication and audio marketing. It produces contents broadcasted through the telephone or the web. The manager (a woman) has been responsible for communication in the telecommunications sector (TDF and France Telecom) before creating the company in 2004. The opportunity has come from an expansion strategy of France Telecom related to a period of redundancy. The idea of a business radio was born inside the group and had been tested internally from 2000 on. The manager has received special helps during one year (offices, training...) to launch this new activity created in association with two professionals of *Sud Radio*. The firm is currently in a growth period. It has invested in new digital equipments and markets. It is located in a special part of Toulouse a ZFU.

(B) was created in 1988, the company is specialised in the economic territorial development. It produces studies and benchmark studies for local authorities to help them attracting industrial activities on their territories. It has also developed an expertise in the creation and management of business parks all around the country. In the field of local development and innovation, the highest demand comes from stricken territories (Nord-Pas-de-Calais, Lorraine...) or very dynamic regions like Île-de-France and Rhône-Alpes. As a consequence, one third of the staff works in Ramonville-Saint-Agne whereas the other employees work where the business parks are located. The company is currently changing its organisation and expects to reach 30 employees by the end of 2008.

Three small businesses in the communication branch

(C) - This small-sized communication agency created in 1999 has a long experience in the communication sector as its founder has co-managed another firm previously during 12 years.

A large part of the current client portfolio comes from this former association. The company intervenes on different markets for the private and for the public sector. Its main task consists in studying the needs of the clients, defining target publics and implementing communication plan. It can operate either yearly as an integrated communication service for a client company or punctually. It has also a specialisation as a press agent. This function tends to become more and more important in the strategies of small and medium businesses.

(D) - This company created in 1998 is specialised in the elaboration of communication campaigns on different types of supports (poster, review, flyers and more recently websites…). The chore of the business relies on a large immaterial base, made of reflection of the clients needs. The product results from exchanges with the clients and from an argumentation effort to reach the objective. For a few years the company has developed a specialisation in the green products business all around the country. Perspectives in term of growth are important as this market is composed of fast growing small businesses with strong interaction (exhibitions, associations).

(E) - This multimedia production studio intervenes in different fields such as web design, graphic design, websites creation and online selling (e-commerce). Founded in 2004 by two young brothers, it had during its first years of existence a double localisation in Paris and in Toulouse. The company insists on its legal status of SCOP (*Société coopérative de production*) for the values of transparency, social responsibility, equity and solidarity. It also favours free softwares for the web developments. The firm creates graphic identity printable on different types of support like clothes. It presents itself as a laboratory using Internet as a creative and experimental media. Being close to the electronic music world, it has notably created an 'audiographic' label called '*Je rêve que je dors*' (meaning 'I dream that I sleep').

Two self-employed strongly involved in professional networks

(F) - This consultancy firm specialised in European business has been created in 2002. It helps holders of European and international projects. The company provides services in the formalisation, the engineering, the co-ordination and animation of projects as well as in the dissemination of the projects results. It also proposes training sessions on European projects management and organises seminars to increase awareness of European themes.

(G) - Located in the eastern periphery of Toulouse, this land-surrounded 25 years old company is oriented towards the engineering of firms and territories economic development. Its specific know-how concerns the projects feasibility, the local development and markets studies. Mono-client as well as multi-clients studies allow the manager to go on. The firm intervenes for both public and private sectors and has specialisation in several fields like industrial ecology (construction, water, waste, wind-borne energies), real estate, and tourism.

4.2.2 Overview of companies' networks

Clients

As next table shows, four out of seven firms have a national openness but this is differently structured. For two of them (A) and (E) the national dimension refers to Paris; for (B) and (D) the proportion of national clients is lower and 'national' means that they cover different parts of France. (C) (G) and (F) have a proximity logic. Their clients are mostly located in the UAT or the region. As a consultant for European projects, (F) is the only company of this sector to be present at the international level.

Table 4.3 - Spatial distribution of 71.14 firms clients in percentage

Company	Local (UAT)	Regional	National	Île-de-France	International
(A)		10	10	80	
(B)		30	70		
(C)	80	18		2	
(D)	10	30	60		
(E)	20		10	70	
(F)		80		10	(Brussels, GB) 10
(G)	80	20			

Five companies of this set have to keep strong links with Paris, by settling offices and employees there (A) (B) or by traveling often to the capital to visit clients and keep in touch with a specific professional (C) (F) or artistic milieus (E).

> *'Toulouse benefits from a good image of dynamism thanks to aeronautic activities. But this location works against us, compared to Paris because all the key clients are there. (...) We are going to open extra offices in Paris.' (A)*

> *'I wanted to come back to Toulouse but I was conscious that I had to stay in Paris in the first creation years to consolidate the activity. (...) In Toulouse we don't have this underground culture like in Paris, with networks proposing many things. But today these networks are present on the web, so the location tends to be less important.' (E)*

> *'In Paris, there is an abundance and a freedom that do not exist here. (...) I go to Paris sometimes. It is important to keep a foothold in Paris. (C)*

Public institutions:

Except (E) which looks more like a web agency and could be classified in the computer and web design sector, all those companies have frequent relations with the public sector either as clients or in the case of institutional partnership. One should stress that four out of seven companies of this sample (B, F, G, D) have a large part of their activity resting on the increasing ecological demand, which implies connections with specialised networks and actors involved in environment and economic development.

To get contracts with institutions requires firstly to be referenced as a potential service provider. Once registered on the organisations list, companies can compete with other through

a notice of tender system. This procedure has become progressively compulsory. 50 per cent of (C)'s turnover depends on public markets:

> *'We have no chance to contract with institutions if we are not referenced in the case of notice of tender'.*

Trade unions and associations:

Self-employed managers of our sample are deeply involved in trade unions and associations to make the image and efficiency of the profession evolve. They both have been president of the regional association SCIBER (see part 2.) and benefit from this position to become strong actors of the profession.

Along with the self-employed, also small businesses are or have been involved in professional associations. From his experience as a member of the graphic designer local trade-union (*Syndicat des graphistes*) (D) concludes:

> *'I went away (...) it's not efficient'.*

The '*Club de la communication'* has been mentioned by two managers as a local association. Opinion depends on the size and on the scope of the business. For (C), member since the 1990s, it allows to meet other actors of the sector but it doesn't play a major role for the business development. (A) declares it cannot bring any help for its business radio activity at the national level.

4.2.3 Recruitment aspects

Communication agencies resort to freelance workers to cover different fields of their activity. Graphic design competencies are the most solicited, but other trades can be practiced under temporary contracts. (D) employs creative-writers, press agent, computer programmer, and printers.

Own professional networks are preferred to recruit temporary as well as permanent contracts. National agency for employment (ANPE) and generalist websites for job research are generally considered not efficient to find appropriate working force. Only one company has mentioned the resort to specialised recruitment agencies. Internship also remains a good way to recruit future employees.

As external to the region, (F) has a specific opinion about Tolosan social networks that play a crucial role in the organisation of business at the local level.

> *'I've got the image of underground networks (....); the Toulouse opera is a very important network, the association of industrials, les Amis du Stade...'*

This manager underlines the importance of a certain type of education in the local professional integration process.

'Here the education dimension matters more than the cultural one. The business school you patronised matters to get recognition: Sup de co, IFG, not the University of Le Mirail...'

4.2.4 Image of Toulouse for the sector: Advantages and drawbacks

Business and management consultancy activities depend on a strong economic base of clients requiring their services (studies, researches, sectorial reports, communication campaigns, building projects, press services...). As a consequence one of the main reason to choose the city relates to its economic dynamism:

'I've remained in Toulouse because the economic fabric is important. For instance I would probably not go to Perpignan' (D).

Toulouse does not count among the leading region regarding the particular sector or communication consultancy:

'Toulouse globally is not a very communicative city; there is no very strong communication tradition; no specific sector, like the wine industry in the Bordeaux region, has driven or supported the communication at one time' (C).

Compared to other regions Toulouse is even in retreat regarding the communication culture:

'It has evolved a little bit but this feature has not yet completely disappeared' (C).

Reference to Barcelona is pregnant for managers whose activity relates to web and artistic design. Lille and more generally Belgium are also considered as more favourable places for graphic design activities.

'I've got the feeling that there is a strong creative energy in Barcelona. There is a will to claim things, for instance: the level of graphic identities is much higher than in France. Clients lack a graphic consciousness compared to Barcelona'. 'To be competitive in our sectors means to have an atmosphere in the city, a city that goes forwards and initiates models: this environment is not here...' (E)

Along these lines the reference to Paris is pregnant:

'Everything is centralised in Paris where one finds much more effervescence, culture, luxury and showiness (...) there is also many migrants.' (D)

'We are going to create a consulting agency in Paris. We must be there. You know, we still have this image of "provincial", it's funny...' (B)

'I had my address in Mondouzil and at the beginning it was like a betting (compared to Paris) to sell multi-clients studies from Mondouzil.' (G)

One manager points out the good image of Toulouse itself, but mentions the few business development opportunities offered by the Midi-Pyrénées region compared to other administrative regions in France:

> *'If you put Toulouse aside, you have a Midi-Pyrénées region that does not move much, which is still very traditionalist with an economy oriented towards agro-business, mechanics... very classical sectors with much less innovation than other regions like Île-de-France, Rhône-Alpes or Provence-Alpes-Côte-d'Azur'. (B)*

On the other hand, (A) asserts Toulouse is much more dynamic and relevant than Bordeaux to implement a start-up in the radio sector.

4.2.5 Location factors inside the UAT

Table 4.4 - Precise location in the UAT

Company	Location	Neighborhood	Rent/month €	Surface (m2)
(A)	Toulouse	ZFU	2650	265
(B)	Ramonville-Saint-Agne	Business Park	X	200
(C)	Toulouse	Historical center	600	80
(D)	Beauzelle	Business Park	1200	110
(E)	Toulouse	Minimes	X	home
(F)	Toulouse	Central station	X	home
(G)	Mondouzil	Land	X	home

One company (A) is located in a free urban zone (ZFU), benefiting from a complete tax exemption over a five-year period. Since its creation in 2004, it has accommodated over 600 companies. The main criteria to benefit from this support relates to employment constraint, as 20 per cent of the staff must have its place of residence in the neighborhood. For security reasons, the interviewed company has preferred to be located at the border of the ZFU, and not too close to the social housing district. Although recruitment difficulties due to the ZFU rule and to extra-costs to settle in the premises, the firm plans to acquire extra offices in the same building. It is globally satisfied with this location and appreciates the proximity of other dynamic companies.

Other managers have decided to be located in the core city because they feel like keeping in touch with the urban life:

> *'It's important to be in the core city for the image; it's also more convenient to give appointments, and everybody knows the place. I cannot stand business centers. I need the city; it's also a source of inspiration. In the communication sector, you have to see the image... to be in a glass tower, it runs counter to creativity; I like to go out in the street, look at the film posters, see how people are dressed, see what teenagers are doing, this is a mass of information...' (E).*

> *'We have worked a lot for the SICOVAL at the beginning, but I could not imagine myself 'living' in Labège'. (C)*

For others at last, the city center presents too many drawbacks and they prefer to leave it for a location in the first ring or farther in the periphery. For instance, (D) was firstly located in the center of Toulouse near the central station and has moved for security and nuisance reasons. Now it is located in the northern periphery of Toulouse close to a fast growing industrial zone.

> *'For me the most important is the internal environment, not the external one. In this house, we have the feeling that we're on holydays. But I can understand that it doesn't appeal from outside. We often work late at night... Maybe some employees would prefer to be close to the core city to meet in the evening...' (D)*

A location in the periphery, though in a wonderful environment, can cause problems to employees:

> *'The company has counted until 8 employees. They came here in Mondouzil but it has become difficult (lack of reachable services e.g. for lunch time) so we have moved to Toulouse in a business park, in the eastern part of the city, close from my residence place and convenient for the employees that were used to come and live eastward.' (G)*

The congestion problems can also explain a location outside the center. The choice can also be justified by the proximity to the manager's place of residence and by a preference for well equipped, accessible business parks around Toulouse. For (B), settled in the SICOVAL area:

> *'Toulouse is a city that offers a great diversity of choice for companies who want to settle according to their needs and budgets'. (B)*

4.2.6 Expectations regarding policies

Interviewed managers of the business and consultancy sector have mentioned different types of problems regarding their activity and its location in Toulouse.

