Information Technologies Observatory

Introduction

The data gathering survey for building ICT indicators is conducted annually in accordance with the international recommendations of the Partnership on Measuring ICT for Development (ITU, UNCTAD, WB, OECD, Eurostat, etc.)

The purpose of the Information Technologies Observatory is to:

- Complete the information collected from operators on fixed and mobile telephony, and Internet markets, and deal with the issues of usage and behavior with regards to ICTs in order to analyze qualitative aspects, such as usage and impediments to computer/internet equipment ;
- Enhance a precise and numbered knowledge of the state and evolution of the Information Society in Morocco ;
- Guide and monitor the impact of regulatory decisions and governmental initiatives on the development of ICTs, and the degree of usage and appropriation of these technologies by citizens and businesses ;
- Constitute a communication medium at the domestic level ;
- Feed the international databases (ITU, UNCTAD, etc.) and allow the calculation of ICT index that rank countries with regards to their level of ICT development.

The fifth edition of the National Survey on Information Technologies in Morocco, initiated by the National Telecommunications Regulatory Agency, was conducted on the same pattern as the previous surveys to allow for comparison and follow up on some key indicators.
However, the list of indicators included in the survey was updated and enriched following international recommendations and evolutions in the domestic market.

ICT indicators Survey

A few points on the methodology used

The indicators

The measured ICT indicators can be classified into three main categories:

- The equipment level
- Access
- Usage

The "individuals" sample

The target population for the "individuals" survey is composed of individuals aged 12 and over living in urban and electrified rural areas (98% of rural households lived in electrified zones at the end of 2008 according to the Moroccan Ministry of Energy and Mining). We cover therefore 68% of the Moroccan population. The reference base for the studied population was defined according to the 2004 population survey and the 2008 forcasts calculated by "le Haut Commissariat au Plan" (HCP).

The sample population was fixed at 1 300 respondents (850 urban and 450 rural), which corresponds to a confidence interval of +/- 2.5%.

To ensure a sample that is representative of the population, quotas were fixed based on the following criteria:

- gender,
- age,
- socio-economic status,
- area of residence (urban / rural).

Questionnaires were conducted face to face with respondents, in French and Moroccan Arabic (depending on the linguistic profile of the respondent) over the period from 9th March to 3rd April 2009.

The "corporate" sample

The characteristics of the targeted enterprises are as follows:

- Businesses established in Morocco
- Employing at least 4 people

The sample is composed of 500 businesses (the first half employs between 4 and 19 persons, and the second half employs more than 20 people), which corresponds to a confidence interval of +/- 4.4%.

In the lack of a reliable and exhaustive database in Morocco, the sample was selected through a process of random selection from the Moroccan Kompass business directory (2008 edition) which included 10 979 businesses.

The surveyed businesses were classified according to 4 sectors of activity defined as follows:

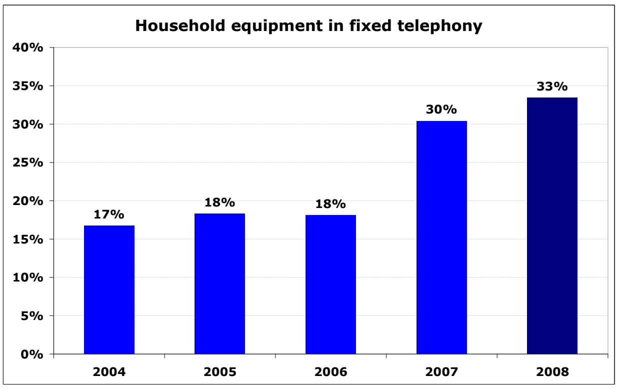
- The Technology sector, which includes businesses that operate in one of the following areas: Web and multimedia, Networks construction, Integrated Business solutions, Software development, Mobile (applications and services on the mobile), Call centers (CRM), Teleservices and Outsourcing, Electronics, Equipments, IT services, Distance learning, Consulting ;
- The Primary sector, including businesses who operate in one of the following fields: Fishing, Forestry/hunting, Agriculture, Livestock, Agriculture-related activities ;
- The Manufacturing/Construction sector, with businesses operating in one of the following areas: Water and electricity, Oil and fuel, Ore and minerals extraction and preparation, Metal processing, Chemical industry, Food industry, Beverages, Tobacco, Textile and clothing, Leather and footwear, Wood and furniture, Paper and cardboard, Printing, Press and publishing, Building materials and public works ;
- The Services and Transportation sector, including businesses which operate in one of the following: Transportation and communication, Commerce, Finance, Hotels and catering, Services and industry intermediaries and sub-professionals, Real estate, Domestic services, Hygiene and Other services.

