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DIFFUSION AND USES OF INTERNET IN CATALONIA AND IN SPAIN

A Commented Summary of Available Evidence, as of 2001.

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WORKING PAPER



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KEYWORDS

Internet, Catalonia, Spain, statistics, diffusion, Internet uses, socio-demographic characteristics.

ABSTRACT

This working paper summarizes and analyzes the statistics provided by available studies on the spread and uses of Internet in Catalonia, in Spain, and in selected Spanish regions circa 2001. A data base was established by collecting and evaluating studies and surveys from various sources. Their methodology is described in the study. Relevant variables are identified, and tables are built for each variable bringing together data from various sources. An analytical commentary highlights the main findings concerning the relationships between Internet and society in Catalonia, in Spain, and in the Spanish Regions. A number of hypotheses on these relationship are suggested.

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3. THE SPANISH NETWORK SOCIETY

A commented summary of the evidence on the uses of Internet in Spain, 2000-2001.

The Internet, as it has happened in most of the developed countries all over the world, has had a gradual introduction in Spain during the last 90's. In the early stage it was a technology mainly available at universities and research centres. It was also an expensive technology. This is why there were few people were using Internet in the mid-1990s: only 0.8% of Spanish population in 1996 used the Internet (Estudio General de Medios, EGM). But, in only five years time there has been a significant increase in the growth rate of Internet users, probably due to decrease in cost. In 2001, according to EGM; 20.3% of Spaniards aged 14 or more were Internet users (See Fig 6). This percentage may not seem to be very high, specially if we take into account the number of Internet users in other countries, such as UK, Finland or other countries of the EU, but if we take as an estimate the lowest yearly growth rate from 1996 until 2001, which is 50%, and we take its half as a plausible yearly growth rate for the next four years, the result is that by the year 2005 there would be over 17 million Internet users in Spain, which would represent almost half of the population aged 14 or more. The implication of this is that the Internet is a growing and unstoppable phenomenon which is becoming everyday more pervasive part of our lives, in the same manner that happened some years ago with technologies such as the telephone or the television.

	EGM (2001)	
	% of persons connected to the Internet	Yearly growth rate (%)
1996	0.8%	-
1997	2.7%	237
1998	4.8%	77
1999	7.2%	50
2000	11.3%	56
2001	20.3 %	79
Total 1996 - 2001		2437

Fig 6- Evolution of percentage of persons connected to the Internet (1996 – 2001)

According to several studies, most Internet users (between 44% and 54.7% of Internet users depending on the study) connect to the Internet from their own households⁵⁶. This is surprising because the place with the highest Internet access is the place of work. The average of households connected to the Internet is only between 10% and 14% of all Spanish households⁵⁷, a low number if we take into account that between 32% and 37% of the households in Spain have a computer⁵⁸, while the percentage of business firms with Internet access is of 64.5%⁵⁹. What is surprising is that if workplace is the place with highest Internet access, the number of Internet users should be higher than the number of Internet users in households, and not the other way around. But this is not the case. If we look at the evolution of the number of Internet users we see that at the onset of Internet use in Spain, the place where most people connected to the Internet was the workplace, and the main reasons for that were the high cost associated to the use of the Internet and the lack of general knowledge about what the Internet was or its usefulness. Nowadays, there is an inversion of the trend, because although the amount of business firms with Internet connection is six times the number of households with Internet connection, the yearly growth rate of Internet household users is positive while the yearly growth rate of Internet work users is negative. As said earlier, in Spain there is a high percentage of business firms that are Internet connected (64.5% of all the firms). However, only 24% of Spanish business firms have a website⁶⁰. Our hypothesis is that the use of Internet as a business tool is currently rather limited. Firms with a web page consider that the main objective of its page is to provide information about the firm or about its products (70% of business firms) and only 25.3% of firms consider e-commerce as the main objective of their web page⁶¹. In addition, 65% of business firms have no income from e-commerce⁶².

- ⁵⁸ See V.9 ⁵⁹ See V.53
- ⁶⁰ See V.53
- ⁶¹ See V.90
- ⁶² See V.94

⁵⁶ See V.19

⁵⁷ See V.1

According to business firms with e-commerce, the main problems for selling on-line their products are the distrust of in the mode of payment and Internet security (25.1% of mentions) and the lack of knowledge of the Internet (17.4% of mentions)⁶³. Best-sold products are CDs (24.8%) and books (21%)⁶⁴, which are not only popular and affordable but also products that people are ready to buy without physically touching them, because shoppers know the kind of information contained in the product before buying it . In sum, there is a limited use of the Internet in the daily practice of business firms. So, their workers are not frequent users of Internet at work. As a result, people who do want to connect to the Internet, predominantly do it at home.

Another highly relevant feature to understand the use of the Internet is the age of Internet users. According to all the studies, the Internet users who are between 25 and 34 years old represent about one third of the total Internet users (between 30% or 38% depending on the study), which is the highest percentage of any age group(See Fig 7). One of the possible causes of this readiness to accept the Internet may be that this generation grew up with videogames and computers, so the Internet could be taken as one step further. These people represent the young work force of the country, which means not only that the Internet is for personal use, but also may be in the near future for business use, although business uses of the Internet in Spain are only in their beginning. The frequency for the rest of the other age groups decreases as people are younger or older. But there is a point in which the percentage of Internet users dramatically decreases, and it is at the age of 45 or older (This group are only 9% of all Spanish Internet users). This age digital divide could probably be leave out of the information society the older generations if they do not learn how to use the Internet. This age gap has serious social consequences beyond the group of retired people. Someone who is 45 years old is expected to continue working for at least 20 years more, since retirement age in Spain is 65. This means that these workers will be at a disadvantage in a rapidly changing labor market, as the dynamic e-conomy transforms business and work.

	EGM (2001)	AIMC (2001)	eEspaña 2001
< 14 years old			3.4%
Between 14 – 19 years old	18.5%	9.3%	
Between 20 – 24 years old	19.8%	20.7%	
Between 25 – 34 years old	30.3%	38.6%	
Between 35 – 44 years old	19.4%	19.9%	
Between 45 – 54 years old	9%	8.8%	
Between 55 – 64 years old	NA	2.1%	
> 65 years old	NA	0.5%	0.7%%
Doesn't know or doesn't answer	3%	0.2%	

Fig 7- Distribution of Internet users by their age

There is also a gender gap. While 61.1% of Internet users are men, only 38.9% are women⁶⁵. However, the difference of Internet use between genders decreases as Internet use increases, which may be due to the high growth rate of Internet users in the young generations. Although there are no data comparing the age-gender variables, we could hypothesize that the gap will not decrease in the older generations because women in this group do not work and do not have studies, which means a lack of motivation and skills for using the Internet.

Another interesting feature of Internet users is their cultural level. The higher the educational level is, the higher the percentage of Internet users is. In Spain, 52.1% of Internet users have a University degree, only 8.6% of Internet users have primary education and less than 1% have no studies⁶⁶. Below secondary education there are few Internet users, epitomizing the educational component of the digital divide.

Regarding the social class, it could be thought that high class people is the social group with highest Internet access. Surprisingly it is not: the medium-medium class has the highest percentage of Internet users (39.7%). If we take into account the evolution of the percentage of Internet users according to their social

⁶³ See V.74

⁶⁴ See V.40

⁶⁵ See V.130

⁶⁶ See V.138



class, we see that for the 1997-2001 period there has been a negative growth rate of high-class Internet users (-30.5%), while there has been a growth rate of 38.3% of medium-medium class Internet users⁶⁷. If we combine the education and social class features we could hypothesise that Internet used is not defined by income but by education. The digital divide is not between people with and without money, because nowadays the Internet is an affordable technology for most people: the digital divide would be between educated and non-educated people, but not because of the Internet access but because of the Internet content: educated Internet users were the first designers of Internet content.