Transports infrastructures

The first one concerns extra-costs and loss of time and efficiency due to the lack of high-speed train connections (TGV) with the capital city. As observed earlier most of the companies of this sample (5 out of 7) have to remain connected with Paris. The largest ones (A and B) have settled extra-offices there. This absence of cheap and simple transport mean to other cities in France is mentioned as an impediment for the activity itself and for local business in general.

> *"The problem is the absence of train, this lack of links with Paris can be an important brake; costs and travel times are important' (C).*

Contracting conditions

This point relates to a hard factor as it refers to general efficiency of the working external environment. This does not only concern the metropolitan region of Toulouse but refers to the national law context regarding contracting procedures.

The smallest businesses underline their disadvantageous position in the selection process through notices of tender (with public and private sector). Co-contracting with other small or medium businesses allow them getting a critical mass and increasing their credibility. But still strong obstacles persist in France to co-contract with other consultants.

Another problem concerns the complexity and heaviness of relations with public institutions once they are clients. One manager explains why he avoids more and more relations with clients from the public sector:

> *'We're fed up to work with institutions and administrations because you're not directly in contact with the decision-maker like in the PME and TPE.'*

Artistic diffusion structure and emergent cultures

Managers of this knowledge intensive sector are generally rather satisfied with cultural life in Toulouse. One critic though comes from one company having strong links with local artistic milieus of design and electronic music.

> *'In Toulouse I know many artists, the creative effervescence is here; it might be good to get more support for the diffusion structures.'*

> *'Cultural policies do not make enough to promote independent cultures... Helping emergent cultures to express themselves means to wager on the future. They must give the means to make it seriously, I mean... for instance, the acoustics of the hall must be good to hear a concert.' (E)*

Visibility of the sector

Another proposition concerns the improvement of conditions for the development of business and consultancy activities. As underlined by trade unions the whole profession needs to improve its image.

> *'Our profession is too virtual. Public policies could support initiatives that contribute to better identify consultancy activities (resource center, consultancy cluster, house for consultants).' (F)*

4.3 Motion picture, video, radio and television activities

4.3.1 Overview of the interviewed firms

Table 4.5 - Spatial distribution of 921 and 922 firms

Company	Main activity	Location	Creation	Status	Size	Turnover
(H)	Audio services	Toulouse	1998	SARL	8	400
(I)	Film making post-production	Portet-sur-Garonne	2003	SARL	0	300
(J)	Communication agency	Balma	1991	SARL	12	850
(K)	Animation movie making	Toulouse	2000	SARL	4	300
(L)	Distribution of sports films	Toulouse	2005	SARL	2	150
(M)	Music recording studio	Blagnac	1995	SARL	6	500
(N)	National rock radio	Toulouse	1998	Public company	70	X

Interviewed companies of the motion picture and video sector are quite small businesses with 12 employees at maximum. The exception comes from the only company belonging to the radio and TV sector interviewed in this set. It is part of Radio France, a group counting thousands of employees over the country and abroad. To distinguish those companies according to their size does not bring much to the analysis because this sector has a specificity: it employs many temporary contracts, precisely showbusiness intermittent workers. It is characterised by specific temporalities linked to artistic production constraints.

We can distinguish in this sample three firms whose activities are related to sound and audio recording: (H), (M) and (N). They are present in the UAT for at least ten years and have a specific point of view on the evolution of musical creation and creative atmosphere in Toulouse.

Then we can identify a second group of companies created after 2000 acting directly in the motion picture and video industries: (I) and (K) have a production related activity whereas (L) is a young firm in the distribution sector.

Although registered under the 921B NACE code (J) can be isolated as the part of its activity dedicated to films production still exists but has decreased progressively in favour of the multimedia conception. This illustrates the shift between the sectors linked to the digital convergence already mentioned in this report (3.2). We observe that other companies of this sector have started a diversification process face to competition and some difficulties in the field of artistic production. This is the case of (H) and (M).

Sound recording and links with the music stage of Toulouse: diversification

(H) - This company has one historic core activity related to the sound recording for advertisement and communication agencies. Quickly after its creation in 1998 it has also developed an "audiotel" activity, i.e. the diffusion of messages on telephone servers. A

second type of activity comes from the buyout of another firm created by the manager at the same time. It results from computer programming and network administration with the hosting of websites, 3D Internet creation, and e-trading. A third way for the company consists in coupling both activities and it works actually through a currently promoted project of telephony using the Internet Protocol (IP). This is a very fast growing activity and the company has to invest in the making of equipments ready to install by the clients.

(M) - Located in Blagnac next to the concert hall *Odyssud*, this is the largest recording studio for music in the region and in the south of France. It accomodates artists in a adjoining hotel residence. The manager is the founder of a famous French music band that once had a huge success at the end of the 1980s. When buying out the studio in 1995, the association with one famous French singer (who belonged to the same record company Warner) and with a company of sound engineers located in Paris has allowed to bring many contracts. Most of the turnover comes from the rap music (bands coming from Paris and Marseille), which sells the most in France. With a loss of 30 per cent turnover (due mostly to the growing use of home studios), the company recently decided to diversify its activities and develop a post-production competency in the movie sector. An alternative project is the creation of a school specialised in images and sounds. Music publishing activities

(N) - National radio for a young public settled in Toulouse for two main reasons: the presence of students and the availability of the frequencies. Five years ago they realised that it was too complicated and expensive to be in Toulouse to receive artists. 1 studio with 20 people working in Paris has been opened to be closer to the music world. The firm has suffered from conflicts and misunderstandings inside the national establishment and broader in the radio sector.

Production and distribution of movies and TV programs

(I) - Created in 2003 by a former show business intermittent worker. The first activity of this company is the post-production but it has rapidly invested means in the production of institutional and advertising movies as well as documentary films and short movies. It actually employs regularly around 10 intermittent workers to achieve projects that result from a client's demand (e.g. Regional council) or from a creation designed to be proposed and sold to national channels.

(K) - Created in 2000 by three associated partners who decided to give up the job opportunities they could have had according to their curriculum (Mathematics, Civil engineering, Mechanic engineering). Two of the founders experienced a success two years before the company creation with the production of a 4 minutes animation movie.

The second film has been cheered and indeed selected to be shown in movie theaters before the projection of *Astérix et Cléopâtre*. This success has allowed the firm to start prospering, obtain contracts and make advertising movies. Using puppets (and not the 3D technology) is a specificity of the company. Now it is currently undergoing a growing success and overall an acknowledgement from the institutions and the motion picture sector. Next project is a 30 minutes broadcast already bought by several channels in Europe and abroad.

(L) - This two-years-old firm specialises in the development, production and international distribution of sports entertainment programs throughout the world. First organised event in Ramonville (Havana Café)

FSD now provides a complete variety of fighting TV shows from traditional martial arts to wrestling or cage fighting. The company currently represents more than 500 hours of programming and can be seen in more than 160 countries.

(J) - As a conscientious objector, the manager worked for the CNET (National center for telecommunications studies) when first local televisions are launched by the end of the 1980s. Some major companies like Gaz de France and Matra ordered institutional movies, which have been during ten years the main activity of the company, firstly settled in Paris. In the 1990s, the company starts to diversify by developing the multimedia part with the creation of CD Rom, CD Cards and websites. The agency settles in Toulouse (see reasons for moving here 4.2.3) between 1998 and 2000. The video production activity is relaunched for 2 or 3 years and the firm produces currently between three and four films per year. Regarding its clients portfolio, this communication agency has developed an experience in some leading markets of the local economy such as environment, health, agribusiness and aeronautics.

4.3.2 Overview of the companies' networks

Clients

According to next table, all the companies of this sample have a large part of their activities developed outside the UAT. This corresponds to the concentration of diffusion structures in Paris and to the dependence of the television and radio sectors as well as the motion picture and video sector to the French capital (see part 2.).

Table 4.6 - Spatial distribution of 921 and 922 firms clients (per cent)

Company	Local (UAT)	Regional	National	Île-de-France	International
(H)	65		30		(USA, Belgium) 5
(I)		25	75		
(J)		50	15	35	
(K)		25	67	8	
(L)			10		90
(M)	15		10	70	GB, Jamaica 5
(N)			100		

(H) appears like an exception and this is actually due to its diversification strategy in the computer services and telephony sectors.

> *'I had bought a music recording studio (Deltour) in 1988. I was musician and my idea at the beginning was to couple advertising and music activities. This has lasted three years until we had to stop making music with artists and concentrate only on audio ads services. It had become impossible to manage two different activities night and day.'*

This firm counts large local or national companies among its clients (Stade Toulousain, Auchan, Corléone (clothes), Air France works council...). In the IP telephony sector it has partnership with two pioneers of the sector in Toulouse (123 Index Multimédia, Newtech Interactive). Regarding the advertising activity, clients have a national dimension as the firm has worked for large groups such as Pasteur Mérieux, Sofitel, Quick (national advertisement campaign during 4 years broadcasted on major national teens radios like NRJ, Fun, SkyRock).

Local milieus and music sector

Through its first experience as a music recording studio, (H) has common acquaintances with (M) although both managers have no personal or business relation currently. Several names of studios are cited in both interviews refering to the 1980s period, where Toulouse acquired fame in the French pop music. (M) mentions the solidarity that exists in Toulouse among people who have a good knowledge of the local artistic milieu: managers of studios like Condorcet, La Cour des Miracles, former Casa Studio... and also owners of music instrument stores and material providers (Soft).

Companies whose activities are close to the music sector, like (M) (N), describe generally strong links with some cultural places or local events. For instance (N) has strong relations with one concert hall (Le Bikini), which is also cited by (M). (N) is also partner of two yearly cultural events in Toulouse (Le printemps de Septembre, Le Marathon des Mots).

Competition at the local level: the clique effect

In the motion picture and video sector, the description of networks often refers first to the structure of the local competition. This one is perceived as marked by cronyism by two companies. Thus (J) declares:

> *'to my utter despair, I had to give up the video activity because small agencies happened to have no budget for films anymore. I've tried to develop this part at the beginning but it's very complicated because in Toulouse one large company (Master Image) controls the market: there is no notice of tender in the aeronautic sector and it's always for them...' 'I had done a film for EADS and clients were very satisfied but at the second time someone has told them: you should not work with CC, you have to work with Master Images. I don't know how it functions, there must be contracts system or agreement, I don't have an idea... but it's like that, it's related to history'.*

Along these lines (I) mentions four of the large four competitors in the local institutional and advertising sector (Master Image, Digivision, IComm, Abaques): *'Those ones are 'pimped' with the main potential clients like Airbus and EADS...'* (I)

This last company (I) has acquired credibility as a medium-sized reactive business in the filmmaking and the post-production. It has developed contracts for documentaries, short movies and institutional films with major territorial administrations (Région Midi-Pyrénées, Conseil général de la Haute Garonne, Région Poitou-Charentes), private companies (Cultura

whose head-office is in Bordeaux), and several partners at the national level (TF1, Ushuaïa, Cité des Sciences in Paris). (I) insists on the own network he has developed with 'friend' companies in Paris and in Perpignan. This unofficial association allows the firms to share and use each other's equipments when necessary.

A different vision of the local competition system is given by (K) who is a direct co- and sub-contractor of Master Image. (K) describes this company as well as Digivision like the biggest jobs provider of the region. *'Like everyone we have worked for them. Now we are sub-contractor'. 'We use Master Image studios to shoot our advertising movies*.'

The position of (K) is very different from (I)'s, due to the managers' trajectory (generation, place of birth and studies) and to the type of films they make. Thus (K) is managed by 30 years olds and specialised in the emergent sector of animation. As a consequence it has developed links with cultural public organisations (DRAC, Conseil régional, APIAMP) France 3 national Unité Jeunesse, Cartoon Forum).

Specialised associations and business networks

About the efficiency of networks at the local scale, (I) mentions the strong local anchorage of other local companies, making reference to a regional recognised association for independent local filmmakers (APIAMP): *'I am not an adherent because I'm apolitical. I've attended several meetings to see what they do and it is very very boring'*. More generally this manager notices an important clique effect in the profession that he describes as very selfish and self-centered. We can notice that (J) has sub-contracting relation with (I) for the films production and post-production. (J) also cites the same equipment provider (Soft) than (M).