The survey was conducted by phone in French and Moroccan Arabic (depending on the linguistic profile of the respondent) over the period from 9th to 19th March 2009.

ICTs and Households

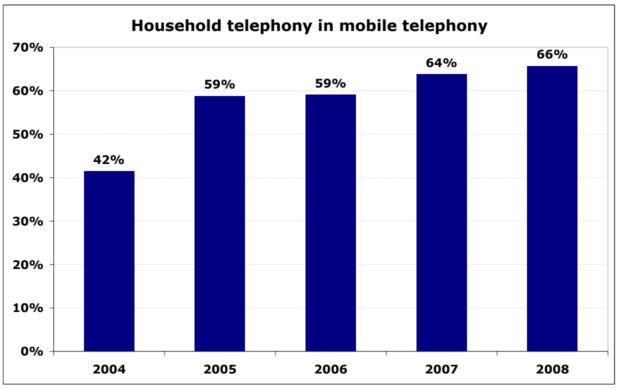
Fixed and mobile telephony

After a significant increase over the period 2004 - 2007 (+100%), the fixed lines penetration growth rate slowed down in 2008, even if it remains positive (+7%) between 2007 and 2008.



Household equipment in fixed telephony witnessed a very strong growth in 2007, linked partly to the introduction of new restricted mobility fixed telephony offers launched by Wana Corporate operator, and to the opening up programs conducted throughout the country .

In 2008, household equipment in mobile telephony sustained its upward trend: 65.7% are equipped with mobile phones in 2008.



The main usage of mobile telephony remains communication: placement and reception of calls (used by 100% of individuals). The messaging service SMS is strongly used as well (72%).

As to the other usages of mobiles, it is worth mentioning the growing interest for related services, besides telecommunication, such as music, video or photography which are used by over 30% of individuals owning a mobile.

Switch of operator

The change in operator in 2008 appears to be quite significant (12%).

Churn rate in 2008 in mobile telephony	
Percentage of individuals who switched operators	2008
Yes	11,9%
No	88,1%

Basis: Individuals owning at least one mobile line

The two main reasons behind the change in operator are prices and quality:

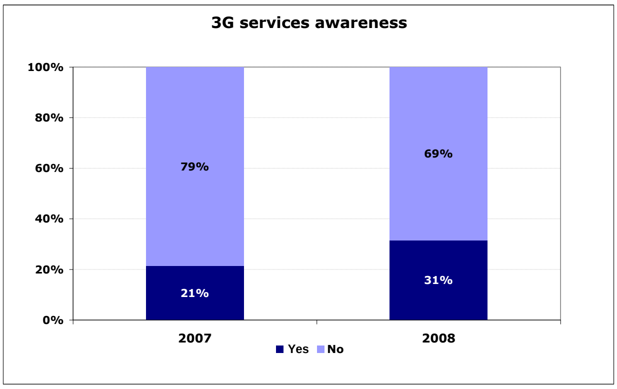
- Price of communications and promotional offers account for 31.7% of the reasons behind changing operators.
- Around one third of respondents also mentioned network coverage and service quality as a reason to switch operator.

Intentions to switch operators in the next 12 months	
	2008
Yes	8,8%
No	91,2%

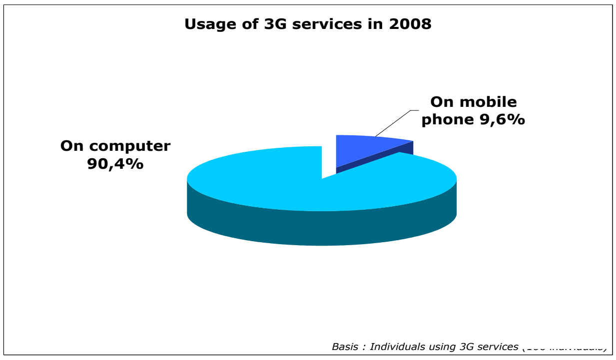
Basis: Individuals owning at least one mobile line and who have not switched operators in 2008

However, intentions to switch operators in the next 12 months appear less pronounced (8.8%).