The household size is another interesting reference point that confirms many data of the previously analysed features. The lowest percentage of Internet users belongs to households with one person (4.8% or 6% depending on the source) and to households with six people (5.2% or 6% depending on the source), while the highest belongs to households where four people live (35.3% or 31.3% depending on the source)⁶⁸. On the one hand, households with one person are usually households where old people live, and households with six people are usually households where families of low social class live. On the other hand, households with four people represent medium class families, in which the youngsters live with parents because they still do not have enough money to live on their own.

It can be stated that Internet is an urban phenomenon, not a rural one. Towns with less than 2,000 inhabitants show the lowest percentage of Internet users (only 3%), while the highest percentages of Internet users is located in middle-size towns (Towns with 50,000-200,000 inhabitants have 23.5% of Internet users). Surprisingly, large metropolitan areas have only 9% of users, which contradicts the trend in other countries⁶⁹. We could suggest that the cause is that in large metropolitan areas the statistically predominant social classes are medium-low and lower class, among which the use of Internet is still low, while the relative percentage of medium-medium class over the total population of the town is higher in the middle sized towns.

Concerning the marital status of Internet users, the percentage of single users is the highest (56.9%), while the percentage of widow users is the lowest $(0.4\%)^{70}$. These data are in concordance with the data referring to number of people in households and age of Internet users.

How is Internet used? We could suggest that there are several typologies of uses of the Internet. One of the main uses of the Internet is the search for information, either from information sources (89.5% of users) or general media information (81.6% of users). This percentage decreases when the searched information is more specific, such as financial information (34.2% of users) or weather forecast information (21.7% of users) (See Fig 8). The hypothesis here could be that Internet is an informational tool, and the more specific the information is the lower the percentage of Internet users (maybe because of the previously mentioned cultural factor). Internet is a principal source of information because it has two big advantages over other sources: it is quick and there is access to worldwide information. Business firms specially value these advantages when they search for information about their competitors. Another data that supports this hypothesis is the number of bookmarks stored in browsers: 38.8% of Internet users store between 11 and 50 bookmarks⁷¹, which may be considered a high because it means that at least the user usually visits between 11 and 50 pages of his interest.

⁶⁷ See V.140

⁶⁸ See V.124

⁶⁹ See V.128

⁷⁰ See V.137 ⁷¹ See V.39

	AIMC (2001)	CIS (2001)	Tecnologías información (2000)
Searching for information in web directories or search engines	89.5%	80.7%	82%
Reading news and headlines in online newspapers and magazines	81.6%	50.1%	
Sending short messages to mobile phones	56.4%	29.7%	
Downloading MP3	39.4%		21.2%
Consulting financial information	34.2%		
Consulting the movies /entertainment / movie guide	29.1%		
Sending e-cards	29%		
Searching for phone numbers or addresses	26.2%		
Searching for a job	25.2%	18.2%	
Consulting the weather forecast	21.7%		
Consulting the TV guide	19.6%		
Network games	19.3%	13.6%	
Videoconference	6.9%	2.9%	

Fig 8 - Distribution of Internet users according to their kind of activity when surfing the web

Internet is as a communication tool, either individual or in group. For individual communication, the most important use is email (74.2% or 95.5% of users depending on the source). Email is followed by sending messages to mobile phones (56.4%), sending e-cards (29%) and videoconference (6.9%). Regarding the group communication, only 21.1% users chat⁷². If we analyse these data we do not find support to the idea that Internet is an isolating technology, because the data clearly show its communicational use. On the other hand, Internet is not a substitution for other forms of communication, such as phones. In Spain, the number of mobile phone users is increasing at a fast pace: in 1995 the number of mobile phone users was of 944,000, while the number for 2000 was 24,344,000 users⁷³, which shows the quick penetration of this technology due to the lowering of its cost and availability of the area coverage for mobile telephony.

The Internet is also a source of leisure and entertainment. Internet users download music using mp3 technology (39.4% of users)⁷⁴; visit adult websites (38% of users)⁷⁵ and play network games (19.3% of users) (See Fig 8). It could be hypothesized that mp3 downloaders are young people who download free mp3 because they do not have money to buy the original CD, although the sound quality of mp3 is lower. Regarding the adult websites visitors, we could say that Internet allows the visitor's privacy and the comfort of not having to go out from home.

Internet can be regarded as an instrumental tool: 25.2% of Internet users search for a job by Internet (See Fig 8). This use is highly selective due to the kind of job offers found on the Internet, which are usually related to the field of technology.

It is also relevant to analyze frequency of connection to the Internet. Nowadays, the majority of Internet users connect to the Internet daily (43.1% of users), while only 18.8% of users connect to it monthly. At the very beginning of the penetration of the Internet, users used mostly to connect to it weekly or occasionally, probably because of the cost and of the few household with access. As these two facts have considerably changed, the data about the evolution the frequency of use for the 1997-2001 period show that the growth rate for the "daily" variable is of 72%, while the growth rate for the "monthly" option is 7% for the 1997-2001 period⁷⁶. This means that while the daily variable growth rate has significantly increased, the monthly variable growth rate has increased only a little. We could hypothesized that the Internet is everyday more a part of our life.

Another social aspect that has been affected by the Internet is education. There are no data for Spain regarding the educational use of Internet at primary or secondary schools, but the available data show that

⁷² See V.26

⁷³ See V.15

⁷⁴ See V.31 ⁷⁵ See V.32

⁷⁶ See V.32



Internet is an educational tool for adults: 34.6% of the online education courses are economic and finances courses⁷⁷. It is also important note that 47% of online courses last less than 50 hours⁷⁸. It could be inferred that these courses are professional and training courses addressed to the work force. Another remarkable fact is that online education tends to be cheaper than traditional education: the cheaper the cost/credit is the higher the number of online courses is.

As in other countries, telecommuting is not a widespread practice. Only 2.8% of the total working population in Spain are telecommuters⁷⁹. Instead of the idea of "telecommuting" we should think about the concept of "work online" from a variety of places, including the workplace.

We have discussed the data on e-commerce earlier. Let us now take into account e-banking. The fact is that 49% of Internet users do not use e-banking, but 51% of users do it⁸⁰. The main causes for not doing it are the lack of Internet security (24%) and the lack of customised services (23.6%)⁸¹. On the other hand, online bank users remark as most valuable aspects its availability (49.2%) and its easiness (28.1%)⁸². If we compare the data in the e-commerce and the e-banking areas, we could suggest that it is the same kind of Internet user who practises both activities: if an Internet user has an online bank account his readiness to shop on the Internet is higher than somebody who has not.

Let us address now the issue of Internet and sociability. Since the onset of the Internet much has been said about this matter, specially on the idea of Internet as an isolating technology. It has been previously showed that the Internet is a communication tool, by means of e-mail use and mobile messaging. In addition, we could say that direct sociability is not affected by Internet because only 8.4% of Internet users substitute the time spent in the Internet for going to the cinema or only 10.1% for going out with friends⁸³. Regarding indirect sociability, Internet may affect activities such as watching TV, but it is still very early to know the real impact of the Internet in other media.

In sum, like in the Catalonia case, Internet in Spain is characterized as a personal and communicational technology, fully weaved into the lives of people. It does not isolate, in fact it expands social networks. And it is primarily a tool of personal expression and educational development. However, the business uses of the Internet are still very limited in Spain, with the major exception of e-banking, probably due to a systematic effort undertaken by the banking industry. There is a substantial gap in the uses of Internet between the young people on the one hand, and the mature and older segments of the population on the other hand. There is also an educational divide between the highly educated segment of the population and the rest. So, the users of the Internet clearly represent the newest, and most dynamic part of the Spanish society. That this group does not isolate itself from the mainstream of society, thus adding another layer to the division of society, depends to a large extent on public policy initiatives and also on the openness by business firms to the advantages provided by networking technology.