The only film distribution company of the sample (L) has an interesting profile as almost all its contacts result from the national or the international level. It has only two links at the local level with a filmmaker (whose father is director of the Shaolin show in Toulouse) and with a company who does copies of the programs we sell. To develop its activity the firm attends many exhibitions all over the world (Cannes, Marseille, Monaco, Shanghai, Budapest...) to meet channels and sell programs. It has commercial relations with channels in New Zealand, South Korea, South America, South Africa, Scandinavian countries, and Spain. The only project in France with Eurosport has been given up after being refused by the CSA (Conseil supérieur de l'audiovisuel). (L) is active in two types of associations: one related to its specialisation in the fighting sports (Cage Rage federation); another one relates to the organisation of the movie distribution sector (TV France International). Its only competitor is in the US, all the others (France and abroad) being specialised in only one or two types of sport whereas (L) differentiates by multiplying the number of fighting sports addressed.

Only one local event related to the sector (*Trophées de la communication*) is mentioned by a company diversifying in multimedia products. Generally managers argue that they have little time and will to attend exhibitions or conferences, although they recognise it could be interesting for them sometimes.

4.3.3 Recruitment aspects

A flexible workforce required

A specificity of this sector is the employment of many people under temporary contracts. For instance, (I) employs an average of 7 intermittent workers for production and post-production activities but according to the size of the project, the staff can count 25 persons. In the animation movie sector, (K) counts 4 permanent employees and currently 10 intermittents for the making of one film.

Internship is favored to access permanent or temporary jobs in the sector. This goes along with the rather young profile of audiovisual workers. Interns can be entrusted with important mission, like (L) searching for someone to develop prospecting and follow-up exhibitions contacts.

Spontaneous applications are also numerous in the sector. Demands for internships come mainly from education centers that have developed specialisation in the sector. Cited establishments located in the UAT are the following: Ecole supérieure d'audiovisuel (ESAV), Les Arènes, ETPA (Ecole technique de photographie et de multimédia), ACT (Center for professional training).

As a national radio service (N) is an exception as its recruitment process works overall through internal mobility, without any no public announcement.

> *'This profession requires passion. The ANPE national agency for employment is completely useless to find a job in our sector' (I)*

Diversified opinions on the local education system

Depending on the activity, managers declare to be more or less satisfied with the young workforce hailing from local training establishments.

For one company diversifying in the telecommunication sector (H), institutions like ENSEEIHT constitute a good ground to recruit computer programmers and engineers. In this firm, the majority of the staff hails from the region.

For another company specialising in multimedia (J) and requiring web design and graphic competencies, recruitment problems are national. Although one school (Lycée Saliège) exists in Balma, it is for instance currently difficult to find people knowing the *Flash* technology, that used for animated websites.

For the specific branche of animation, several references to training establishments outside Midi-Pyrénées have been mentioned. Schools quoted for 3D competencies and graphic design are located in Valenciennes, Angoulème, Marseille and Arles.

> *'We have to make people come from outside, required skills are not in Toulouse. (...) On the contrary, Angoulème accomodates a huge training center, lots of companies, schools, films produced... the image for the sector is very good. Toulouse is not recognised at all.'. (K)*

4.3.4 Location factors (hard and soft): Image of the city for the sector

As for other sectors, the decision to locate a company of the video and music sector in Toulouse is linked to some hard factors such as the size of the city and its good economic situation. Soft factors seem however to be put forwards more explicitly by companies of this sector. This is strongly related to both to a complain about the lack of infrastructures for the sector in Toulouse and to a systematic reference to Paris.

Size of the city, good employment force, business opportunities

The rank of Toulouse as the second place in France for the number of students after Paris has been a location factor for (N) who where looking for an audience and searching for an image of young city.

In the case of an external manager, the decision to settle in Toulouse is linked to the quantity and quality of the local workforce:

> *'I am in Toulouse because I've got a network of good professionals, technicians, film-makers, very important in the region Midi-Pyrénées, and particularly in Toulouse there is a large potential production volume compared to other cities in France'. (I)*

The decision to remain or locate in Toulouse can be seen as an economic advantage as far as competition in new emerging sectors like animation is concerned.

> *'When we decided to create the company, we wanted to remain in Toulouse. We haven't even thought to move to another place. Actually there are few really strong actors of the sector in our region. We told us that it would be easier to stand out here from the competition than in Paris'. (K)*

Lack of infrastructures, dependence on Paris and transport issue

The concentration of all the diffusion structures in Paris however constitutes real drawbacks for most of the interviewed managers. The majority of them (6 out of 7) have to travel regularly to the capital city to meet and socialise with decision-makers.

> *'Budgets are much less important and projects are much less numerous in Toulouse than in Paris. In the TV sector, it's better to be in Paris, go to cocktails etc. so we take the plane and go to Paris!'. (I)*

> *'The decision to relocalise a part of the production in Paris? We have unfortunately realised that it was very difficult to deal with all the moves to interview artists who make a show in Paris but who will never come to Toulouse. Costs are huge, it requires also much energy'. 'If one does not out in Paris, roughly one does not exist, neither internally within Radio France, nor externally... one is very quickly forgotten'. (N)*

> *'The negative point is that nothing is decentralised, and it is getting worse: even radios like Sud Radio or RMC do not favour local artists anymore... All the decisions are taken in Paris.' 'Paris corrupts everything…' (M)*

This entails comments on the level of insufficient level of national transport infrastructure in Toulouse and informs on specific problems encountered by creative managers.

> *'We lack a TGV. You should know that an artist is seldom on time and it's a big problem when you have non refundable flight tickets like it's the case now with Air France!...'. (M)*

> *'Toulouse is the worst city to travel in Europe... even by plane'. 'It took us 7 hours to go to Berlin. To go to Lyon? forget it... It's really annoying'. (K)*

About this transport issue, only one company (L) is very satisfied with its location in Toulouse and doesn't even complain for the lack of TGV lines. *'We would have absolutely no advantage to be in Paris'*. This company insists on the *sun and rugby* image of Toulouse at the international level, which is good as sport is ever-present in its activity sector.

Music sector and artistic effervescence

The flourishing musical past of Toulouse might have played an important role in the attraction of artists and businesses in the 1980s and 1990s. However according to the three companies of the sample concerned by the music sector, this glorious past is over. They do not find the same intensity as in those years of artistic effervescence:

> *'There is indeed a nice image of the tolosan music with sound recording studios (Deltour, Condorcet, Polygone) and the bands (Mader, Gold, Image). It has helped in the advertisement sector but I've got the feeling that it does not help anymore... it is not as it has been in the 1980s and 1990s... this is the end of the great tolosan era...'. (H)*

The AZF explosion in 2001 is mentioned as having had serious negative consequences on the local artistic production. This shows how this sector is fragile and requires a specific urban atmosphere.

Soft factors

The sunny climate and the good 'quality of life' also help in the location decision or in the choice to remain in Toulouse albeit the encountered difficulties.

> *'Here in Toulouse we have just an exceptional quality of life'. (N)*

The position of Toulouse seen as an advantage often relates too the much less strong pressure undergone by inhabitants and workers of 'province' city compared to Paris. It can even play a role on the creativity.

> *'I think that we are more creative in Toulouse than in Paris. We are less stuck in congestion problems. They are not creative in Paris, they bother me when I go there, I find they are stuck very hardly in their humdrum routine.' (N)*

One manager underlines the friendliness of the city:

> *'Living in Toulouse has nothing to do with living in Paris... The good side is that everybody knows each other. If I need anything, for instance a music instrument, I'll get it the next hour, because some people have a good knowledge of the artistic world in Toulouse'.*

Other diverse comments disclose the image of a 'province' city referring to the lack of openness and tolerance especially towards activities and people coming from Paris:

> *'Sometimes we have suffered from prejudice against a radio coming from Paris. At the beginning we had a very bad image as a radio for the young (...). In Toulouse we have this problem: all that comes from Paris, go out! (...) Paris is the capital where things happen, I think it would be very stupid if Toulouse would close itself on the only regional dimension.' (N)*

4.3.5 Location factors inside the UAT

Companies of this sector show a strong preference for a location in the center of Toulouse and more precisely in the dense historic core of the city. Image matters a lot in the audiovisual milieu.

Table 4.7 – Precise location in the UAT

Company	Location	Neighborhood	Rent/month €	Surface (m2)
(H)	Toulouse	Historical center	X	150
(I)	Portet-sur-Garonne	Business Park	X	250
(J)	Balma	Commercial area	750	120
(K)	Toulouse	Historical center	600+930	185
(L)	Toulouse	Central station	650	66
(M)	Blagnac	Avenue du Parc	X	800
(N)	Toulouse	Central station	X	300

Young managers have often started their activity at home. One firm currently shares its premises with an association of short movies diffusion. Large surface required to store audiovisual or sound recording material compel some companies to locate in the periphery.

> *'I don't know anything of the place; it's only an opportunity because the price is low compared to Toulouse. Actually I have the dream to be located in the center, to have lunch or dinner Place Wilson... and then it would be less polluting'. (I)*

Although higher rent prices, location in the center is considered very important to give a good image of Toulouse to clients or partners coming from outside, especially from Paris or foreign countries.

> *'When people from France 3 or English filmmakers come to see us, we can go easily to restaurants...' 'There's no economic advantage to be here in the center. It's just pleasant'. (K)*

> *'It is important for us to be in Toulouse; for instance, if a Dutch client comes to visit us, it still and all nicer to go to restaurant here...' (L)*

This central position is also favored and necessary in the case of advertising activities, where image (of the company, the neighborhood, the city...) matters even more.

> *'To be in the center is important for our clients in the advertising sector... we could be in the periphery now that we work less and less in this domain for shrinking budgets reasons'. (H)*

One manager located in the close periphery of Toulouse especially for personal reasons underlines the quality of the external environment required to work and create:

> *What we want is to be in a place to live, with some style... to easily go and buy bread, vegs etc. We don't want something like Labège with cubes and parkings, we could find offices there but for the image, no'. (J)*

4.3.6 Expectations in term of local policy for the sector

Questions about public policies result in several reactions related to the global lack of consideration for sound and video activities.

Underestimated activities (regarding the positive image of the sector for the city)

Some managers underline the positive image their activity can bring to the city. This has been the case in the 1980s and 1990s with the success of music bands coming from Toulouse. A more recent example in the animation movie sector is the presence of three local companies at the European cartoon forum.

> *'We have an activity that creates employment. It seems absurd that public authorities (municipality, Département) do not understand that there is a real economic return'. (K)*

Credibility problem

Audiovisual companies need money. The complex system of funding implies to be in contact with several institutions to achieve one project. Some managers mention the importance of competencies and motivation of the person in charge of audiovisual affairs in a public administration. This is to relate to a general problem of credibility towards activities considered unconventional, marginal or even not "serious".

> *'To make animation is considered as having fun, it is not a "true" job'. (K)*

Young managers seem to suffer even more from this lack of confidence.

> *'The worst is our experience with the Conseil régional that we had solicited for an event happening in June. Thrice they said "yes, don't worry we'll help you", so we have believed it... but eventually by the end of September we received their negative answer...' 'It means that we haven't been considered as serious persons, because we came from the university, we were young...' (L)*

Lack of "ambition" for the city and the sector

This lack of consideration is related to a general lack of ambition and projects at the national level.

> *'It has taken 6 years to be recognised and it has been really difficult... You really have to want to stay in Toulouse because we are just considered as hillbillies... Who? Parisian filmmakers, channels... it's true that in Toulouse practically nothing of national range is done. We are messed around.' (K)*

One manager asked about what stimulates or slows down creativity in its trade gives interesting answers with direct references to soft factors.

> *'The only difficulty we encounter in the region is to find clients who can afford our services, who dare and have some ambition... (...) We are in a world of image, creativity thus is related to a dynamic; for instance in Barcelona, there is the modern architecture; we need to have a dynamic ('mouvance'). Toulouse slugs, it doesn't move compared to other cities where I've traveled in Europe." (J)*

> *'Regarding the attraction, a dynamic must be created; people's eye should be changed. They should be helped to progress in their creative ambitions. To dare, it's important to be educated and opened. What could stimulate this? Many things... festivals, exhibitions, everything that is going to touch senses...'. (J)*

Lack of political will to develop these creative activities

Several managers remind that neither the local municipality of Toulouse nor the Haute Garonne Département help local audiovisual companies. The Regional Council is the only institutional representative with a policy for the sector. As underlined in part 2 of this report, Midi-Pyrénées is not an important location for video activities. According to one interviewed, Poitou-Charentes, Rhône-Alpes, Corse and Centre invest more money for the sector.