3G Services



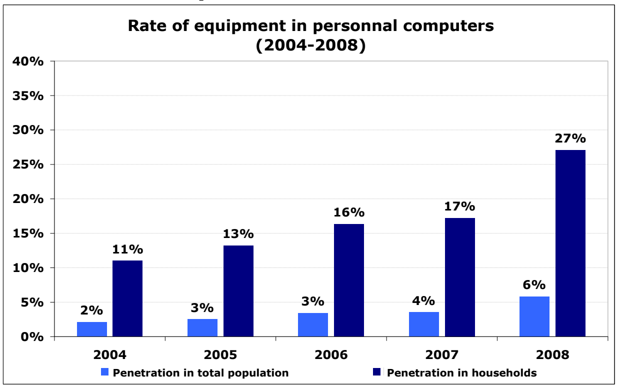
In 2008, 31% of respondents confirm knowing the 3G services, against 21% in 2007, which represents a noticeable performance in terms of recognition.
The share of 3G users is 8%. Their usage is mainly on computers (90.4%).



The share of 3G users is 8%, which is far from negligible given the very recent introduction of these services into the market. Their usage is mainly on computers (90.4%).

In addition, usage intentions of these services in 2009 appear significant: 55% of the surveyed sample.

Personal Computers



The rate of equipment in computers increased significantly in 2008: 27% of households against 17% in 2007. Furthermore, both intentions of acquiring computers and of renewing equipment in 2009 are high (37% and 33% respectively).

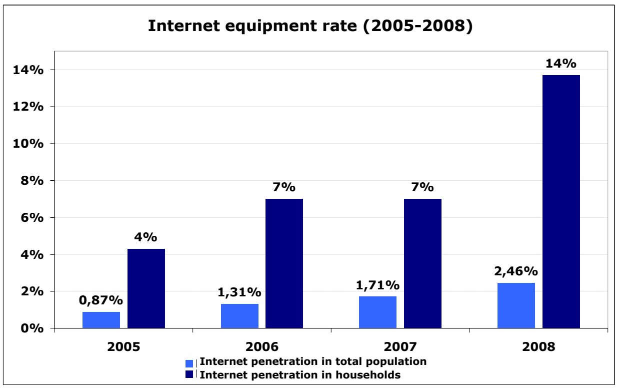
Computer equipment by gender is almost equivalent: 49% of computer owners are women against 51% of male owners.

It is however unevenly distributed between urban and rural areas: 78% and 22% respectively. It is worth noticing nonetheless that equipment in rural areas shows significant improvement (+43% compared to 2007).

The main obstacle to acquiring a computer remains its price which is deemed too high. Indeed, almost half of the respondents who don't have a computer at home argue that it is because of its price. Other reasons mentioned for not having a computer at home include the absence of need (27% of individuals), the problem of illiteracy (for 24%) and finally the perception of usage complexity (8%).

Internet

Internet at home



Internet access speeded up in 2008:

- Households' internet penetration rate goes from 7% to almost 14%.
- We record today around 3 internet connections for 100 inhabitants.

Internet access remains correlated to some variables, mainly the socioeconomic status (SES): 67% of households with internet access belong to the A, B and C SES, which only account for 16% of the population. Conversely, households in the D and E socioeconomic categories, which account for 60% of the population, only record a 33% access to the internet.

It appears that, until 2007, internet access outside home was a determinant factor in internet equipment. Those who had access to internet outside home did not feel the need to have internet access at home. However, 2008 records a change in this trend and equipment rates tend to balance.

Households still favor ADSL as a mean to connect to internet (64% of households in 2008, down from 80% and 89% in 2007 and 2006 respectively). As far as the wireless 3G connection is concerned, its penetration rate is 30%.

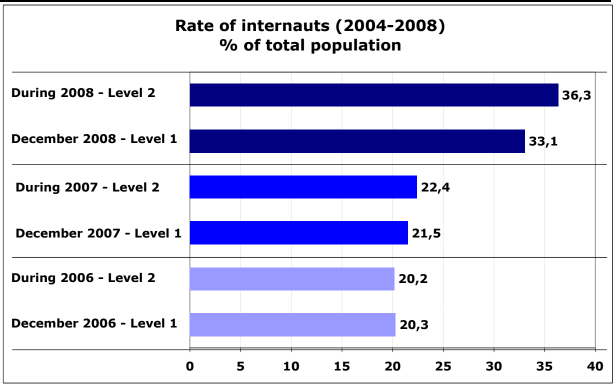
The growth potential for internet access at home is increasing in 2008 (+10 points compared to 2006): 38.3% of individuals with no internet access at home intend to get internet access in 2009. This represents a potential of 1.6 million households.

