Information Technology Observatory

ICT Survey Within Households and Individuals, 2013

June 2014

CONTENTS

1   INTRODUCTION

This report summarizes the main results of the 2013 Information and Communication Technologies (ICT) survey within households and individuals in Morocco.

This yearly survey initiated by the "Agence Nationale de Réglementation des Télécommunications (ANRT)" aims at collecting information on the main indicators related to ICT equipment, access and uses by households and individuals in Morocco. Other indicators also focus on the expectations, the motivations, the barriers for access or use, and the perceptions of the individuals towards ICT. Moreover, in 2013, some indicators related to the participation to social networks and to the use of ICT by young children were added to the analysis.

The tenth edition of the national survey on ICT in Morocco was carried out in keeping with the previous surveys to allow comparison and tracking of key indicators. For this edition, the recommendations from the 2014 ITU manual on "Measuring ICT Access and Use by Households and Individuals" were also followed in order to comply with international standards and enable comparisons with other countries.

This survey is conducted by the Observatory of Information Technology that aims to establish accurate, quantitative and shared knowledge of the state of the information society in Morocco. The observatory's objective is to:

- Complete information collected from operators in the fixed line, mobile and Internet services markets and to process questions on how ICT is used and how users behave in the context of ICT in order to analyze qualitative aspects such as the drivers or the barriers for access to ICT equipment and its usage;
- Promote accurate, quantitative knowledge of the situation and developments in information society in Morocco;
- Provide communication medium at the national level;
- Be an official source of information for international databases (ITU, UNCTAD, WB, etc.) and be used in particular to calculate ICT indexes that classify countries with respect to their level of development in this area.

The annual collection and tracking of a battery of key indicators in ICT allows ANRT to follow up both telecom market developments and some of the changes in progress within the Moroccan population, whose uses of ICT are being transformed, in particular with the democratization of the Internet.

Thanks to this study, the ANRT is able to orient and track the impact of regulatory decisions and governmental initiatives that have been taken to support the development of ICT and to strengthen the extent to which these technologies are being used and adopted by the Moroccan citizens.

This report is divided into four main sections: the first section describes the methodology followed for this edition; the second section focuses on the state of ICT equipment and uses in the Kingdom in 2013; the third section summarizes the main results on the usage of new services (E-Commerce, Social Networks, Mobile Payment, E-Gov, Mobile Applications) and finally, the last section looks at the results concerning ICT equipment and usage by young children.

2 METHODOLOGY

Despite some methodological improvements and a longer questionnaire to allow the collection of more indicators, the 2013 edition is aligned with the methodological characteristics of the previous editions, and especially with the 2012 edition. This continuity in the methodology is essential to allow comparison and tracking of key indicators. The main features of the methodology followed for this edition are presented in this section.

2.1 Survey Characteristics and Sample Size

The questionnaires were administered face to face in French or in dialectical Arabic following a method of soft quotas with dynamic monitoring during the period running from February 27th to March 26th 2014 within 1,823 households.

2.2 Population

The parent population for this survey includes all the Moroccan individuals and households.

The target population for households includes all the households living in urban or rural areas with electrification (100 per cent of the localities in urban areas and 98.06 per cent of the localities in rural areas are electrified according to ONEE), on the Moroccan national territory.

The target population for individuals includes all individuals aged between 12-65 years old living in urban or rural areas with electrification on the Moroccan national territory.

2.3   Sample Design

The sample design established for the survey enabled to cover the 16 Moroccan administrative regions and more particularly the main cities such as Casablanca, Rabat, Salé, El Jadida, Settat, Fès, Meknès, Béni Mellal, Oujda, Taza, Kenitra, Tanger, Marrakech, and Agadir.

The sample design also enabled to cover rural areas which were dividedbetween periurban rural areas (perimeter of 35 km surrounding urban centers) and remote rural areas (areas located farther than 35 km of urban centers) to ensure a better representativeness.

2.4   Reference Population and Adjustment Variables

The reference base for the population to be studied was established in compliance with the 2004 census and the projections for 2013 made by the "Haut Commissariat au Plan" (HCP).