Managers interviewed in this sector globally plead for a better listening of local governments and institutions, especially the Chamber of Commerce and Industry. They often underline the fragility of their sector and the lack of recognition for their activities. They put forward the much more important interest of politics for leading sectors of the local economy, like aeronautics or biotechnologies.

4.4 Web design and computer games

4.4.1 Overview of the interviewed firms

Table 4.8 - Interviewed firms in the computer games and electronic publishing sectors

Company	Main activity	Location	Creation	Status	Size (nb)	Turnover
(O)	Web agency / Web solutions	Montberon	1999	SARL	8	250 (web)
(P)	Web agency (3D)	Toulouse	2002	SARL	5	250
(Q)	Web agency / Gaming	Toulouse	2007	SAS	9	70
(R)	Web agency / Web solutions	Saint-Jean	2007	Self employed	0	X
(S)	Web agency / Web solutions	Toulouse	2004	Self employed	0	80
(T)	Web agency / Web solutions	Ramonville-Saint-Agne	2000	SARL	8	650

Only one company (Q) has a specialisation in computer games. Its turnover is not representative of the sector figures, as the activity has just started in 2007. Like all the firms of this set, it is also specialised in the web sites creation, which includes a creative part of design and graphic execution. This activity evolves rapidly and the ability to match the clients' requirements is crucial as these ones are easily informed through the visit of competitor's websites. For instance the demand is currently oriented by the 'Web 2.0' evolution, which improves applications ergonomics, maintenance and security.

The specialisation of businesses in one type of clients sector such as the real estate (P and S) or the transports (O) reminds what we noticed about the activities related to communication services. The affinity of the manager with one economic sector appears very important to guarantee the success of the business. This also implies the involvement in certain types of networks that are not only related to the computer programming activity but rather to leisure and hobbies.

Managers of those companies are rather young and hail mostly from the metropolitan region. The relation to foreign countries is the most pregnant in this sector compared to the business and management consultancy and the video sectors. Self-employed have very important working hours. Subcontracting and employment of freelance workers are common practices in this sector.

Two innovative businesses

(Q) - The company has been created very recently (2007) and constitutes one of the two existing structures in the sector of computer games in Toulouse. This company typically mixes different types of activities related to telecommunications, computer programming and

game. At the outset the purpose of the company was an innovative meeting website (a mix between the famous *Meetic* and *Second Life*), which explains why the company is registered in the telecommunication sector. This project presented at the Midinvest exhibition and supported by business angels requires time to be developed; that's why the firm has diversified towards two other types of activity: web design and games. This last part includes the making of online computer games (currently two are available on the company website), advertgaming and consultancy in the game creation. In the web design sector, the firm differentiates itself by including a game dimension.

(P) - The company created in 2002 has developed a specific know-how by associating 3D technologies to infographic and video. The firm's activity matches a growing demand for new communication and visualisation methods. This is striking in the real estate and architecture sector, which represents 50 per cent of the firm's clients portfolio. Between 30 and 40 per cent of the turnover rests on the creation of advertising or institutional animation movies for different clients such as research and academic establishments that also need to innovate in the field of education. Products are rather delivered on Cds or DVDs and as a consequence, websites creation (for any sector and not essentially including 3D) represents currently only 15 per cent of the company activity.

Two medium sized web agencies

(O) - This agency is specialised in the making of showcase or trading websites with auto-administration solutions. It also helps clients in the referencing process of their web pages. The third service offered is the hosting of Internet websites. Since its creation in 2000, the firm has made about 150 websites in France and in Europe. Its clients belong to a large diversity of markets but the company has developed long-lasting links with the transport sector. Another source of business is the development of national and international business directories for freight transports companies.

(T) - Created in 2000 by a former student in Geography at the University of Toulouse-Le Mirail, the company sells three types of services in the web site creation, the installation of computer device and the training. Its clients portfolio is made of large accounts and small businesses such as boutiques and shops.

Two self-employed

(S) - Although existing for only three years and managed by a self-employed worker, this company has already developed many contracts as a web agency. One of its first clients was a real estate agency in Toulouse and through personal networks (friends); the firm has been able to develop a significant part of its clients portfolio in this sector. A recent project deals with the creation of a web business directory dedicated to local agencies. Manager's studies in econometrics and finance have been completed by a self-education in computer programming, which allows the firm to propose extra services such as tax saving calculating softwares, credit simulators etc.

(R) - Created in 2007, this self-employed sells web sites creation, referencing services and web design activities. The clients are mostly from local origin and their activity often relates to leisure, sport or tourism. Among its clients, the firm also counts three radios, two of which are web radios.

4.4.2 Overview of the companies' networks

Clients

We observe that companies offering web solutions are the most implied in distant networks at national and international levels.

As shown in Table 4.9, four companies have a majority (60 to 80 per cent) of their clients located in the UAT. At the same time, one striking element coming up from the analysis of this sector is the complete openness to foreign countries in Europe and farther. Foreign countries are mostly places where French is spoken. Five out of six companies have clients in Europe, northern Africa, northern America or China. The relation with companies abroad also concerns the subcontracting process, including with Chinese partners.

Table 4.9 - Spatial distribution of interviewed firms client-base (per cent)

Company	Local (UAT)	Regional	National	Île-de-France	International
(O)		50	35	10	(other activities) 5
(P)	80	10	5	2	(Morocco) 3
(Q)*	17		14	53	(Canada, Belg., Maghreb, Switz.) 16
(R)	80	10	8	0	(California) 2
(S)	60	0	40		
(T)	80		15		(US, China, GB, Germany, Spain) 5

** Figures are based only on the online game activity and refer to the number of people registered to play on the Internet website.*

Freelance workers networks

As seen in part 2, companies of this sector are mostly micro or small enterprises. This entails, as in the business and management consultancy sector, the resort to subcontracting procedures. Freelance workers are numerous in various branches of the web industry. Computer programmers as well as graphic designers are the most required competencies. Experienced project managers can also be temporary hired for one specific contract.

Self-employed are particularly concerned by this type of work and have developed relationships based on confidence with other freelance workers. One manager underlines that cooperation is more important than competition in this field.

> *'I would not speak of competitors in my case because I do not hunt on the large web-agencies ground. The only true competitors are freelance workers like me but we are rather a network than competitors. It happens sometimes that we make each other work.' (R)*

Internet

Internet plays a key role in the evolution of these companies as the heart of their activities relates to web solutions and web design services.

Managers of this sector often declare that they could have their activity located almost anywhere in France (see section 4.4.4) thanks to electronic networks. This sector is indeed marked by the increasing use of distant working process.

> *'Projects developed for our local clients (real estate developers) can be delivered anywhere in France. Telephone and e-mails are used to get the required information and documents (building permits etc.) from the architects. We work at a distance, there are some clients we have never met face-face'. (P)*

Business organisations

Internet and specialised websites constitute the favorite source of information to know about new technologies as well as to find skilled workers (see next section).

Globally, web design companies seem not much interested in the organisation of meetings or events directly related to their activity. Events where different sectors and clients can be met (Fair of Toulouse for instance) are preferred. All the interviewed firms though knew the main local business organisation for the sector, *La Mêlée numérique* (see 2.2.3). One firm joined recently this association and made a presentation of its activity during one of the meetings organised by this business organisation.

> *'I hope this membership will bring us new contacts as we don't have a commercial agent and a lot of things happen through networks'. (P)*

The interviewed manager also plans to register as a member of a golf club (*Club des décideurs golfeurs*), which gathers about hundred managers and decision-makers. Social and personal hobbies are very important to get contacts and contracts in general. Another manager, member of several sports (rugby, automobile, golf) and business clubs, gives his opinion on associations created to promote the web sector, through exhibitions or meetings.

> *'it can promote an interesting dynamic but for me, it's much more efficient to socialise with managers'. (T)*

Relations to institutions and entrepreneurship spirit

Neither web design nor computer games activities receive specific helps from local institutions. They do not benefit from supports like other branches of computer activities based on R&D programmes for instance.

Self-employed and small companies composing this sample are evolving in a sharp competitive globalised environment. One of their chances rests on the development of a regular, loyal client-base. Many entrepreneurs interviewed in this sample argue they are

generally not waiting anything from public institutions to help their activities. They insist on professionalism and recognised competencies from clients as keys of success.

Combination of competencies

Web sites creation is the main activity of companies composing this sample. This type of service requires both knowledge-based (computer programing) and creative (graphic design) competencies.

Associated managers are to be found among the youngest companies. Entrepreneurs often mention an anterior hobby and personal students or associative networks before creating an official firm. Having studied in Toulouse plays an important role in the socialisation process of managers and their insertion in specific creative milieus. The unique games publisher of the sample illustrates the complementarity of profiles of the four current associated managers, including one freelance worker in the advertising sector, one manager in the software publishing sector, one graphic designer and one graduate in marketing.

4.4.3 Recruitment aspects

Specificities of the graphic design sector

Managers are generally satisfied with the local competencies and labour force present in Toulouse for their activities. Whereas computer programmers are quite easy to find on the local labour market, it seems however more difficult to find good experienced graphic designers, as those ones are often already overbooked. One company mentions the unadapted profile of certain applicants in this trade.

> *'They are crazy! I've received applicants with very marginal looks, wild type aspect... they cannot be put in direct relation with the clients'.*

Several establishments located in Toulouse provide companies with a young workforce trained for infographic and 3D related jobs (ETPA, ARIES 3D, professional bachelor's degree from the Paul Sabatier University). Like in many other sectors, internship works often as a first employment opportunity.

As mentioned earlier, managers of this sector use Internet as a strategic intelligence tool, favouring specialised websites to recruit workforce. One announcement on the web (3DVF) launched from a company has entailed 150 answers from all over the country and one applicant from Lille has been received. Though all the staff currently comes from Toulouse, which proves the still important role of proximity in the recruitment process.

Recruiting or sub-contracting abroad

All the managers of this sample have mentioned actual or potential business opportunities with foreign countries. Specific competencies or financial advantages can drive managers' intention to resort to competencies outside France.

> *'We think to subcontract one part of the activity in Romania because we have acquaintance there and we know that there is creative people who have a good control of 3D techniques'. (P)*

> *'Considering the level of French taxes, I don't want to increase the size of the company. I am seriously thinking of delocalising a part of the production that really costs a lot. I could stop recruiting in France and use competencies abroad in Morocco for instance in Casa, Tangier or Marrakech.' (T)*

4.4.4 Location factors (hard and soft factors): Image of the city for the sector

Let's remind that 100 per cent of the managers of this sample have a strong attachment to the city either by being born there or by having studied there. However managers of this sample have often had anterior temporary mobilities. They have traveled around Europe and the world and have references about foreign countries, values and attitudes. These trajectory features could suggest the idea of a favourable environment to maintain good skilled workers in the city.

Size of the city and demographic growth of the metropolitan region

Managers are aware of the potential markets they could access if they were located in world cities like Paris or London, but they generally have made the choice of a 'right' or optimum size.

> *'Toulouse is small enough so that we do feel integrated in a dynamic and large enough so that we do not have the impression to be in a village'. (T)*

On the other hand Toulouse can be compared to smaller cities in the region that could not fit the level of economic activity required for starting a business in the sector.

> *'As we are native to Rodez, we could feel like being there, but the potential markets in the real estate sector are much more dynamic in Toulouse'. (P)*

The current demographic dynamism of the UAT is considered as a positive factor for the business of two managers having developed a clients portfolio in the real estate sector.

> *'Size of the city matters as it's growing very fast with new architecture projects and new dwellings constructed'. (P)*

Adapted local workforce

For computer programming activities, firms from web and games sectors benefit from the strengths of Toulouse as a knowledge intensive and technology-oriented city. Interviewed managers also point out the good level of competencies they can find in the web solutions and web design sectors.

> *'For sure we could have a greater amount of activity and clients in Paris, but regarding the level of competencies, there is nothing to be envious of'. (S)*

Soft factors

In some cases geographical mobility of the manager allows him to compare the quality of life in Toulouse and to justify its settlement in the city.

> *'I speak of delocalisation for one part of the production but personally I do remain in Toulouse; I've seen other cities New York, Beijing, London, Hamburg, Amsterdam, Shanghai, Hong Kong, and I can tell that Toulouse is a nice city to live in'. (T)*

Soft factors are particularly put forward in this manager's discourse, referring to weather and climate on the one hand and to (sufficient) cultural dynamism on the other hand.