Number of internet users

Two levels of internet users are distinguished:

- Level 1 Internet user: any individual who accessed the internet at least once in the past month, regardless of location and access mode;
- Level 2 Internet user: any individual who accessed the internet at least once in the past twelve months, regardless of location and access mode.

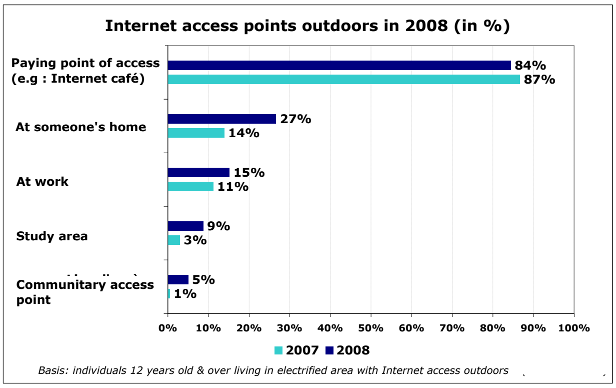
Internauts (in millions)	2004	2005	2006	2007	2008	Evolution 2008/2007
Level 1	3,5	4,6	6,1	6,6	10,3	+56%
Level 2	3,6	4,8	6,1	6,9	11,3	+63%



33% of individuals were connected at least once in December 2008 (level 1 Internet user) and 36% were connected at least once over the year 2008 (level 2 Internet user).

Internet access outside the home

In 2008, 43% of individuals had access to internet outside their home whereas 15% had outside home access only, which is less than in 2007 (28.4%).



The main internet access point outside the home is the internet café (84% of individuals) followed by the house of another person (27%).

Main usage of the Internet

Internet is primarily used by households to look up information (46%) and for electronic messaging (40%).

It is however worth noticing the big share taken up by music, movies, software and video games downloads, heavy consumers of capacity and broadband.

Obstacles and fears linked to Internet

The main obstacles to home internet access are the following:

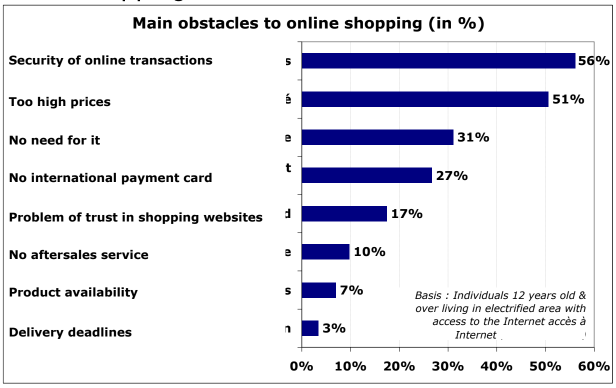
- The high price of internet subscription (60%)
- The absence of a computer at home (33%)
- Illiteracy/lack of expertise (27%)
- Absence of need (20%)
- Fear by parents that internet might distract children from their studies (10%)

Indeed, Internet raises fears and reserves, in Morocco as in many other countries, with regards to its usage and privacy protection.

Fears are mainly related to the protection of children from « adult » sites (32%) and the risks of contact with dangerous person (23%). Next comes the fear from viruses and from theft of personal data.

Online shopping

A majority of respondents (96.1%) never purchased anything online, confirming the tendency recorded in 2007 and the lack of interest of Moroccans for online shopping.



Security of online transactions remains, since 2006, the main obstacle to online shopping, Moroccans showing little trust in online shopping websites. Besides, internet usage with regards to online trade is very weak if not completely absent.

Internet is therefore perceived by users as a source of information, a fast and simple means of communication, as well as a channel to access a rich content and multimedia products hardly accessible so far.