⁸⁰ See V.46 ⁸¹ See V.88

⁷⁷ See V.118

⁷⁸ See V.122

⁷⁹ See V.86

⁸² See V.87

⁸³ See V.25



3.1 Tables on Spain (*)

(Organized by Variables)

(*) We have organized the tables according to the variables we have studied on the basis of available data. We have numbered the variables, given one number to each variable, as per the list of variables shown in the appendice of this working paper.

Thus, tables do not have numbers, variables do. Each number is unique for each variable. All data concerning the variable from various sources are included in the table characterizing each variable. However, since our study concerns three different contexts: Catalonia, Spain, and Spanish Regions, tables are presented in three different blocks at the end of each section of the paper. For each context, we continue to identify the variables by their unique number, but naturally the data for the same variable are different in each one of the three contexts, and so are the tables that share the same number of the end of the three sections.

In each table we have indicated the specific source for each one of the statistics displayed in the table. Statistics may differ and usually do. This is exactly the purpose of our study: to show the diversity of estimates for the same variable, referring the reader to the methodological note in appendice for her/him to evaluate the reliability of each one of the sources presented.



3.1.1 Internet use variables (Spain)

Access to Internet and use by households and persons in Spain

1. % Households connected to the Internet

EGM ⁸⁴ (2001)	AIMC (2001)	eEspaña 2001 ⁸⁵	Telefónica ⁸⁶ (2001)	CIS (2001)	Tecnologías información (2000)
14.3%		10%	10%	NA	14.2%

% Persons connected to the Internet 3.

EGM (2001)	AIMC (2001) ⁸⁷	eEspaña 2001	Telefónica (2001)	CIS (2001)	AECE (2001)
20.3%		13.7%	13.7%	23.9%	23.5%

5. Evolution of percentage of persons connected to the Internet (1996 - 2001)

	EGM (2001)				
	% of persons connected to the Internet	Yearly growth rate (%)			
1996	0.8%	-			
1997	2.7%	237			
1998	4.8%	77			
1999	7.2%	50			
2000	11.3%	56			
2001	20.3 %	79			
Total 1996 – 2001		2437			

7. Distribution of households connected to the Internet by year of connection

	EGM (2001)	AIMC (2001)	eEspaña 2001	Telefónica (2001)	CIS (2001)
Households connected to the	52.9%				
Internet in the last year					
Households connected to the	45.4%				
Internet more than a year ago					
Doesn't know / doesn't answer	1.7%				

8. Distribution of persons connected to the Internet by year of connection

	EGM (2001)	AIMC (2001)	eEspaña 2001	Telefónica (2001)	CIS (2001)
Less than 6 months		8.2%			
Between 6 and 12 months		10.4%			
More than a year and less than		14.8%			
two years					
More than two years and less		17.2%			
than three years					
More than three years and less		25.6%			
than five years					
More than five years		17.8%			
Doesn't know / doesn't answer		5.9%			

9. % Households with a computer

 ⁸⁴ All percentages in EGM are over the total population in Spain except when indicated
 ⁸⁵ All percentages in eEspaña 2001 are over the total population in Spain except when indicated. Original source: INRA Europe 2000
 ⁸⁶ All percentages in Telefónica are over the total population in Spain except when indicated. Original source EITO 2001

⁸⁷ The percentage is omitted in this case because the only way to fill in the survey was by Internet.



EGM (2001)	AIMC (2001)	eEspaña 2001	Telefónica (2001)	CIS (2000)
32.5%		40%		36.7%

11. % Internet connected persons among persons with access to a computer

EGM (2001)	AIMC (2001)	eEspaña 2001	Telefónica (2001)	CIS (2000)
60.6				59.4%

14. % of mobile phone users over Spanish population

EGM (2001)	AIMC (2001)	eEspaña 2001 ⁸⁸	Telefónica (2001) ⁸⁹	CIS (2001)
		64.5%	64.5%	58% ⁹⁰

15. Evolution of mobile phone users (1995 - 2001)

	Telefónica (2001)	
	Number of mobile phone users	Yearly growth rate (%)
1995	944,000	-
1996	2,996,000	217
1997	4,337,000	44
1998	7,051,000	62
1999	15,005,000	112
2000	24,344,000	62
Total 1995 - 2001		2478

16. Distribution of Internet users according to their frequency of connection to the Internet (% of Internet users over total Internet user)

	EGM (2001)	AIMC (2001)	eEspaña 2001	Telefónica (2001)	CIS (2001)
Daily	43.1%				
Weekly	38%				
Monthly	18.8				
Occasionally	NA				

17. Evolution of percentage of Internet users by frequency of connection to the Internet (% of Internet users over total Internet users) (1997 - 2001)

				EGM	(2001)				
	Daily Weekly		ekly	Month	Monthly		Occasionally		
	% of persons over total persons connected to the Internet	Yearly growth rate (%)	% of persons over total persons connected to the Internet	Yearly growth rate (%)	% of persons over total persons connected to the Internet	Yearly growth rate (%)	% of persons over total persons connected to the Internet	rate (%)	wth
1997	25%		28.8%		17.5%		28.7		
1998	31.1%	24	30%	4	12.5%	-28	26.4	-8	
1999	30.9%	- 0.64	27.3%	9	15.3%	22	26.6	0.7	
2000	38.3%	23	36.7%	34	9.8%	-35	15.3	-42	
2001	43.1%	12	38%	3	18.8%	91	NA		
Total 1997- 2001 ⁹¹		72		31		7		-46	

 ⁸⁸ Original source : CMT, Informe sobre la competencia en el mercado de telefonía móvil
 ⁸⁹ Original source : CMT, Informe sobre la competencia en el mercado de telefonía móvil
 ⁹⁰ Over a sample of Spanish population
 ⁹¹ Except in the group "occasionally", in which the data are only available until the year 2000, so the value is in that case "Total 1997-2000"



		AIMC	(2001)	
	Household	Work	University / Centre of studies	Cybercentre/ Library
Several times per day	23.7%	34.2%	5.3%	0.6%
Every day	38.4%	14.2%	5.2%	1.1%
Several times per week	16.2%	6.1%	6.9%	2.6%
Once a week	4.7%	2.2%	3.9%	2.2%
Twice a month	1.8%	1.1%	3.3%	4.5%
Once a month	0.8%	0.4%	1.6%	3%
Less than once a month	0.7%	0.9%	3.9%	9.3%
Never or almost never	9.5%	28.9%	44.9%	52.5%
Doesn't know / doesn't answer	4.4%	11.9%	25%	24.1%
Total	100%	100%	100%	100%

18. % of Internet users distributed by place of connection and by frequency of use

19. % of Internet users by place of Internet connection (over total persons connected to the Internet)

	EGM (2001)	eEspaña 2001 ⁹²	Telefónica (2001)	CIS (2001)
Household	54.7%	44%	55%	
Work	31.0%	33%		
University / Centre of studies	16.5%	12%		
Other / Doesn't know or doesn't answer	20.4%	11%		

20. Evolution of percentage of Internet users by place of Internet connection (over total persons connected to the Internet) (1997 – 2001)