> *'We have more days of sun (more than the Parisian at least)... We have enough bars, theaters, restaurants, and cinemas... For my activity Toulouse is sufficient. A lot of people don't even use the numerous cultural equipments...'. (T)*

Disadvantages of a "small" city

The importance of local social networks comes up to mention the image of Toulouse. Like in the audiovisual sector, some managers complain about the "clique" effect regarding some specific exclusive markets.

> *'Toulouse remains a city where a lot of things work through relations. It's good and sometimes it's bad, because if someone already works with someone else, it will be difficult to go to him and take the market, it never changes...' (P)*

This is indirectly related to openness and tolerance that cities are supposed to offer to attract new talents and creative workforce.

> *'For people that would be completely external it wouldn't be easy. We have this south culture, mutual aid, rugby and as far as business is concerned, it's completely different from Paris. It's not always good for creativity because someone can have a very good product but won't be able to present it to the right person, whereas others will benefit easily from personal contacts'. (P)*

4.4.5 Location inside the UAT

Except one company located in the periphery of the urban area, all companies of this sample tend to be close to the center of Toulouse. Transport issues are pregnant in their location choices inside the UAT. Employees of firms located in the core of the city use adapted means of transports like bicycle or metro.

Table 4.10 - Precise location in the UAT

Company	Location	Neighborhood	Rent/month €	Surface (m2)
(O)	Montberon	House	600	150
(P)	Toulouse	Historic center	850	110
(Q)	Toulouse	Central station	1600	150
(R)	Saint-Jean	First ring	X	home
(S)	Toulouse	Outskirt	X	home
(T)	Ramonville-Saint-Agne	First ring	Owner	110

Working times issue is mentioned as important regarding the location choice inside the UAT. This is especially proved in the case of a self-employed working at home in the outskirts of Toulouse.

> *'I've been living in the neighborhoods of Canal de Brienne and Esquirol, there was too much noise and it was too difficult to find parking places. For a self-employed like me who sells his time, it is inconceivable for me to spend one hour in a traffic jam. That's why I could not live in Paris.' (S)*

Atmosphere of the core city, as opposed to the (assessed as) less friendly environment of business parks is underlined. The image of the neighborhood for the sector also influences the location decision.

> *'It's nice to be in the center for instance to have lunch or when we finish working late... It also matters a little regarding our activity which is related to architecture with a creative dimension, so it matters to favour a nice working environment.' (P)*

For one business owner located in the first ring of Toulouse, security aspects should also be considered. This manager remains reluctant to settle in urban free zones whatever financial advantages it provides, for security as well as for accessibility reasons.

> *'I know that a company like ours with computer equipment would only last 48 hours in such a neighborhood (Le Mirail), we would probably undergo burgles and vandalism...'*

> *'The other Urban free zone are lost in the far periphery of Toulouse and that what just inconceivable to settle there because we must remain close from our clients.' (T)*

4.4.6 Role of local government

Problems encountered by this set of web design companies are classic considering the fact that they are very small sized enterprises evolving in a very selective business environment. What is specific regarding the Tolosan context is their twofold belonging to knowledge-based and creative industries.

Regarding computer programming activities, they benefit from the good level of education offered by many establishments in Toulouse. Graphic design competencies are also present in the metropolitan region but competition is sharper and comes from farther in this type of job. In some specific branches like 3D infographic, it can come from France or Eastern Europe.

> *'Competition comes from farther: Nantes and Brittany in France, Spain and Bulgaria. They have a commercial agent here and make everything in their country without taxes and with much lower wages.' (P)*

The very high level of taxes in France in general is pointed out by almost all the interviewed managers. For instance, one self-employed explains he receives only 50 per cent of the invoiced price after taxes.

We can state that managers of this sector have a point of view that relates much more to the national than to the local context. However some local practices or habits are denounced as counterproductive for very small businesses. This also relates to the issue of efficiency of relationships with the public sector. Examples given refer to the complicated access to notices of tender, underlying clique effect, and too long time to be paid.

> *'In the case of notices of tender, institutions should consult smaller structures, be confident in more responsive and creative companies. It happens that we intervene on important projects as subcontractors of bigger agencies and this is eventually much less interesting in term of cost for the clients...' (P)*

Underlying critics concern the favorite sectors traditionally supported by local authorities.

> *'The city's government has just changed and I hope it's going to change because there is lots of clique effect between politics and some companies that haven't moved for 30 years...' (S)*

Opinion on transports relates more often to local urban systems than to national connections networks.

> *'We are getting behind on urban transports. Toulouse metro and collective transport system is not developed enough compared to the cities I know abroad.' (T).*

4.5 Main drivers for settlement of selected creative and knowledge activities

4.5.1 Personal trajectory and networks

Trajectory reasons (being born, having studied, having family in the region) must be taken into account in order to avoid misinterpretation regarding the location choice. Let's remind that more than half of the interviewed managers are born in Toulouse or in the Midi-Pyrénées region. 60 per cent have graduated in Toulouse, having studied in the city appears very important in the process of social and professional networks construction. 75 per cent at least had a connection with the city before starting their current occupation.

Let's now consider the five managers (25 per cent of the managers' sample) who have no anterior link with the city:

- One of them has come to Toulouse because his wife had family there and wanted to move closer to it, which can be assimilated to an indirect personal trajectory reason (G).
- Another one is here because of an opportunity for her spouse's employment (C).
- For the three external managers remaining, the main reason for living and settling a company in Toulouse is essentially related to markets opportunity reasons. One of them had acquaintances in the region and knew he could rely on a network of professionals in the video sector (I).

Only two managers didn't know anybody in Toulouse before settling there. They have made a conscious choice by comparing Toulouse with other cities in France. The determining factor has been the economic dynamism of the city and the supposed opportunity to develop a successful business in their sector (J) (F). A closely related reason is the size of the city and its demographic growth perspectives.

Some managers show a strong affective attachment to the region and say they are not ready to leave the city. This results from trajectory elements but also from soft factors such as the proximity of sea and mountains, the sunny climate, the specific atmosphere and mindset that is to be found in the South of France compared to the North. Many mention the much less strong pressure regarding the rhythm of life and compare it spontaneously to the Parisian stress.

The network dimension comes up whatever the sector. In most of the cases managers say they do not need to canvass potential buyers. The rumor effect plays positively in general. Most of the time, the satisfaction of the very first clients generates next demands and so on and so forth. The firm acquires progressively credibility and confidence from its partners who can easily check by themselves the quality of the creations.

> *'Many clients come to us because they have seen our clients websites on the Net' (T).*

In the motion picture sector the usual system of temporary contracts (intermittent workers) increases the mobility of workers inside a specific professional milieu. This one is made of a relatively small number of key-companies in the production and post-production services. This generates a system where 'everybody knows everybody'.

Management and business consultancy sector also has its own features and rules in terms of networking. The size of the company, its generalist or specialised approach, are strong identification criteria in this business. The duration of the enterprise plays like an evidence of its seriousness and efficiency. The implication in official business organisations such as trade unions and lobbying associations is also crucial to get information on the potential contracts and to get a broad recognition in the long term.

Clique effect is often denounced or indicated like a specific mark of the professional milieu. Managers very seldom find this is specific to Toulouse but that it looks rather like a general feature of the markets at the national level. The network effect is indeed present and acknowledged whatever the sector. Sometimes it can play negatively and this would be more pregnant in a small-sized city like Toulouse (any city in France being unable to compete with Paris).

> *'If you do something good, everybody will know it and it will have a positive effect on your image and your business; but if you make the least mistake, you'll also hear of it...' (S).*

Firms implement several types of competencies to satisfy their clients. Let's remind that this satisfaction is crucial, as the reputation tends to act by itself and replace the role of the commercial agent inside small businesses. This will lead us to pay attention to the way information circulates inside the different professional milieus characterised by specific cultures and values.

4.5.2 Hard factors: Crucial for business development

For local as well as for external managers, these hard factors of market, economic fabric and size of the city play a crucial role in the business location choices. The rapid demographic growth of the UAT (about 17,000 extra inhabitants per year since 1999) is seen as a favorable factor by companies especially those having a link with the real estate sector.

The opportunities to recruit well-skilled workers and the presence of good universities are also relevant in the decision to settle in Toulouse compared to other cities in France. As far as the South of France is concerned, Bordeaux, Perpignan, Marseille and Nice are the cities managers cite spontaneously and consider as less dynamic or relevant for their sector.

Along these lines, it is interesting to notice that the reference to Paris is pregnant in almost every company of the business and management consultancy (74.14) and motion picture, video, radio and TV sectors (921-922). Those ones can suffer more or less from the overwhelming domination of Paris to develop their activity. This is much less obvious in the computer-programming sector (72.22) where only two companies refer to the capital, but rather to say that they have no reason to be jealous of Paris, except casually for the clients budgets and the higher volume of potential business.

The lack of high-speed train connection however is often mentioned as an impediment for the business development. The isolated character of Toulouse, '*the most remote regional metropolis from Paris and the rest of France*' (K) is pointed out in 7 cases out of 20. This is

obviously more pregnant for the managers who need to travel often for their business, such as the motion pictures sector and also the business and management consultancy sector.

There are actually no cluster logics in the selected sectors. Only one web agency located in Ramonville-Saint-Agne argues that this location was quested for two interrelated reasons: the image of a dynamic pole of specialised companies in the southeastern part of Toulouse and the proximity of clients and companies of the same computer sector.

Hard factors also play a role at the urban local scale. Regarding the location inside the UAT, some managers justify their location choice by the proximity to their place of residence and by the fact that employees live in the area of the working place. The difficulties to park and the congestion problems in the center come up often to explain the location in the peripheral business parks.

An insight on the location choices between the center and the periphery of Toulouse allows us to address the soft factors issue. As we mentioned earlier in this report, the distinction between soft factors of geographical or social dimension seems to be relevant at this stage of the study. Politics indeed can hardly intervene on the physical climate and environmental factors except to protect and give value to the rural landscapes around Toulouse. On the other hand they can take into account what is said about the strengths and weaknesses of the city in terms of urban atmosphere, cultural background and quality of life.

4.5.3 Location inside the UAT: Soft factors and creativity

Whatever their sector and the current location of their company, nearly half of the interviewed managers (9 out of 20) assert that a position in the core city is important for them, their employees and their clients. This is even more striking in the motion pictures and video sector (921) where 4 managers out of 6 declare they would not settle in the periphery if they had the choice. This confirms what figures show at the national and metropolitan level (see part 2.). Along these lines, Grondeau (2008) reminds that '*a priori new media can settle pretty much everywhere but the core of large cities allow them to benefit from particular sociological, academic, artistic and cultural potentials'*.

Looking at the two other sectors, we can state that the most creative and young companies ((E), (P), (Q)) insist on this location factor as they consider it is relevant for their activity. They give different kinds of arguments that result from a mix of practical and symbolic values. For instance, they argue that accessibility through public transports, walk or bicycle is better for the environment protection.

The image given to clients is also one significant reason to settle in the center, especially when they come from outside the region or from a foreign country. The metropolis is supposed to offer a quantity and diversity of sociability places like restaurants, pubs, nightclubs, theaters, museums, and opportunities of regular events like festivals.

It is also important that the image of the neighborhood matches the image of the sector i.e. an image of cultural and artistic effervescence. At last the urban environment as a source of inspiration is mentioned directly or indirectly by some managers ((P), (A), (C), (E), (J), (N)).

Some companies insist on the good relationships they want to keep among their team and as a consequence also place importance on the internal atmosphere. One discourse we have heard in the communication sector relates to the small-sized aspect of the company. This would allow the manager to keep in touch with the clients needs (C) and also to protect good relations between employees, compared to large agencies where competition prizes (D).

Generally speaking, one recurrent idea that comes up relates to the qualitative versus the quantitative aspect of the production logic. This reminds what differentiates the industrial from the post-industrial era and conducts to question the specific features of the cultural industries. As A.C. Pratt (2008) recalls, it is *'characterised by some unusual organisational forms: project working, networks of micro-enterprises and freelancers, an oligopolistic market structure, and a very quick product turnover.'*

The projects on which the selected companies are working on are not characterised by a standardised but rather by a customised approach of the clients needs. The creative aspect of these jobs (web design, film making, market researches...) is linked to a permanent reconsideration of ideas and concepts. This requires keeping informed about current tendencies and also innovate to increase clients' competitiveness. As seen earlier the size of the city is a major location factor, as it increases the opportunities of meeting different kind of people with different types of cultures and values. Along A. Scott (2000), this would favour the emergence of new ideas. For him, *'random face-to-face meetings and activation of weak social links, as much or even more than strong links, appear to be at the primary sources of creativity and innovation'*.