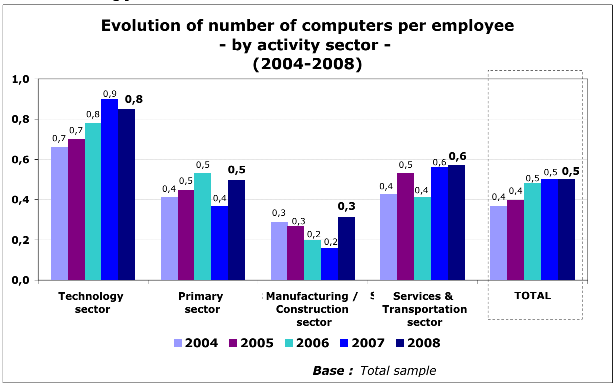
ICTs and Businesses

Telephony and IT equipment

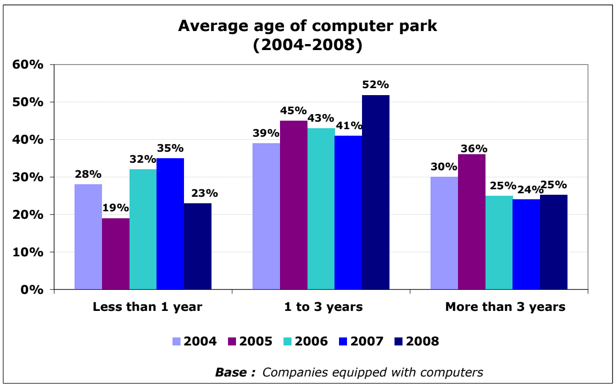
The average number of fixed telephone lines reaches around 4 lines per business in 2008.

Similarly, the average number of mobile subscriptions is around 6.

The number of computers per employee remains stable compared with the past two years: around 1 computer for every two employees. The highest equipment rate is naturally recorded by the Technology sector.

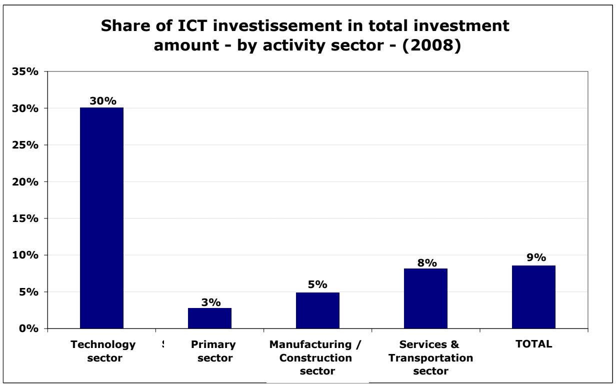


The computer park is composed for the most part of desktop computers (85%), which are slightly older than in 2007.

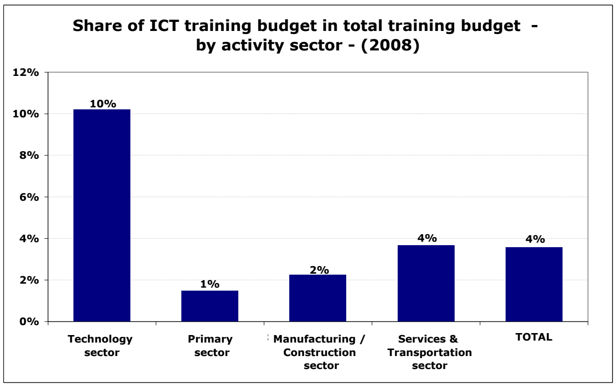


ICT Investment and Training

The share of ICT investment in the total sample amounts to 9% in 2008. The Technology sector is naturally the one where the investment rate is the highest (30%) followed by the Services/Transportation sector (8%).



The share of the training budget allocated to ICT reaches around 4% on average in 2008; it peaks at a maximum of 10% in the Technology sector.

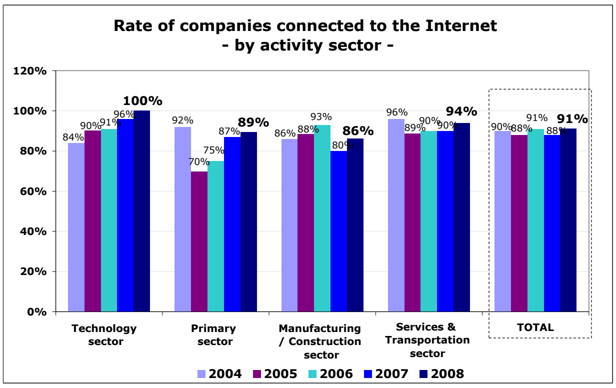


Internet

Internet connection

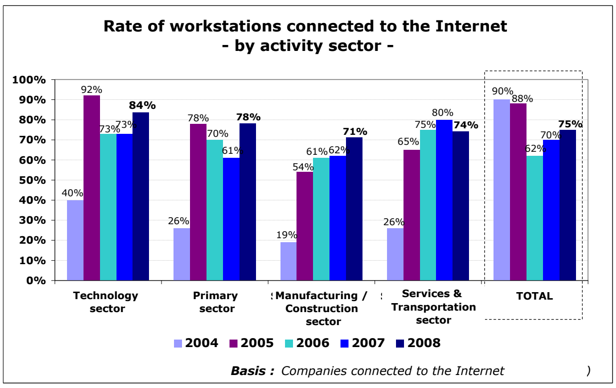
Almost all businesses surveyed (91%) are connected to the internet in 2008.