				EGM (2001)			
	Household		Wo	Work		University / Centre of		clude "doesn't
					st	udies	know or do	besn't answer")
	% of	Yearly	% of	Yearly	% of	Yearly growth	% of	Yearly growth
	persons	growth	persons	growth	persons	rate	persons	rate
	over total	rate	over total	rate	over total	(%)	over total	(%)
	persons	(%)	persons	(%)	persons		persons	
	connected		connected		connected		connected	
	to the		to the		to the		to the	
	Internet		Internet		Internet		Internet	
1997	31.7%		42.3%		24.2%		8.2%	
1998	39.9%	25	39.9%	-5	21%	-13	11.3%	37
1999	45.1%	13	40%	0.2	19.8%	-5	9.1%	-19
2000	52.5%	16	40.7%	1	18.2%	-8	9%	-1
2001	54.7%	4	31%	-23	16.5%	-9	20.4%	120
Total 1997- 2001		72		-26		-31		140

22. Weekly average time of connection to the Internet

	EGM (2001)	AIMC (2001)	eEspaña 2001	Telefónica (2001)	CIS (2001)
Connected to the Internet less		2.7%			
than an hour					
Connected to the Internet		13.9%			
between 1 – 4 hours					
Connected to the Internet		26.5%			
between 4 –10 hours					
Connected to the Internet		34.7%			
between 10 – 30 hours					
More than 30 hours		21.1%			
Doesn't know or doesn't		1.1%			

⁹² Original source: AIMC (2001)



answer			

23. Monthly average time of connection to the Internet (Measured in hours/month)

EGM (2001)	AIMC (2001)	eEspaña 2001 ⁹³	Telefónica (2001)94	CIS (2001)
		8.7	8.1	

24. Intensity of Internet use by day of the week

	EGM (2001)	AIMC (2001)	eEspaña 2001	Telefónica (2001)	CIS (2001)
From Monday to Friday		45.5%			
Weekends and holidays		17%			
Any day of the week		37.1%			
Doesn't know or doesn't answer		0.6%			

25. % of Internet users who substitute the time spent in Internet for other activities

AIMC (2001) 95	
Watch TV	65%
Do nothing	58.3%
Search for information in libraries. guides	39.9%
Sleep	25.5%
Read books	20.7%
Study	13.8%
Do sport	13.1%
Go out for a walk / with friends	10.1%
Go to the cinema	8.4%
Work	6.1%
Other activities	3.7%

26. Distribution of Internet users according to their kind of activity in the Internet⁹⁶

	EGM (2001)	AIMC (2001)	eEspaña 2001	Telefónica (2001)	CIS (2001)	Tecnologías información (2000)
World Wide Web	89.7%	93%	96%		85.8%	
e-mail	74.2%	95.5%	61%		75.5%	42%
FTP	30.5%	35.3%			20.4%	35.9%
Chat		33.5%	28%		21.9%	
Newsgroups		13.7%	10%		3.9%	
Telnet		7.2%			3.2%	
Other	44.8%	18.9%	26%			

27. Evolution of Internet users according to the kind of activity on the Internet

EGM (2001)								
WWW		E-mail		FTP ⁹⁷		Others (Include "doesn't know or doesn't answer")		
% of persons over total persons connected to the Internet	Growth rate (%)	% of persons over total persons connected to the Internet	Growth rate (%)	% of persons over total persons connected to the Internet	Growth rate (%)	% of persons over total persons connected to the Internet	Growth rate (%)	

⁹³ Original source: Net Value (2001)

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⁹⁴ Original source: Net Value (2000) ⁹⁵ The total sum of percentages is higher than 100% because many of the surveyed persons marked two or more answers. The Telefónica (2001) study report the same finding. ⁹⁶ The total sum of percentages is higher than 100% because many of the surveyed persons marked two or more answers ⁹⁷ FTP stands for "File Transfer Protocol"



1997	78.3%		67.8%		35.7%		31.8%	
1998	80.4%	2	76.3%	12	40.2%	12	29.2%	-8
1999	82.8%	2	74.7%	-2	34%	-15	26.6%	-8
2000	86%	3	81.3%	8	38.1%	12	27.1%	-1
2001	89.7%	4	74.2%	-8	30.5%	-19	44.8%	60
Total		14		9		-14		40
1997-								
2001								

28. Distribution of Internet users according to the kind of activity when surfing the web⁹⁸

	EGM (2001)	AIMC (2001)	eEspaña 2001	Telefónica (2001)	CIS (2001)	Tecnologías información (2000)
Searching for information in web directories or search engines		89.5%			80.7%	82%
Reading news and headlines in online newspapers and magazines		81.6%			50.1%	
Sending short messages to mobile phones		56.4%			29.7%	
Downloading MP3		39.4%				21.2%
Consulting financial information		34.2%				
Consulting the movies /entertainment / movie guide		29.1%				
Sending e-cards		29%				
Searching for phone numbers or addresses		26.2%				
Searching for a job		25.2%			18.2%	
Consulting the weather forecast		21.7%				
Consulting the TV guide		19.6%				
Network games		19.3%			13.6%	
Videoconference		6.9%			2.9%	

31. % Internet users who use Napster

EGM (2001)	AIMC (2001)	eEspaña 2001 ⁹⁹	Telefónica (2001)	CIS (2001)
		20%		

32. % Internet users who visit adult websites

EGM (2001)	AIMC (2001)	eEspaña 2001 ¹⁰⁰	Telefónica (2001)	CIS (2001)
		38%		

 ⁹⁸ The total sum of percentages is higher than 100% because many of the surveyed persons marked two or more answers
 ⁹⁹ Original source: Net Value (2001)
 ¹⁰⁰ Original source: Net Value



33. Distribution of Internet users according to the main problems they face when surfing Internet

AIMC (2001) ¹⁰¹				
Slow speed	82.1%			
Quality of phone connection	46.3%			
Too much advertising	41.1%			
Phone cost	41%			
Security	38%			
Quality of service providers	26.6%			
Lack of confidentiality	22.9%			
Language	21.5%			
Cost of the service provider	13.3%			
Other problems	4%			

34. Most visited .es domains over most visited websites (ordered by number of visits)

Telefó	nica (2001) ¹⁰²
Website	Number of visited webs
Terra España	759.2
Ya.com	283.8
Yahoo.es	163.4
Navegalia	102.3
EBankinter	66.1
Grupo Intercom	40.6
Páginas Amarillas	35.2
World Online	24.0
La Caixa	21.8
Infojobs.net	21.6
Segundamano	13.7
Infobolsa	12.7
Plus.es	12.1
Corazón Gay	11.4
Grupo Anuntis	11.4
Canal 21	11.2
BOE	7.1
Agencia Tributaria	4.4
IDG	3.4

35. Distribution of email users according to the weekly average of sent / received emails

AIMC (2001)				
	Received	Sent		
Less than five	10.8%	23.5%		
Between 5 and 20	40.3%	50.7%		
Between 21 and 50	25.5%	16.5%		
Between 51 and 100	13.0%	5.8%		
More than 1000	10.2%	3.0%		
Doesn't know or doesn't answer	0.2%	0.9%		

36. Distribution of email users according to the email software used

	AIMC (2001)	
Outlook (Microsoft)	64.2%	
Messenger (Netscape)	12.6%	
CC:mail (Lotus)	2.4%	
Exchange (Microsoft)	2.2%	

¹⁰¹ The total sum of percentages is higher than 100% because many of the surveyed persons marked two or more answers
 ¹⁰² The data refer to March 2001. Original source: OJD (2001)



Eudora	2.2%
Other software	6.6%
Doesn't know or doesn't answer	9.8%

37. Distribution of email users according to the frequency of received spamming

	AIMC (2001)	
More than one every day	17.8%	
One per day	4.4%	
Several per week	25.1%	
One per week	5.4%	
Several per month	13.2%	
One per month	4.9%	
Lower frequency	14.9%	
Never	14.1%	
Doesn't know or doesn't answer	0.3%	