4.6 Discussion: Strengths and obstacles for a competitive knowledge and creative city

How do managers perceive the role of local government in relation to the needs of their firms and employees? A first result relates to the quantity of hard factors (transports, premises, dwellings, leisure and shopping places...) that indirectly determines the potential diversity of "social" soft factors (strong and weak social links). The link between both hard and soft factors relates to the networks construction process. Clique effects, weak consciousness of the potential new innovative activities can bring to local economy are the most serious critics made by some managers towards public local authorities.

4.6.1 Image of the city and critic of hard factors by sector

Toulouse benefits globally from a positive image over France and abroad. The image of a sunny and coloured meridional city close to the Pyrénées Mountains as well as to the Mediterranean Sea and the Atlantic Ocean plays definitely in favour of the metropolis.

Then the image of Airbus and all the business opportunities it generates comes up quite often to describe Toulouse as a dynamic high-technology oriented city with an efficient local system of competencies (Grossetti, Zuliani, Guillaume 2006, Zuliani 2008). This has positive effects but it also raises the limits and weaknesses of a highly specialised knowledge intensive

local economy. This specific historic distinctive feature of Toulouse has influence at different levels and prompts many derived critics about the local urban organisation.

From an internal point of view, the lack of high-speed train connections of the city with the rest of France is pointed out as impeding a good business development. Managers that need to travel around France and abroad complain about the isolated character of their city and plead for cheaper, more practical and less polluting means of transports.

We can state first of all that the type and amount of answers differs according to the sector. Thus businesses from the consultancy sector are not as prolix as the companies from the motion picture or the computer sectors. This might be due to the fact that the consultancy sector is already organised inside rather strong trade union networks and are accustomed to lobbying practices. On the contrary the video sector is hardly starting to emerge at the regional and local level and audiovisual managers are much more talkative about what could be done by politics.

Regarding telecommunications, the level of equipments and services is satisfying for electronic broadband communications but very low as far as radiodiffusion structures are concerned. (N, 922): '*I would like to know why there is absolutely no local radio of public service in the Midi-Pyrénées region. (...) It's all the more amazing that people here have a strong attachment to the public service, much more than in the North of France where RTL has the best audience'*. This manager pleads for a pedagogic effort from the local and national politics to explain why an existing project of local radio has been given up.

The insufficient level of diffusion structures in the Midi-Pyrénées region is related to the concentration of all means in Paris, which is often pointed out negatively by managers of the motion pictures and video sector (921). These ones also deplore the contempt that is still pregnant regarding the "province". This observation is also made in the advertising sector and appears less pregnant in the computer sector.

Regarding companies offering web solutions, critics and suggestions result more from the national economic policy than from the local context. Those firms benefit from the strengths of Toulouse as a knowledge intensive and technology-oriented city. Managers of this sector talk more often of delocalisation in foreign countries where taxes and wages are lower and well-skilled workers easy to find. The cited countries are China, Morocco, Bulgaria and Romania.

Globally, web design companies seem not much interested in the organisation of meetings or events directly related to their activity (like the business organisation 'La Mêlée numérique' proposes). Their favorite source of information to know about the technologies evolution as well as to find skilled workers remain Internet and specialised websites (e.g. Journal du Net for business intelligence and 3DVF for the recruitment of graphic designers). Social and personal hobbies related networks are very important to get contacts and contracts in the clients sector.

4.6.2 Attitudes of local politics and soft factors: Getting prepared to improvisation

Relationships with administrations and institutions

Broadly speaking managers often deplore decay between their own preoccupations and the vision of public sector on their activities. Two cases give opportunities for a company to have relations with government bodies:

- an administration service can be a client most of the time in the case of notices of tender,
- or it can be an institutional partner supposed to help the manager in starting or promoting a new activity (Chamber of commerce, Municipality of Toulouse, Grand Toulouse, Département, Région...).

One important result that comes up from the interviews of creative managers is linked to the general behaviour of politics and to the global lack of interest managers receive from public local authorities. This argument emerges from the most recent, young and creative companies (animation, video and computer games sectors). These ones often deplore public authorities have not considered them seriously when they asked for financial or material support.

Another statement concerns difficulties to get contracts and to work with the public sector. This refers to the heaviness of administration procedures and above all to the length of payment returns. These bureaucratic values work against the required flexibility that should characterise a competitive knowledge and creative city. In some cases managers say that they just gave up the idea of working with administration services for these reasons and actually because they had felt more pressure than pleasure in their work.

When asking companies covering the image consultancy sector what stimulates or slows down their creativity, the answers are related to money and budgets but also often to the clients ambition.

> *'Creativity can be slowed down by too short lead times and also when a client is apprehensive, he wants to control everything, gives too many directives and eventually the result is less good as it could have been because he made us change things all the time during the project...' (P)*

Proximity and distance in creative knowledge activities

Markusen (2008) mentions different types of places where artists are supposed to meet each other. Besides identified organisations employing, showing or educating artists (like theaters, concert halls, arts exhibitions, arts schools etc.), another type of place is identified: *'smaller, permanent or temporary location where artists can work, show their production and evolve thanks an interactive learning process'*.

Accommodating artists requires a good apprehension of their activities and some indications are given by interviewed managers of the cultural industries (radio, music publishing, motion picture...). For some actors in the sound and image sector, politics miss artistic sensitivity but they know how to benefit from the mediatic success without doing much in return. Those

companies have also spontaneously cited the 2001 AZF accident and its enormous and long negative impact on the local artistic creativity.

Strategic intelligence that all companies apply for themselves and for their clients runs through face-to-face or distant relations allowing the exchange of information with other companies: clients, subcontractors, providers, business organisations, competitors. We have observed that companies offering web solutions are the most implied in distant networks at national and international levels.

For all the interviewed companies Internet plays a crucial role as a new working process. For web agencies and image consultants, we have seen that it acts as a key-agent in the commercial process. It provides an almost universal access to an infinite number of references, ideas, creations and knowledge. It represents a new source of inspiration along with all the new interactive media (web-radios, web-TVs, VOD...).

Some of the interviewed managers insist on the importance of considering a specific public of young generations with new ways of communicating and learning.

> *'What stimulates creativity is a great scope project, shown on TV for instance, with a visibility: it motivates people that work on it.' (P)*

This last observation can be related to the hypothesis of the need of events to increase the temporary attraction and accommodation of external creative people in a city. This could be reached by the implementation of diffusion systems and by the combination of real and virtual creative places.

A diversification process is at stake and public policies should be better prepared to accommodate small flexible creative businesses. This implies openness and a good knowledge of the supported sectors. Regarding the relations to institutions, managers often say that the implication of one person and the real interest he (she) shows for the sector and activity is crucial in the negotiation process (see e.g. managers opinions about the responsible for motion picture and video sector at the Conseil régional of Midi-Pyrénées).

In a nutshell, all these observations could help going beyond the 'province' image effects (with strong interpersonal networks and risks of exclusion it entails for external creators), the Tolosan clichés of aeronautics and rugby on which a competitive knowledge creative city cannot only rely on.

5 CONCLUSIONS AND DISCUSSION

To sum up, results of this qualitative research confirm those of the previous quantitative study conducted among workers in the UAT between June and November 2007. Questionnaire surveys among 200 highly skilled workers showed the importance of personal trajectory in the reasons to live somewhere. Being born and/or having studied in the region appear as important as being attracted by hard factors such as employment opportunities, good level of infrastructures and economic development of the city. Although massively quoted by the surveyed, soft factors like climate, proximity to nature and overall friendliness of the city are not overriding, since often ranked as secondary reasons to explain presence in the city. Whereas they are not decisive to attract creative workers and managers from outside, soft factors could however have an impact to retain them in the city. This has implications in term of policy and relates globally to the image of the city.

5.1 General conclusions of the qualitative research

What are the main drivers behind managers' decision to settle creative knowledge activities in the metropolitan region of Toulouse? Next table puts forward striking elements that we can draw from the analysis of interviews with 20 managers from consultancy, audiovisual and web design sectors (Feb - Apr 2008). It includes results on managers trajectories as well as main outcomes on location factors at two levels: 1) In Toulouse (compared to other cities); 2) Inside the urban area (center/periphery/Business park).

Table 5.1 - Elements to apprehend logics behind location of selected sectors

Sector	Toulouse/ other cities	Inside urban area	Managers profile	Additional observations
74.14 Business and management consultancy	Sector driven by the national context (law evolutions) Strong hierarchy / size of companies	Very small businesses in the periphery Medium: business parks	Mobile workers Birth and studies outside Highly skilled	Size of the city crucial to develop shares of local clients. Relations to public sector.
921-922 Motion picture, video, radio, TV	Dependence to Paris (concentration of diffusion structures).	Center favored. Image+atmosphere of neighborhood Rent prices	Diversified profiles. Local social networks	Locked, exclusive sector. "Clique" effect. Credibility problem (animation)
72.22 Web design, Computer games	Propensity to leave the city (taxes+cheaper competencies abroad.	Center for the most creative activities. Importance of internal atmosphere	The more local (all have anterior link with Toulouse).	Footloose activities + trajectory effect: Does this suggest a strong influence of soft factors?

Source: Own survey

"Hard factors" and personal trajectory

Consultancy, audiovisual and web design activities that have been selected in this ACRE work-package 6 are not representative of the local economy. The presence of these service-oriented enterprises is strongly related to existing strengths of the regional metropolis in terms of demographic and industrial development. This is proved by results showing the crucial role of the following hard factors mentioned whatever the sector: size of the city and size of the local market, business and recruitment opportunities, level of transport infrastructures, affordable housing market.

Hard factors are crucial for the development of business relations and for the contracting process with clients, subcontractors, providers and business organisations. The lack of cheap connections and the absence of TGV lines between Toulouse and the rest of France are for instance pointed out negatively whatever the sector. This can constitute a real brake for the development of the company activity outside the metropolitan region.

A rather high number of managers say they could have their activity, customers and staff almost anywhere in France thanks to Internet and ICTs progress. However face-to-face meetings are still considered essential in the production process. The possibilities to enrich one's social networks appear like the most relevant reason to settle and stay in the UAT. This relates to trajectory as well as to soft factors.

Looking at personal trajectory figures, one observes that an overwhelming proportion (75 per cent) of the interviewed workers had a link with the city before starting their activity. More than half (55 per cent) are born in the administrative region and an even higher part of them have studied in the regional metropolis (60 per cent). In Toulouse, trajectory factors relate both to the high proportion of local population reaching higher degrees and to the quality of the local system of higher education in the region.

These results widely put into perspective the part of "nomad" creative classes choosing their living location according to its attractiveness in terms of soft factors (Florida 2004). Hardly two of the external managers, i.e. with places of birth and studies outside the Midi-Pyrénées region, put forward climate or proximity to nature to explain why they favored Toulouse among other cities in France. But these types of factors are ranked second after reasons related to spouse's employment or in any case to the sufficient level of local economic development.

A weak mobility regarding places of birth and studies should not though lead to conclude that workers and managers have not experienced other types of mobilities. Those ones are enriched by large access to information and opportunities to travel or temporarily move at different times of one's career.

Soft factors

Then, soft factors are weakly influential to attract spontaneously managers who had no personal anterior links with the city through family or education networks. However they could have an impact to retain creative people in the city once the activity created. Although it

is difficult to measure, one can state that a high proportion of interviewees, whatever their origin, mention soft factors as important in their decision not to leave the city in the next few years.

Ever-present comparisons with Paris allow drawing elements on soft factors in Toulouse. They concern assessments either on cultural density and artistic effervescence or on general quality of life characterised by lower levels of stress in a smaller metropolis.

Location in the South of France, nice weather and overall friendliness of the city are the main soft factors mentioned by interviewed managers. Specific mindset that is to be found in a relatively small metropolis (compared to Paris) can be sometimes considered negatively. First a clique effect due to long relationships between some industries and politics is often denounced as impeding creativity. New mayor and municipal government elected in March 2008 are expected to bring new conditions for business in Toulouse. Second, if the majority of managers declares globally satisfied with the cultural life in Toulouse, some recognise that the city lags behind in several fields and cannot be considered as "avant-gardiste" like Barcelona for instance.