In order to ensure a better representativeness of the regional and social characteristics of the Moroccan population, the sample designed has been adjusted using key variables. For individuals, the collected sample has been adjusted according to the five following criteria: area of residence (urban/rural), gender, age, type of housing, and region of residence. For households, the collected sample has been adjusted according to the three following criteria: area of residence (urban/rural), type of housing, and region of residence. In both cases, adjustments were based on cross-sectional data of the reference population for those variables.

3   ICT EQUIPMENTS AND USES IN MOROCCO IN 2013

The results of the 2013 survey for the main indicators for ICT equipment of individuals and households in Morocco confirm the trends observed during the previous years. Thus, on one hand, individuals' equipment rate in mobile phone kept rising, even if it has been at a slower pace than during the previous years, reaching 93 per cent of the 12-65 years old in 2013, whereas the households' equipment rate in fixed line telephony kept decreasing (26 per cent). On the other hand, households' equipment rate in computer (47 per cent) and in Internet (46 per cent) posted a significant increase.

INDIVIDUAL AND HOUSEHOLD EQUIPMENT (% of 12-65 years old in electrified area ; % of total number of households in e.a.)
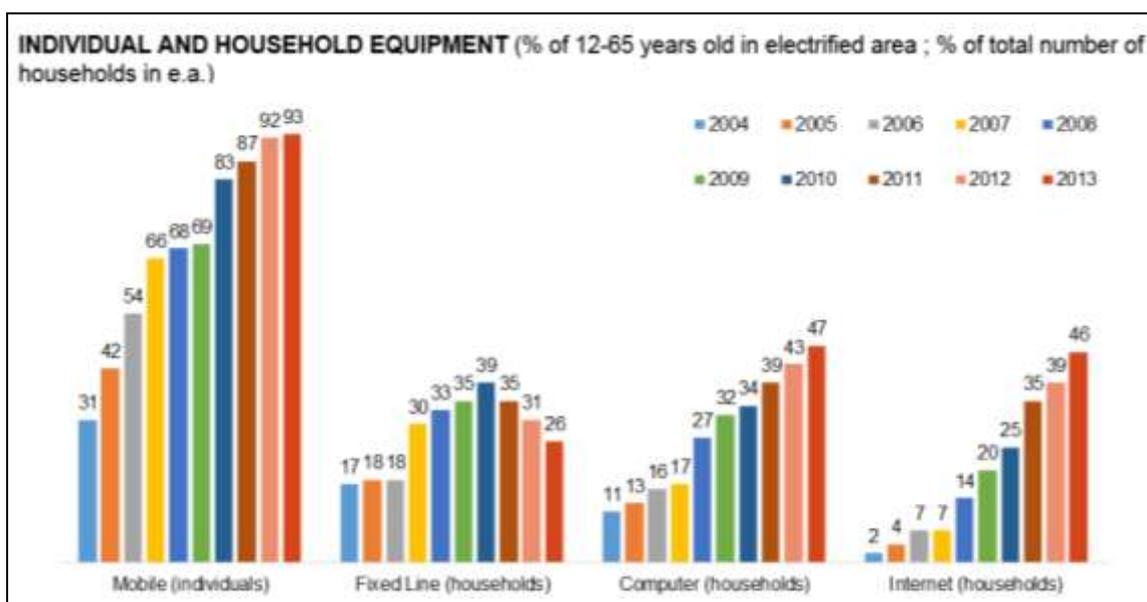
3.1   Mobile Telephony Equipment and Uses Among Individuals

3.1.1   *Mobile Telephony Equipment for Individuals*

In 2013, mobile telephony equipement has increased its market penetration slightly to 93 per cent of individuals from 12 to 65 years in electrified areas. The penetration of mobile telephony among individuals registered a moderate growth in 2013, with a one-point increase compared to 2012 (+ 5 points in 2012).

The difference between the mobile phone penetration among individuals in urban and rural areas is still important (10 points).