38. % of Internet users with a personal website

AIMC (2001)				
Yes	21.4%			
No	76.6%			
Doesn't know or doesn't answer	1.9%			

39. Distribution of Internet users by number of bookmarks stored in their browsers

AIMC (2001)		
No bookmarks stored	14%	
Between 1 and 10 bookmarks	18.3%	
Between 11 and 50 bookmarks	38.8%	
Between 51 and 100 bookmarks	13.7%	
More than 101 bookmarks	9.2%	
Doesn't know or doesn't answer	6.8%	

E-business related uses by persons and households in Spain

40. Distribution of Internet shoppers according to the product they shop on the Internet

	AIMC (2001)	Telefónica (2001) ¹⁰³
Books / Magazines	18.8%	21%
Cd's	12.7%	24.8%
Journeys /Entertainment / Spare time / Tickets	12.6%	16.3%
Hardware	12.2%	
Software	11.7%	9.9%
Electronic items	7.4%	9.6%
Video /DVD	6.8%	
Food / Drinks	3.9%	
Clothes	3.1%	
Flowers	2.7%	
Financial services	1.2%	
Mobile phones	0.9%	
Cars / Motorbikes / Accessories	0.8%	
Internet services and domains	0.8%	
Other	4.2%	

41. Distribution of Internet shoppers according to the yearly amount of money they have spent when shopping on the Internet

 $^{^{\}rm 103}$ The eEspaña 2001and the AECE (2001) study report the same finding



	AECE (2001)
Less than 5.000 ptas	19.3%
Between 5.000 and 10.000 ptas	12.9%
Between 10.000 and 25.000 ptas	26.4%
Between 25.000 and 50.000 ptas	13.1%
More than 50.000 ptas	28.4%

42. Distribution of Internet shoppers according to their reasons for shopping on the Internet

	Telefónica (2001) 104	
Easier	37.8%	
Cheaper products	21.5%	
It's the only way for shopping	16.2%	
Because it's fast	13%	
To try it	9.4%	
Better accessibility to products	2.8%	
Other	1%	

43. Distribution of Internet users according to their reasons for not shopping on the Internet (% over Internet users who don't shop on the Internet)¹⁰⁵

Telefónica (2001) / AECE (2001)		
Lack of information	28.6%	
Distrust in the mode of payment	25.5%	
It is not advantageous	24.9%	
Afraid of giving personal data	24.3%	
Distrust in the way the product is presented	17.3%	
The product is not available on the Internet	5.4%	
Not very much diversity in the offer of product	2.5%	
Problems for receiving the product at home	2.2%	
Cost of the call	1.9%	
Shipping costs	0.6%	

44. Distribution of Internet shoppers according to the mode of payment on the Internet (% of Internet shoppers over Internet shoppers who have bought a service/product in the last 12 months)

	AIMC (2001)	AECE (2001) ¹⁰⁶
Credit card	56.3%	55.2%
Company credit card	2%	
Payment upon reception	29.4%	40.9%
Bank charge	3.2%	9.7%
Bank transfer	5.3%	2.7%
Other	1.7%	5.8%
Doesn't know or doesn't answer	2%	

45. Distribution of Internet users according to their opinion about credit card security on the Internet¹⁰⁷

	Telefónica (2001) ¹⁰⁸	AIMC (2001)
Definitely agree	5%	8.3%
Generally agree	23%	31.5%
Hesitant	21%	10.7%
Generally disagree	26%	29.7%
Definitely disagree	14%	18.4%
Doesn't know or doesn't answer	11%	1.5%

¹⁰⁴ The eEspaña 2001and the AECE (2001) study report the same finding
 ¹⁰⁵ The total sum of percentages is higher than 100% because many of the surveyed persons marked two or more answers

¹⁰⁶ The total sum of percentages is higher than 100% because many of the surveyed persons marked two or more answers

¹⁰⁷ The surveyed persons expressed their level of agreement to the sentence "The use of credit cards for on-line shopping is safe"
 ¹⁰⁸ Original source: CommerceNEt, Encuesta sobre los usarios de Internet y el comercio electrónico (junio 2000)



46. % of on-line banking over Internet users (distributed by kind of use)

AIMC (2001)		
Only to consult the balance summary	24.9%	
Consult of the balance summary and transactions	25.1%	
No	49%	
Doesn't know or doesn't answer	1%	

Infrastructures related to the use of Internet in Spain

49. % of Internet hosts per 100 inhabitants (geographical area)¹⁰⁹

	Métrica SI (2000) ¹¹⁰	
Spain	0.77%	

50. % of web servers per 1000 inhabitants (geographical area)¹¹¹

Métrica SI (2000) ¹¹²		
Spain	0.59%	

51. % of secure web servers per 100.000 inhabitants (geographical area)¹¹³

Métrica S	I (2000) ¹¹⁴
Spain	0.61%

52. % of household Internet users with a high speed Internet access (distributed by kind of access)

	EGM (2001)	AIMC (2001)
RDSI	4.5%	6.2%
DSL	2.3%	6.8%
Cable	3.6%	8.8%
Total	10.4%	21.8%

Internet access and uses by business firms in Spain

53. % of business firms with Internet access ¹¹⁵

	Tecnologías SSI (2000)	Telefónica (2001) ¹¹⁶
Access to the Internet	51.7%	64.5%
Not access to the Internet	48.3%	33.5%

56. Distribution of business firms with Internet connection according to the kind of use of the Internet¹¹⁷

Tecnologías SSI (2000)

¹⁰⁹ Data for 1999

¹¹⁰ Original Source: Network Wizards

¹¹¹ Data for 1998

¹¹² Original Source: Nercraft, OCDE

¹¹³ Data for 1999

¹¹⁴ Original Source: Nercraft, OCDE

¹¹⁵ This value is also available in the CMT study, but it is omitted because the business firms of the survey are all firms with an .es domain, so the value is of Internet access is 100%.

¹¹⁶ Original source: CommerceNEt, Encuesta sobre los usarios de Internet y el comercio electrónico (junio 2000)
¹¹⁷ The total sum of percentages is higher than 100% because many of the surveyed business firms marked two or more answers



Search for information	83.4%
Data transmission	62%
Financial transactions	41.5%
Analysis of competitors	21.4
Human resources	6.9%

57. % of business firms whose main activity is developed on the Internet

CMT ((2001)
Yes	8.5%
No	91.5%

58. Distribution of business firms with Internet access according to the number of full time employees needed for the presence of the firm on the Internet

CMT (2001)		
None	36.1%	
Less than 1 employees	33.6%	
1 employee and less than 2	19%	
2 employees and less than 3	4.7%	
3 employees and less than 4	1.9%	
4 or more employees	2.5%	
Doesn't know or doesn't answer	2.2%	

59. % of business firms connected to the Internet with a website¹¹⁸

	Tecnologías SSI (2000)	Telefónica (2001)/ AECE (2001)
With a website	15%	24%
Without a website	85%	73.9%
Doesn't know/doesn't answer		2.1%

61. Distribution of websites of business firms according to the kind of hosting

CMT (2001)		
% of websites of business firms hosted in an own server	19.6%	
% of websites of business firms hosted in an external server	77.7%	
Doesn't know or doesn't answer	2.8%	

62. Distribution of websites of business firms according to the size of the site (measured in Mb)

CMT (2001)		
% of websites of business firms of less than 12 Mb	27.3%	
% of websites of business firms of 12 to 80 Mb	23.1%	
% of websites of business firms of more than 80 Mb	8.5%	
Doesn't know or doesn't answer	41%	