Regarding location inside the UAT though, atmosphere of the city, cultural density and diversity of consumption places are considered essential, especially in emergent sectors combining arts and technology like motion pictures, video, animation movie, 3D web design or computer games. Managers mention several extra hours spent at office, often late at night or during weekends, and advantages to be in the core city with still opened shops, galleries, restaurants or pubs. Ecological values are sometimes put forward to justify position in the center, as employees can easily access offices by metro or bicycle. This also counts for the global image given to clients of the sector.

5.2 Implications for competitiveness of the city

This study takes place in the ACRE framework programme, addressing the relationship between creative economy and competitiveness of thirteen metropolises of the enlarged EU. Quantitative and qualitative studies should be conducted, in order to have a better idea of what is creativity, and to understand the role it plays in the city's development. In Toulouse, the opportunity is to get a more complete approach of the functioning of the local urban economy. Whereas the UAT is well identified as a knowledge-based city driven by high-tech industries, conditions in which creative industries grow and evolve have not been investigated so far.

Studied companies do not yet enjoy recognition from local public governments. They are still considered as marginal by public local authorities. Managers still sometimes have to convince that they make serious business creating employment on the territory. It still appears risky to support these fragile emerging sectors, new in the metropolis's landscape. This question rises in the case of a potential diversification strategy for the city.

It looks crucial to remind what characterises creative activities. For Lefebvre (2008), they result from an advanced expression of new means of production and new employment relations generated by recent mutations of capitalism. '*Creative activities are generally*

perceived as fascinating because they are made of freedom - (...) *they might rest on improvisation, atypical behavior, creative anarchy, they might be situated in the non working sphere, or even gaming, they function with particular codes, are marked by an hyper-flexibility. Creator should be now considered as the model of the new worker...*'.

We can also mention the key-role played by individuals in all decision-making processes, as observed by Markusen (2008). '*Artistic workers and managers decide who they need to recruit, how many hours should be dedicated to a project (...) they choose the place they want to live and work, the networks in which they want to be integrated. They decide how to sell themselves and their products...*'

To sum up, creative activities are characterised by specific relations to time and space, prizing individual freedom. What does this imply regarding city's competitiveness?

There is at the moment no cluster logic regarding the three selected sectors. Urban and regional policies hardly influence the location choice of interviewed managers. Internet and distant work are becoming constitutive of many web and multimedia companies, in which quick time reactions are required.

Companies of selected consultancy, audiovisual and web design sectors are rather small enterprises that are prompted to look for markets outside the local territory. This is due to the dominant position of the largest firms of the sectors, that tend to lock access to potential local markets.

We have noticed that most of the studied activities rely on a combination of knowledge and creative competencies.

In Toulouse, these activities benefit potentially from a strength of the city at the national level, namely a consistent education system (universities, engineers schools, academic and research centers) matching the local economic fabric. This one is mainly driven by aeronautic and space industries that require high-skilled workers in computer programming, automotive, on-board systems, simulation, calculation etc. Health and medical research present on the local territory require those types of specialised knowledge-based competencies as well.

Web design is strongly related to web-solutions, communication and image consultancy services. It also increasingly integrates sound and video competencies. Like games, the web design sector includes a large part of artistic competencies and specific know-how in the drawing, pictures and animation fields. From this point of view Toulouse has no major drawback as it accommodates many arts schools and more recently multimedia training centers. It remains a little bit more difficult to find good infographic and design workers than computer programmers in the UAT.

Until now, mostly knowledge-based activities and competencies have been put forward in the communication and economic policy of the city region. Paying attention to creative strengths present on the territory, but also to weaknesses and difficulties of specific professions might help local authorities to play a useful role for emergent markets related to entertainment.

6 REFERENCES

Bathelt, H., A. Malmberg and P. Maskell (2004) Clusters and knowledge: Local buzz, global pipelines and the process of knowledge creation. *Progress in Human Geography*, 28 (1): 31-56.

Camagni, R. and R. Capello (2005) Urban milieux: From theory to empirical findings. In: R.A. Boschma and R.C. Kloosterman (eds), *Learning from clusters: A critical assessment from an economic-geographical perspective*, pp. 249-274. Berlin: Springer Verlag.

Dalla Pria, Y. (2006) Interactions sociales et formes de la proximité socioéconomique: Une analyse comparée du Silicon Sentier parisien et de la Silicon Alley new-yorkaise, Communication aux 5e journées de la Proximité, Bordeaux.

Florida, R. and M. Gertler (2003) Cities: Talent's critical mass. *Globe and Mail*, 3rd January.

Grondeau, A. (2008) La 'Silicon Alley': émergence et crise du cluster new-yorkais dans le multimédia. In: F. Leriche, S. Daviet, M. Sibertin-Blanc and J.M. Zuliani (eds), *L'économie culturelle et ses territoires*, pp. 129-139. PUM, coll 'Villes et Territoires'.

Grossetti, M., J.-F. Barthe and C. Beslay (2008) Choix de localisation et mobilisation des ressources dans la création d'entreprises innovantes. *Géographie, Economie, Société*, 10 (1): 43-60.

Grossetti, M. (2008) Proximities and embedding effect. *Environnement Planning and Society*. (à paraître).

Grossetti, M., J.M. Zulianin and R. Guillaume (2006) La spécialisation cognitive: Les systèmes locaux de compétences en Midi-Pyrénées. *Les Annales de la Recherche Urbaine,* (Économies, connaissances, territoires), 101: 23-31.

Grossetti, M. (1991) Trajectoires d'ingénieurs et territoire: L'exemple des hautes technologies à Toulouse. *Sociétés Contemporaines*, 6: 65-80.

Hägerstrand, T. (1967) *Innovation diffusion as a spatial process*. Chicago: University of Chicago press, 334 pp.

Kosianski, J.M. and J.L. Monino (2005) *Les grandes expositions du musée de Lodève, facteur de développement local*. Paris: éditions Espaces.

Lange, A. (2003) The financial situation of the various branches of the European Union audiovisual industry, European audiovisual observatory, Meeting of Experts on the Reform of the Instruments to Encourage the European Audiovisual Industry, Taormina, 15 -16/11.

Lange, A. (2005) *The financial situation of television companies in the European Union (1999-2004)*. European Audiovisual Observatory, Council of Europe.

Lefebvre, A. (2008) L'économie culturelle au risque de l'économie de la création, In: F. Leriche, S. Daviet, M. Sibertin-Blanc and J.M. Zuliani (eds), *L'économie culturelle et ses territoires*, pp. 345-354. PUM, coll 'Villes et Territoires'.

Markusen, A. (2008) Les artistes au cœur du développement urbain: Une approche par les métiers. In: F. Leriche, S. Daviet, M. Sibertin-Blanc and J.M. Zuliani (eds), *L'économie culturelle et ses territoires*, pp. 217-230. PUM, coll 'Villes et Territoires'.

Martin-Brelot, H., M. Grossetti, E. Peyroux, D. Eckert and C. Thouzellier (2008) *Career trajectories and residential satisfaction in Toulouse. Understanding the attractiveness of the metropolitan region for creative knowledge workers*. ACRE report WP5.11. Amsterdam: AMIDSt.

Méadel, C. (1995) La radio et ses territoires *Sciences de la société,* 35: 113-122.

Menger, P.M. (2002) *Portrait de l'artiste en travailleur. Métamorphoses du capitalisme*. Paris: Seuil.

Peyroux, E., D. Eckert and C. Thouzellier (eds) (2007) *Toulouse: Embracing the knowledge economy. Pathways to creative and knowledge-based regions*. ACRE report WP2.11. Amsterdam: AMIDSt.

Pratt, R. (2008) La compréhension des fonctions créatives dans les villes globales. In: F. Leriche, S. Daviet, M. Sibertin-Blanc and J.M. Zuliani (eds), *L'économie culturelle et ses territoires*, pp. 257-266. PUM, coll 'Villes et Territoires'.

Ross A. (2004) Dot.com urbanisme. In: N. Couldry and A. McCarthy (eds), *Mediaspace: Place, scale and culture in a media age*, pp. 145-162. New York: Routledge.

Roy-Valex, M. (2008) Classe créative et marché du travail dans l'industrie du jeu video à Montréal. In: F. Leriche, S. Daviet, M. Sibertin-Blanc and J.M. Zuliani (eds), *L'économie culturelle et ses territoires*, pp. 203-215. PUM, coll 'Villes et Territoires'.

Saint-Julien, T. (1985) *La diffusion spatiale des innovations*. GIP RECLUS, coll. 'Reclus modes d'emploi'. Paris, 40.

Storper, M. and A.J. Venables (2004) Buzz: Face-to-face contact and the urban economy. *Journal of Economic Geography*, 4: 351-370.

Scott, A.J. (2000) *The cultural economy of cities: essays on the geography of image*-producing industries. London: Sage Publications.

Scott, A.J. (2007) Capitalism and ubanization in a new key? The cognitive-cultural dimension. *Social Forces*, 85 (4): 1465-1482.

Zuliani, J.-M. (2008) The Toulouse cluster of on-board systems: A process of collective innovation and learning. *European Planning Studies*, 16 (5): 711-726.

Other sources:

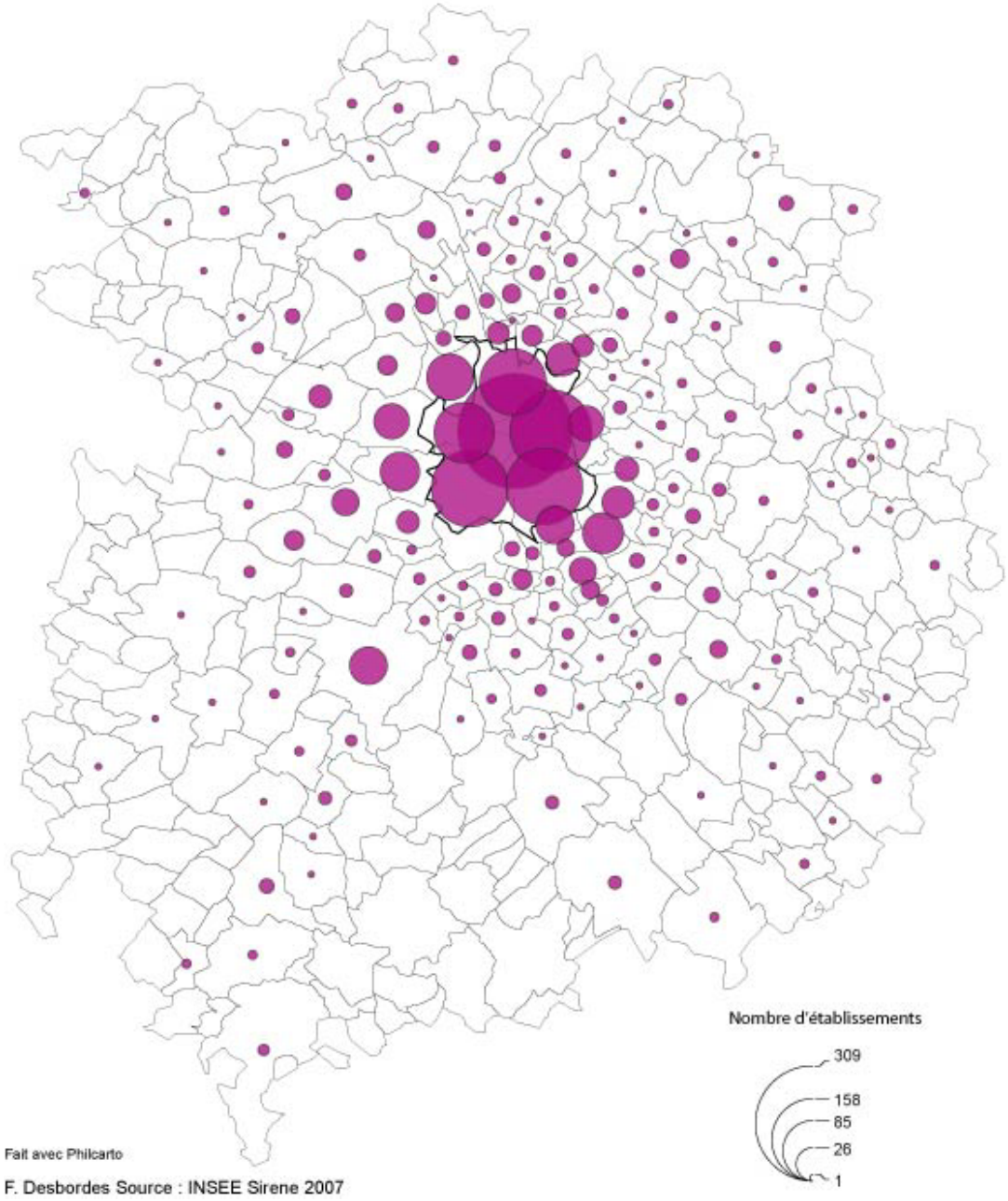
INSEE (2008). Sirene NACE Revision 04/01/2008, Nomenclatures et codes.