The favored connection mode is ADSL (94%), but 3G connection is picking up speed, displaying a penetration rate of 13%.



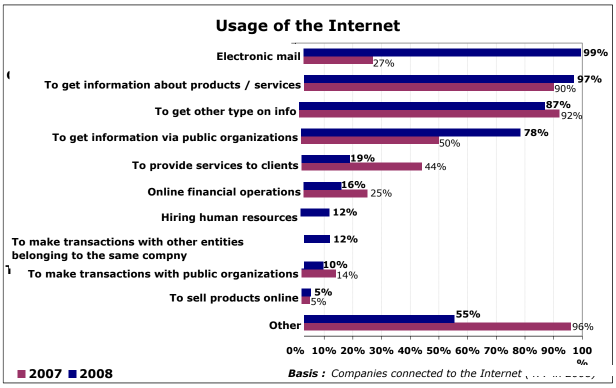
Personalized access to Internet

The share of workstations connected to Internet pursued its upward trend in 2008, reaching 75% (+5% compared to 2007). 64% of Internet users in businesses are executives.



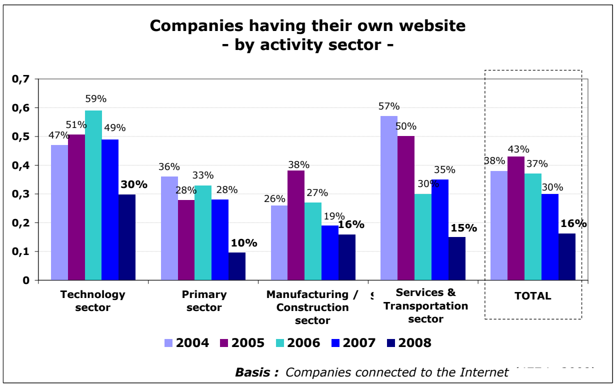
Internet usage in Businesses

Internet is primarily used in businesses to send messages and look up information (>95%).
Collection of information from public institutions displays a strong growth, up from 50% in 2007 to 78% in 2008. This can be explained by the publication by these public institutions of dynamic and interactive websites offering a wealth of services to businesses.



Websites and domain names

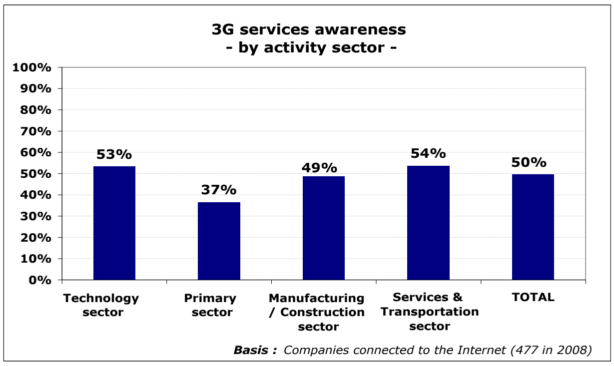
In 2007, 16% of businesses had a website, the majority (61%) of which with a commercial orientation.



The majority of businesses (94%) that have a website, all sectors combined, possess their own domain name.
As a whole, the « .ma » and « .com » extensions are the most common.

3G Services

50% of surveyed businesses declare knowing 3G services.



3G services made a significant breakthrough given their recent introduction in the market (around 13% equipment rate in businesses with Internet connection).

E-Commerce

Online purchasing and sales

E-commerce is barely developed in businesses, both in terms of online purchasing or sales, given the weak usage rate and the lack of [illegible]st displayed by businesses. Indeed, by the end of 2008, only 5% of the surveyed businesses declare making purchases online and 2% carry out sales online.

Intentions to carry out e-commerce remain quite limited as well, and decrease from one year to the next: continued decline since 2006 of online purchase intentions which amounted to 5% in 2008.
The same trend is recorded for businesses online sales: 7% in 2008.

The observed limited breakthrough of e-commerce is once again confirmed in 2008.

Barriers to e-commerce

Around 38% of businesses with an access to the Internet consider that customers are not ready to buy online, and 37% declare that their products are not suitable for e-commerce.

As for individuals, the issue of payment security is often mentioned as a strong impediment to online trade by businesses (27%).