63. Distribution of websites of business firms according to the kind of access

CMT (2001)		
% of websites of business firms which are open	80.4%	
% of websites of business firms partially restricted (they are free but they need a register)	9.9%	
% of websites of business firms partially restricted (of payment)	2.8%%	
Doesn't know or doesn't answer	6.9%	

¹¹⁸ This value is also available int the CMT study, but it is omitted because the business firms of the survey are all firms with an .es domain, so they all have a website



64. Distribution of websites of business firms according to the monthly traffic of the website

CMT (2001)	
% of websites of business firms with 2000 or less visits per month	8.8%
% of websites of business firms with more than 2000 visits per month	3.9%
Doesn't know or doesn't answer	87.3%

67. Distribution of services/products offered by business firms on the Internet according to the kind of product/service

	Telefónica (2001)	AECE 2001
Booking of hotels / accommodation	31%	22.2%
Booking of journeys	14%	10.3%
Books	11%	8.3%
Software	9%	6.3%
Education	8%	5.6%
Hardware	7%	5.2%
Insurance	6%	4.5%
Financial services	5%	3.3%
Drinks	5%	3.3%
Entertainment	4%	3.2%

70. Evolution of e-business in Spain in the B2C (Business to Consumer) e-commerce

eEspaña 2001 / Telefónica (2001) / Price Waterhouse (2000) / AECE 2001			
	Total amount of money (measured in million pesetas) Yearly growth rate (%)		
1997	800		
1998	3,400	325	
1999	11,951	251	
2000	34,000	184	
Total 1997 –2000		4,150	

71. Evolution of e-business in Spain in the B2B (Business to Business) e-commerce

eEspaña 2001		
Total amount of money (measured in million pesetas) Yearly growth rate (%)		
1999	1,250	
2000	4,350	248
Total 1999 –2000		248

74. Distribution of business firms which sell products on-line according to the main problems they have to sell their products on the Internet

Telefónica (2001) / AECE (2001)		
No problems	34.5%	
Distrust in the mode of payment	25.1%	
Internet is still unknown	17.4%	
Habits of the consumer	14.3%	
Problems for having access to new IT	9.1%	
Internet speed	7.7%	
Few Internet shoppers	4.4%	
Costs for the consumer	3.2%	
High selling costs	2.6%	
The target customer is inappropriate	2.5%	
Conflict with traditional selling	2.4%	
Logistics / distribution problems	2%	



Lack of finance	1.5%
Not part of the marketing plan	1.4%
Inappropriate product for the Internet	1.2%

75. Distribution of business firms which do not sell their products on-line according to their reasons for not selling their products on-line

Telefónica (2001) / eEspaña 2001/ AECE (2001)	
Inappropriate product for the Internet	34.7%
No need to sell on-line	23%
Small size of the firm	16.2%
The target customer is inappropriate	12.6%
Lack of technological knowledge	9.8%
Not a clear business opportunity	6.6%
Conflict with traditional selling	6%
Not thought about on-line selling	5.1%
Developing the idea of selling on-line	4.3%
High costs	2.1%
Lack of time	1%
Lack of security	0.7%
Other	0.7%

76. Percent distribution of Internet portals by activity

eEspaña 2001 ¹¹⁹	
Services	56%
Entertainment	21%
Shops	19%
Industry	14%
Culture and Education	10%
Accommodation	4%
Health	4%
Searchers	2%

77. % of employees of business firms with intranet access by department

eEspaña 2001 ¹²⁰	
Top management	74%
Management	62%
I+D	55%
Marketing	55%
Purchases	54%
Sales	53%
Production	48%
Human resources	47%

78. Distribution of business firms according to the kind of free access content of their intranet (% over business firms with intranet)

eEspaña 2001 ¹²¹	
Internal memos	44%
General information of the firm	41%
Data base / files	33%
Information by departments	27%
Sales information /accounting	20%
Información of Human Resources	19%
Information about new customers	17%

¹¹⁹ Original source: REDmarket (2001)
 ¹²⁰ Original source: Paloma Sánchez & others
 ¹²¹ Original source: Paloma Sánchez & others



Training	12%
Management	8%
Computer services	7%
Repairing services	3%
Human resources	1%
Purveyors / Purchases	1%
Information about banks	1%
Doesn't know or doesn't answer	1%

79. Percent distribution of business firms according to the level of penetration of IT ¹²²

eEspaña 2001	
Integrated	2%
Advanced	8%
In process	29%
Emergent	46%
Excluded	15%

80. Evaluation of the IT impact on business firms according to the level of penetration of IT

eEspaña 2001 ¹²³	
Kind of firms according to the level of penetration of IT ¹²⁴	Degree of impact ¹²⁵
Integrated / Advanced	7
In process / Emergent	5.8
Excluded	4.4

81. Evaluation of the expectation of the IT impact on business firms according to the level of penetration of IT

eEspaña 2001 ¹²⁶	
Kind of firms according to the level of penetration of IT ¹²⁷	Degree of impact ¹²⁸
Integrated / Advanced	7.6
In process / Emergent	6.9
Excluded	5.6

82. Evaluation of the importance of the barriers to IT penetration in business firms (Evaluated by business firms with no IT access)

eEspaña 2001 ¹²⁹	
Kind of barriers	Degree of importance ¹³⁰
Problems due to the firm's activity or to the firm's size	5.2
Financial problems	5.1
Human Resources problems	5
Technical problems	4.8

84. Percent distribution of business firms according to the frequency of IT training among their employees

¹²² In order to evaluate the level of IT penetration the fims have been classified according to their availableness to: a)access to the Internet, b)having a website ©)having an intranet, d) selling products on-line by means of their own website According to these criteria, there are five kinds of firms: 1 - Integrated, which have all the previously mentioned elements, 2 - Advanced, which have access to Internet, a website and an intranet, 3 - In process, which have two of the above elements, 4 - Emergent, which have only access to the Internet 5 - Excluded, which have none of the previously mentioned elements

¹²³ Original source: Paloma Sánchez & others

¹²⁴ See footnote 122

¹²⁵ There is a scale in which 0= no impact and 10= maximum impact

¹²⁶ Original source: Paloma Sánchez & others

¹²⁷ See footnote 122

¹²⁸ See footnote 125

¹²⁹ Original source: Paloma Sánchez & others

¹³⁰ There is a scale in which 0= no importance and 10= maximum importance



Tecnologías SSI (2000) ¹³¹	
Usually	1.2%
Occasionally	48%

Evaluation of the importance of the barriers to telecommuting in business firms (% of mentions 85. of the surveyed firms)

Telefónica (2001) ¹³²		
Not enough knowledge of what telecommuting is	76%	
Data security	73%	
Productivity and quality of work	70%	
Management of the telecommuter	67%	
High associated costs	65%	
Communication	58%	
Refusal of the employees	47%	
Refusal of the unions	40%	

86. % of telecommuters over the total of the working population

Telefónica (2001) Métrica SI (2000) ¹³³	Tecnologías SSI (2000)
2.8%	2.3%

Percent distribution of the most valuable aspects of online bank according to online bank 87. customers

eEspaña 2001 ¹³⁴		
Availableness	49.2%	
Comfortableness	28.1%	
Rapidness	12.2%	
Better financial services	7.6%	
Personal service	1.6%	
Security	1%	

88. Percent distribution of barriers to online bank use according to Internet users

eEspaña 2001 ¹³⁵		
Lack of security	24%	
Lack of customized service	23.6%	
Slowness	14.9%	
Lack of services	13%	
Lack of products	10.8%	
Difficult use	7.9%	
Time spent	5.5%	