INSEE (2008) Tableaux économiques de Midi-Pyrénées 2007.

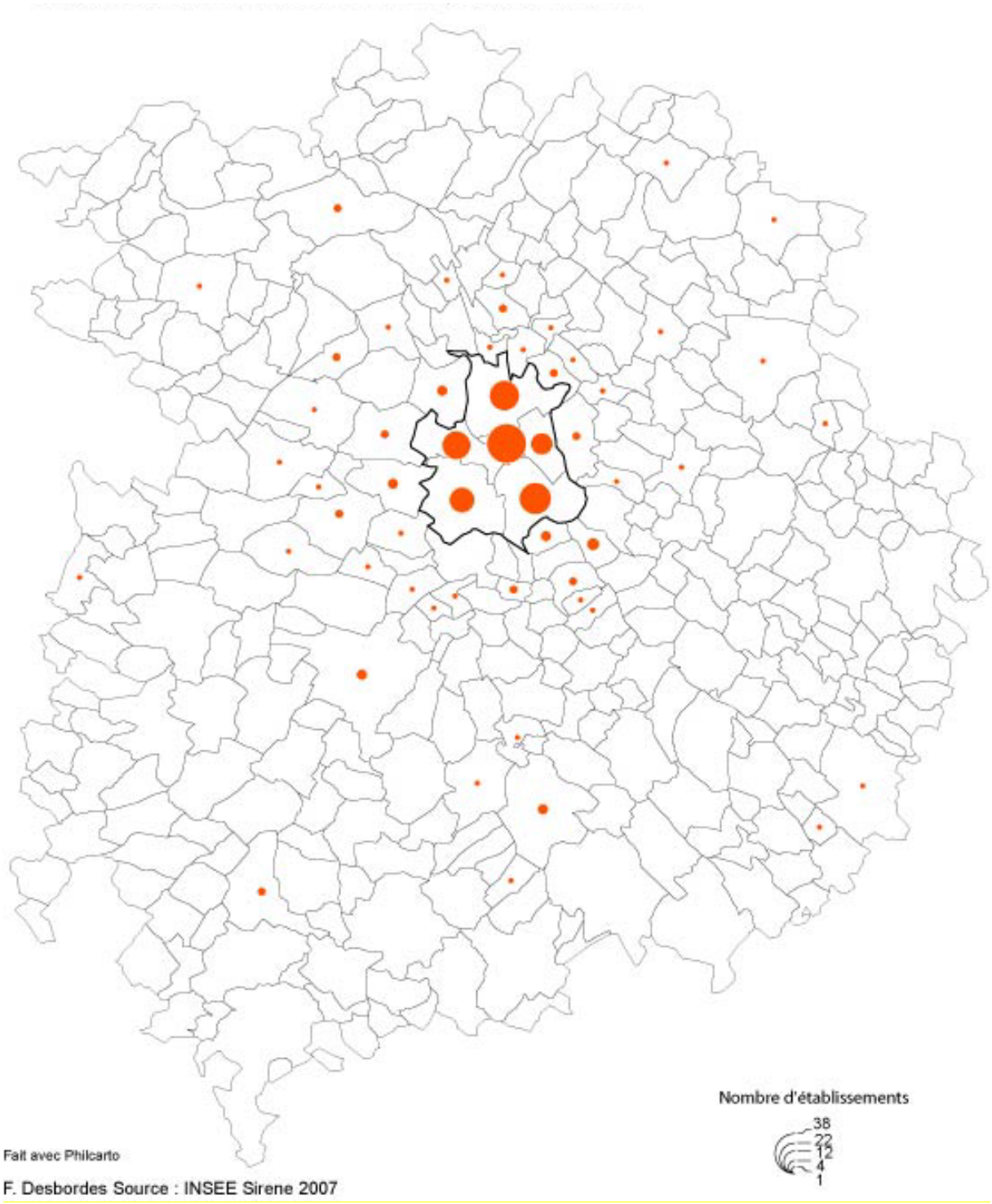
INSEE (2005) Les services informatiques. Résultats et performances, NAF 71.3E et 72.

APPENDIX

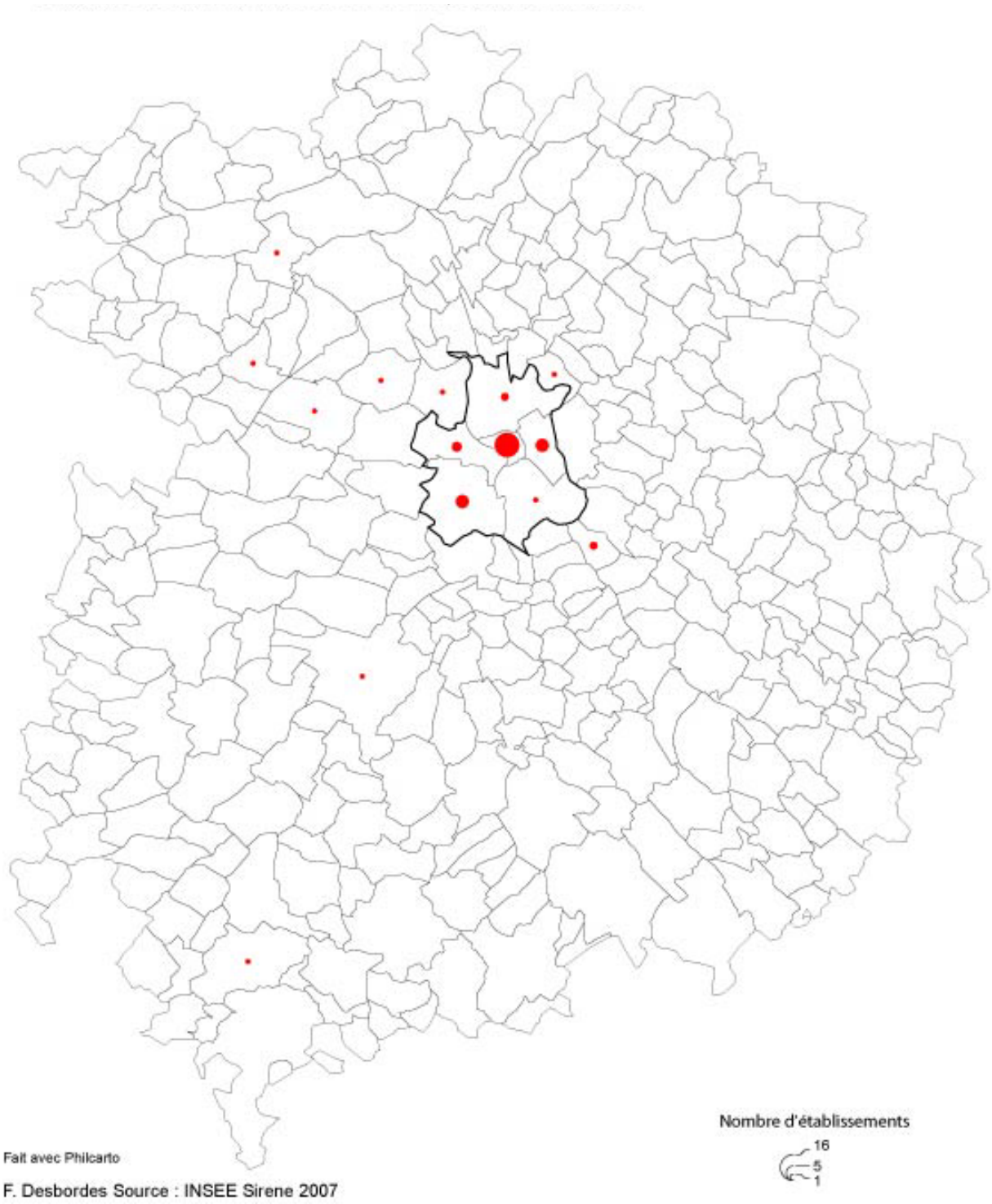
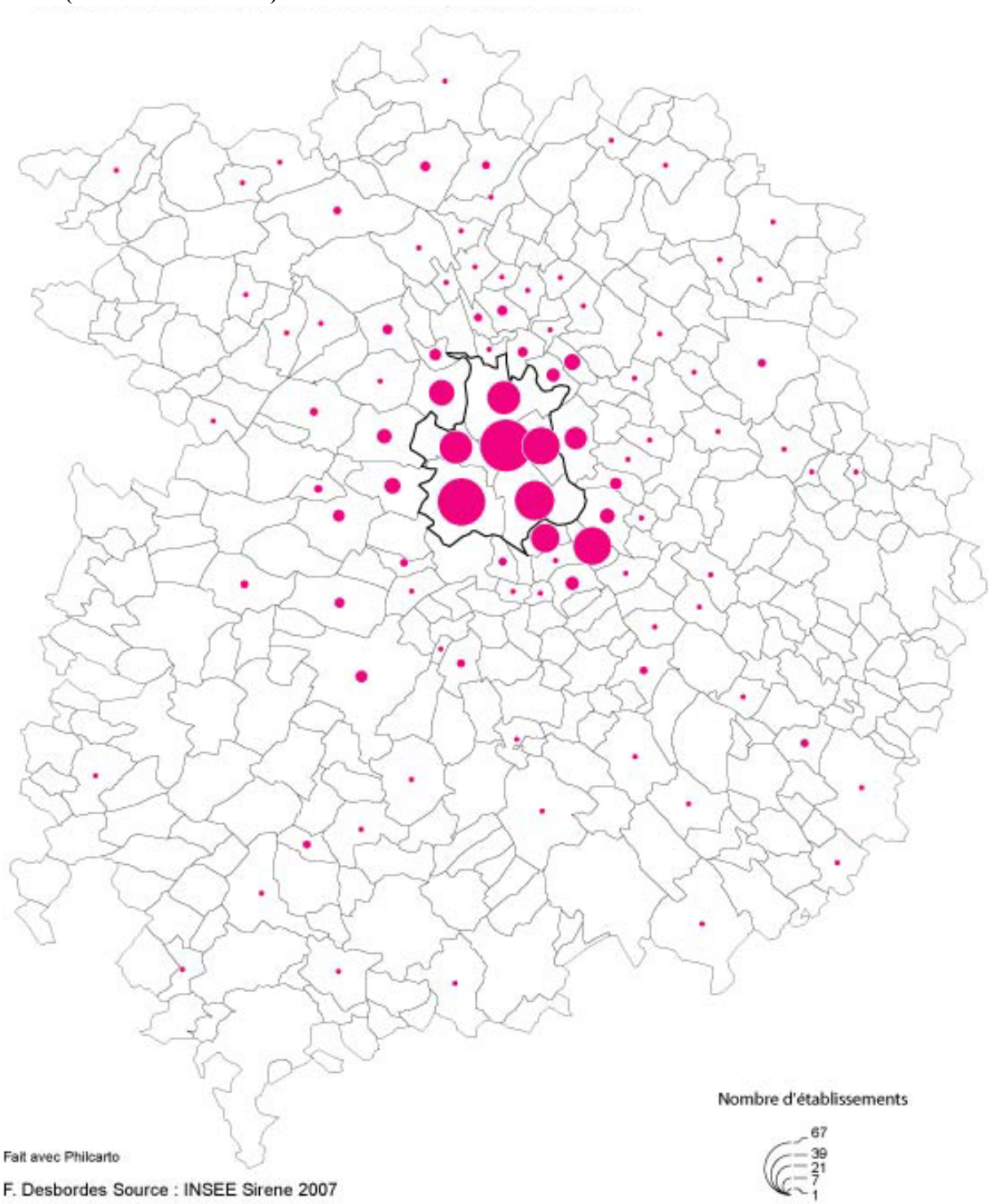
Map 1 - Business and management consultancy activities in the UAT (number of businesses)



Map 2 –Motion picture and video activities (921) in the UAT (number of businesses)



Map 3 –Television and radio activities (922) in the UAT (number of businesses)



Map 4 – Web design, electronic publishing and computer games activities (72.22) in the UAT (number of businesses)