INDIVIDUALS EQUIPPED WITH MOBILE TELEPHONY (% of 12-65 years old in e.a.)
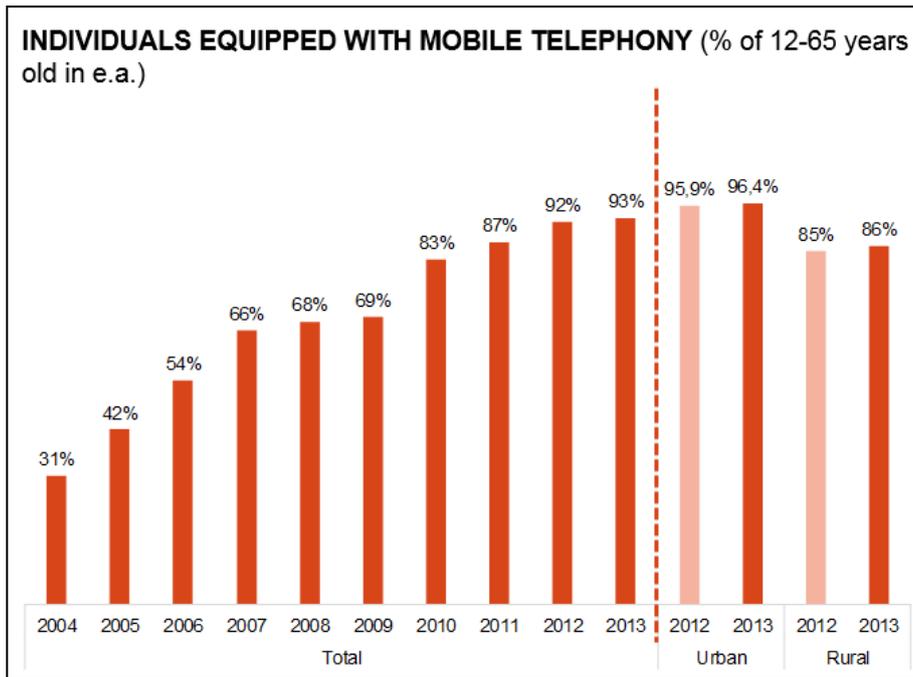
3.1.2 _Multi-Equipment in Mobile Telephony within Individuals_

In 2013, individuals equipped with at least one mobile line have on average 1.22 SIM cards, a slight increase compared to 2012 (1.15 SIM cards).

The results of the survey indicate that 17 per cent of individuals are multi-equipped (they have at least two SIM cards) in 2013 whereas this proportion was 13 per cent in 2012.

DISTRIBUTION OF INDIVIDUALS ACCORDING TO NUMBER OF SIM CARD (% of 12-65 years old individuals with SIM card)
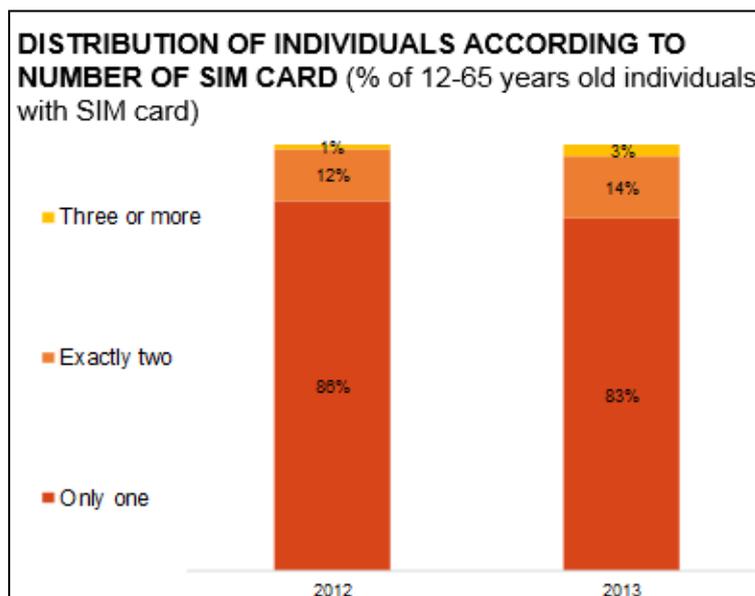
3.1.3 *Equipment Rate For Smartphones Registered a Significant Increase in 2013*

The share of individuals with smartphone more than doubled compared to 2012, reaching 33 per cent and a total of around 7.4 million phones (3.6 million phones estimated in 2012).