90. Percent distribution of business firms according to the main objectives of the firms in relation to their website

	CMT (2001) ¹³⁶	Telefónica (2001) /AECE (2001) ¹³⁷
Information about the products /services of the firm	70.5%	50.8%
Corporative image	69.7%	
Advertising	53.4%	61.1%
Help desk	28.1%	10.2%
Sales / e-commerce	25.3%	10.3%

¹³¹ The total sum of percentages is less than 100% because it is unknown the rest of answering possibilities. ¹³² Original source: Ecatt and Telefónica (2001)

 ¹³² Original source: Ecatt and Telefonica (2001)
 ¹³³ Data for 1998.Original source: EcaTT Project.
 ¹³⁴ Original source: AUI(2001)
 ¹³⁵ Original source: AUI(2001)
 ¹³⁶ The total sum of percentages is higher than 100% because many of the surveyed business firms marked two or more answers
 ¹³⁷ The total sum of percentages is higher than 100% because many of the surveyed business firms marked two or more answers



Internal communication	11.3%	
Economic information about the firm	4.7%	
Other	5%	2.5%
Cost reduction		0.4%
Doesn't know / doesn't answer		1.6%

91. Percent distribution of business firms with a website according to the total annual costs of the maintenance of their website

CMT (2001)		
No costs	2.2%	
0-99.999 pts	25.3%	
100.000 – 199.000 pts	14.9%	
200.000 – 1.599.000 pts	38.8%	
1.600.000 – 6.399.999 pts	8.5%	
6.400.000 pts or more	7.2%	
Doesn't know or doesn't answer	3%	

92. Percent distribution of business firms with a website according to the human resources annual costs of the maintenance of their website

CMT (2001)		
No costs	7.4%	
0-99.999 pts	47.4%	
100.000 – 199.000 pts	12.7%	
200.000 – 1.599.000 pts	21.2%	
1.600.000 – 6.399.999 pts	8%	
6.400.000 pts or more	2.2%	
Doesn't know or doesn't answer	1.1%	

93. Percent distribution of business firms with a website according to their forecast of the trend in costs of the maintenance of their website in a short term

CMT (2001)		
Large decrease of the costs	1.4%	
Little decrease of the costs	7.2%	
No variation of the costs	49%	
Little increase of the incomes	29.2%	
Large increase of the costs	8.8%	
Doesn't know or doesn't answer	4.4%	

94. Percent distribution of business firms with a website according to the total annual income due to their website

CMT (2001)
No income	65%
0-799.999 pts	8.5%
800.000 – 6.399.999 pts	4.4%
6.400.000 – 25.599.000 pts	1.4%
25.600.000 pts or more	4.1%
Doesn't know or doesn't answer	16.5%

95. Percent distribution of business firms with a website according to the annual sale of products /services on-line income

CMT (2001)		
No income	72.2%	
0-799.999 pts	10.7%	
800.000 – 6.399.999 pts	5.5%	
6.400.000 – 25.599.000 pts	3%	



25.600.000 pts or more	3.6%
Doesn't know or doesn't answer	5%

96. Percent distribution of business firms with a website according to their forecast of the evolution in income in a short term due to their website

CMT (2001)		
Large decrease of the income	0%	
Little decrease of the income	0%	
No variation of the income	36.1%	
Little increase of the income	44.1%	
Large increase of the income	9.1%	
Doesn't know or doesn't answer	10.7%	

Internet uses of Public Administration & Health Organizations in Spain

105. Percent distribution of town halls of towns with more than 20.000 inhabitants according to their website presence

eEspaña 2001		
With website	72.2%	
Without website	20.7%	
Web hosted in another organisation	1.3%	
Web with domain but unavailable	5.7%	

107. Distribution of town halls according to their IT penetration level¹³⁸

eEspaña 2001		
Advanced	37%	
In process	32%	
Emergent	21%	
Excluded	10%	

Access and use of on-line education by Internet users in Spain

117. % of organisations which offer on-line education by kind of organisation

eEspaña 2001			
Business firms / consulting firms / foundations / associations 49.8%			
Universities	28.4%		
Portals	10.5%		
Public Administration	8%		
Schools / Professional associations / Unions	2.5%		
Other organisations	1.9%		

118. Distribution of e-learning offer according to the kind of content offered by e-teaching organisations

eEspaña 2001		
Economics / Finances 34.6%		

¹³⁸ In order to evaluate the level of IT penetration the town halls have been classified according to their availableness to: a)access to the Internet, b)having a website ©)having an intranet. According to these criteria, there are four kinds of town halls: 1 – Advanced, which have access all the previously mentioned elements, 2- *In process*, which have two of the above elements, 3 – *Emergent*, which have one of the previously mentioned elements, 4- *Excluded*, which have none of the previously mentioned elements



Social Sciences	17.3%
Technology (Informatics . Telecommunications)	16.7%
Humanities	16%
Biology . Medicine. Pharmacy	11.1%
Communication	8.6%
Physics. Chemistry. Maths. Statistics	6.2%
Other items of general knowledge	3.1%
Computer Sciences for beginners	34%
Marketing and Public Relations	21%
E-commerce	20.4%
Computer Sciences for programmers	19.8%
Management training	16.0%
Prevention of accidents in work	12.3%
Human Resources	11.7%
Quality	11.7%
Languages	8.6%
Ecology and Environment	7.4%
Logistics	6.2%
Production. purchases	6.2%
Teacher's training	6.2%
Other items of specific training	11.6%
Other items	11.1%

119. Distribution of organisations according to the number of courses taught by each one

eEspaña 2001		
1 course	25.9%	
2-5 courses	24.7%	
6-10 courses	31.5%	
11-20 courses	7.4%	
20-50 courses	6.8%	
51-100 courses	1.2%	
More than 100 courses	2.5%	

120. Distribution of Internet portals according to the educational content they offer

eEspaña 2001		
Economics / Finances	35.3%	
Social Sciences	5.9%	
Technology (Informatics . Telecommunications)	11.8%	
Humanities	17.6%	
Communication	5.9%	
Physics. Chemistry. Maths. Statistics	5.9%	
Computer Sciences for beginners	29.4%	
Marketing and Public Relations	41.2%	
E-commerce	17.6%	
Computer Science for programmers	17.6%	
Management training	11.8%	
Prevention of accidents in work	5.9%	
Human Resources	23.5%	
Quality	5.9%	
Languages	11.8%	
Entertainment	5.9%	
Culture	5.9%	
Vocational training	5.9%	
Other items	35.3%	

121. % of on-line courses according to the kind of organisation teaching them

eEspaña 2001		
Universities 44.9%		



Business firms / consulting firms /foundations/ associations	41.5%
Portals	6.3%
Public Administration	5.9%
Schools / Professional associations / unions	1.2%
Other organisations	0.3%

122. Distribution of total amount of on-line courses according to the amount of teaching

eEspaña 2001		
Less than 50 hours	47%	
Between 50 and 100 hours	23.3%	
Between 100 and 250 hours	7.7%	
Between 250 and 500 hours	3%	
Between 500 and 1000 hours	2.2%	
More than 1000 hours	0.8%	
Less than 60 days	11.8%	
Between 60 days and 6 months	3.5%	
More than 6 months	0.7%	

123. Distribution of professional masters degrees in Spain (on-line and traditional) according to the cost per credit

eEspaña 2001			
	Traditional	On-line	
Less than 5000 pts per credit	4	7	
Between 5000 and 10.000 pts per credit	11	18	
Between 10.000 and 15.000 pts per credit	60	22	
Between 15.000 and 20.000 pts per credit	31	13	
Between 20.000 and 25.000 pts per credit	33	-	
Between 25.000 and 30.000 pts per credit	8	-	
Between 30.000 and 35.000 pts per credit	7	-	
Between 35.000 and 40.000 pts per credit	3	1	