The large increase in the share of individuals with smartphones occurred in both urban and rural areas. However, the gap between urban areas, where 40 per cent of those equipped with a mobile phone have a smartphone and the rural areas (21 per cent) is still significant.
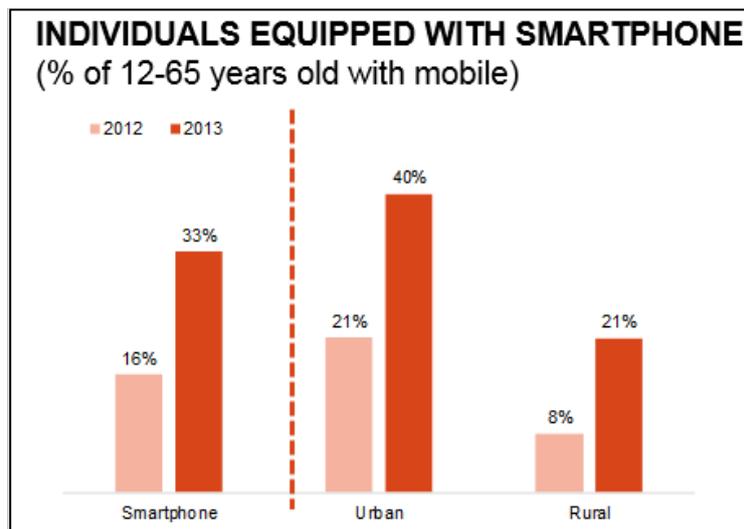
3.1.4 *Intentions to be equipped with a Mobile Phone*

Almost one third (31 per cent) of the 12-65 years old who have no mobile phone have the intention to be equipped with it in the next 12 months. 24 per cent of them have the intention to be equipped with a regular mobile phone.
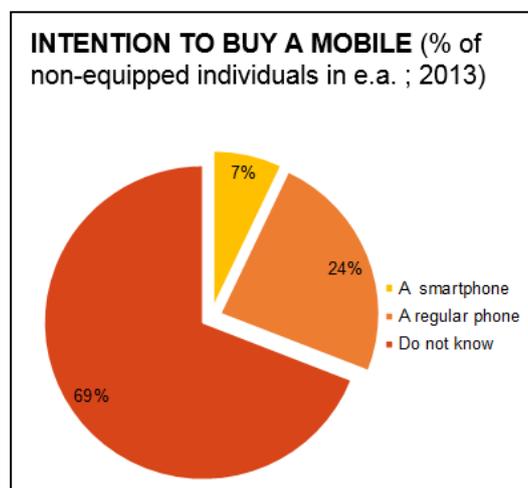
3.2   Fixed Line Equipment and Use Among Households

3.2.1   The Level of households' Fixed Line Telephony Equipment Keeps Declining

The equipment of households with fixed telephone line has continued to decline to reach 26 per cent of households in 2013.