3.1.2 Demographical and sociological variables of Internet users (Spain)

Persons and households

126. Distribution of Internet users according to household dimension (% over all households with access to the Internet)

	EGM (2001)	AIMC (2001)	eEspaña 2001	Telefónica (2001)	CIS (2001)
Households with 1 person	4.8%	6%			
Households with 2 persons	15.6%	18.9%			
Households with 3 persons	24.6%	23.4%			
Households with 4 persons	35.3%	31.3%			
Households with 5 persons	14.3%	13.3%			
Households with 6 persons	5.2%	6%			
or more					
Doesn't know or doesn't	0.2%	1%			
answer					

128. Distribution of Internet users according to city / town dimension

	EGM (2001)	AIMC (2001)	eEspaña 2001	Telefónica (2001)	CIS (2001)
Less than 2000 inhabitants	3%				
Between 2.000 and 5.000 inhabitants	4.5%				
Between 5.000 and 10.000 inhabitants	6%				
Between 10.000 and 50.000 inhabitants	21%				
Between 50.000 and 200.000 inhabitants	23.5%				
Between 200.000 and 500.000 inhabitants	14%				
Between 500.000 and 1.000.000 inhabitants	9%				
Barcelona (City)	8%				
Madrid (City)	11%				

130. Distribution of Internet users according to their gender

	EGM (2001)	AIMC (2001)	eEspaña 2001 ¹³⁹	Telefónica (2001)	CIS (2001)
Male	61.1%	70.5%	62.8%	61%	
Female	38.9%	29.5%	37.2%	39%	

133. Evolution of difference in Internet use between genders (Male-Female percentages) (1997-2001)

		EGM (2001)	
	% of male Internet users	% of female Internet users	Difference in Internet use between genders
1997	66.9%	33.1%	33.8
1998	70.4%	29.6%	40.8
1999	68%	32%	36
2000	62%	38%	24
2001	61.1%	38.9%	22.2
Total 1997 - 2001			-11.6

 $^{\rm 139}\,\rm eEspaña$ 2001 reports the same findings as EGM



	EGM (2001)	AIMC (2001)	eEspaña 2001	Telefónica (2001)	CIS (2001)
< 14 years old			3.4%		
Between 14 –19 years old	18.5%	9.3%			
Between 20 – 24 years old	19.8%	20.7%			
Between 25 – 34 years old	30.3%	38.6%			
Between 35 – 44 years old	19.4%	19.9%			
Between 45 – 54 years old	9%	8.8%			
Between 55 – 64 years old	NA	2.1%			
> 65 years old	NA	0.5%	0.7%%		
Doesn't know or doesn't answer	3%	0.2%			

134. Distribution of Internet users by their age

136. Evolution of percentage of Internet users by their age (1997 – 2001)

							EGM (200	1)						
	% of 14-19	% of 20- 24 years	% of 25- 34 years	% of 35- 44 years	% of 45-54	% of 55- 64 years	% of >65	Yearly growth	Yearly growth	Yearly growth	Yearly growth	Yearly growth	Yearly growth	Yearly growth
	years old Interne	old Internet users	old Internet users	old Internet users	years old Internet	old Internet users	years old Internet	rate of 14-19 Internet	rate of 20-24 Internet	rate of 25-34 Internet	rate of 35-44 Internet	rate of 45-54 Internet	rate of 55-64 Internet	rate of >65 Internet
	t users	ucoro	ucono	dooro	users	00010	users	users (%)	users (%)	users (%)	users (%)	users (%)	users (%)	users (%)
1997	10.6%	19.5%	37.8%	24.5%	6.5%	1%	0.1%	-	-					
1998	10.4%	21.2%	35.7%	18.2%	12.7%	1.4%	0.4%	-1.8	8.7	-5.5	-25.7	95.3	40	300
1999	10.1%	21.7%	34.1%	21.5%	9.7%	2.6%	0.3%	-2.8	2.3	-4.48	18.1	-23.6	85.7	-23
2000	13.4%	18.4%	37.1%	16.9%	10.2%	3.3%	0.8%	32.6	-15.2	8.7	-21.3	5.1	26.9	166
2001	18.5%	19.8%	30.3%	19.4%	9%	NA	NA	38	7.6	-18.3	14.7	-11.6	NA	NA
Total 1997 - 2001 ¹⁴⁰								74.5	1.5	-19.8	-20.8	38.4	230	700

137. Distribution of Internet users according to their marital status

	AIMC (2001)
Single	56.9%
Married	33.5%
Widow / Widower	0.4%
Divorced	2.9%
Lives with his / her couple (without marrying)	6.1%
Doesn't know or doesn't answer	0.3

138. Distribution of Internet users according to their educational level

AIMC (2001)					
No studies	0.3%				
Primary education (EGB / ESO)	8.6%				
Secondary education (BUP / FP)	38.7%				
University degree	52.1%				
Doesn't know or doesn't answer	0.3%				

¹⁴⁰ Except in the groups "% of 55-64 years old Internet users" and "% of >65 years old Internet users". in which the data are only available until the year 2000. so the value is in that case "Total 1997-2000"



140. Distribution of Internet users according to their social class

	EGM (2001)	AIMC (2001)	eEspaña 2001 ¹⁴¹	Telefónica (2001)	CIS (2001)
High class	18.6%				
High –medium class	26.7%				
Medium – medium	39.7%				
class					
Medium-low class	12.3%				
Low class	2.7%				

141. Evolution of Internet users according to their social class (1997 – 2001)

					EGM	(2001)				
	% of	% of	% of	% of	% of	Yearly	Yearly	Yearly	Yearly	Yearly
	high	high –	medium	medium-	low	growth	growth	growth	growth	growth
	class	medium	_	low class	class	rate of	rate of	rate of	rate of	rate of low
	Internet	class	medium	Internet	Internet	high	high –	medium –	medium-	class
	users	Internet	class	users	users	class	medium	medium	low class	Internet
		users	Internet			Internet	class	class	Internet	users (%)
			users			users	Internet	Internet	users (%)	
						(%)	users	users		
							(%)	(%)		
1997	26.8%	32.8%	28.7%	10.3%	1.4%	-	-	-	-	
1998	30.8%	28.2%	30.1%	7.6%	3.3%	14.9	-14	4.8	-26.2	135.7
1999	30.1%	27.5%	32.3%	9.1%	1.1%	-2.2	-2.4	7.3	19.7	-66.6
2000	23.7%	27.9%	37.6%	9.1%	1.7%	-21.2	1.4	16.4	0	54.5
2001	18.6%	26.7%	39.7%	12.3%	2.7%	-21.5	-4.3	5.5	35.1	58.8
Total						-30.5	-18.5	38.3	19.4	92.8
1997										
-										
2001										

145. Distribution of Internet users according to their job

	AIMC (2001)
Work in his /her own business	13.6%
Work for a firm / organisation	56.3%
Student	24.5%
Housewife	1.1%
Doesn't work (retired. unemployed)	4.2%
Doesn't know or doesn't answer	0.2%

Business firms and the Internet

147. % of business firms connected to the Internet according to their dimension (over the total of business firms)

Tecnologías SSI (2000)					
Between 0-2 employees	41%				
Between 3-5 employees	50%				
Between 6-9 employees	61%				
Between 10-49 employees	73%				
Between 50-249 employees	92%				
More than 250 employees	99%				

 $^{^{\}rm 141}$ eEspaña 2001 reports the same findings as EGM



149. % of business firms with connection to the Internet according to their activity

Tecnologías SSI (2000)		
Industry	59%	
Construction	41%	
Commerce	43%	
Rest of services	73%	