The equipment of Moroccan households with fixed telephone line has decreased both in urban and in rural areas with a more significant drop in the latter.
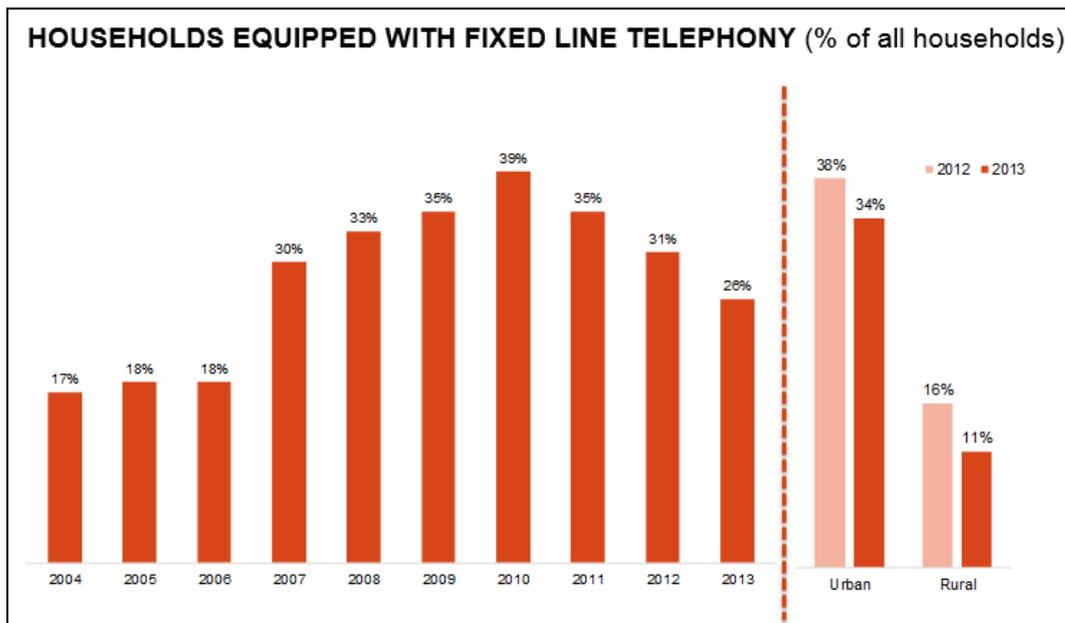
This new drop in household equipment with fixed telephony is due to the continued decline of restricted mobility, which equips fewer households (13 per cent) than the traditional fixed telephony (16 per cent).
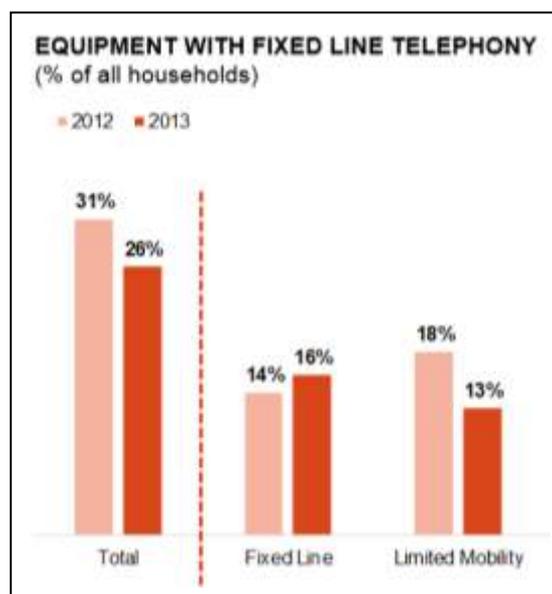
3.2.2 The Decline in Fixed Line Equipment Explained by the Mobile Substitution

As it was the case in 2012, the main reason mentioned by households with no access to fixed telephony is the lack of need because they do have access to mobile equipment. This reason was cited by more than three quarters (77 per cent) of non-equipped households in 2013. This supports once again that the fixed-mobile substitution strongly reduces the need for a fixed telephone line.

REASONS FOR NOT BEING EQUIPPED WITH FIXED LINE (% of households unequipped with fixed line)

	2012	2013
Problems of illiteracy	13%	3%
No need, access to the telephone outside the household	37%	5%
Subscription/installation too long/complicated	19%	5%
High price	39%	15%
Does not want a fixed line	32%	20%
No need, mobile phone	78%	77%
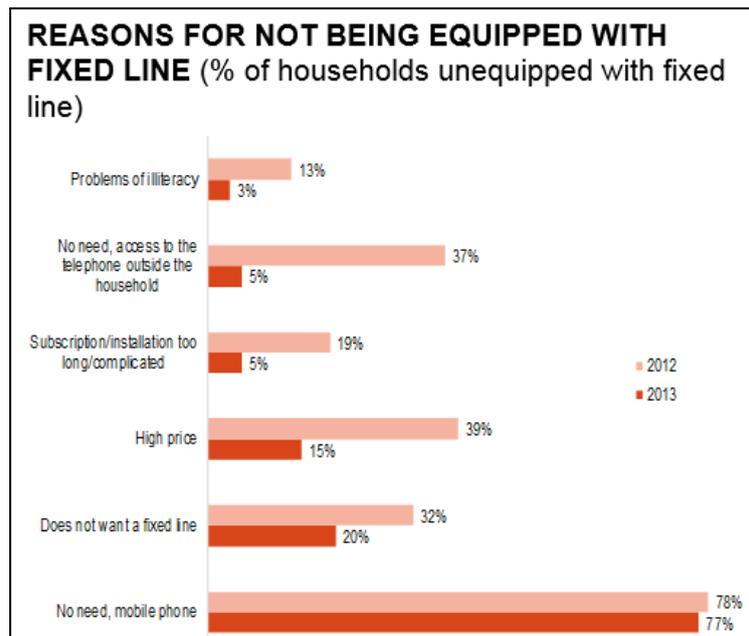
3.2.3 Households Intentions to Get a Fixed Line Remain Low

The proportion of households with no access to a fixed telephone line that intend to equip themselves over the next 12 months remains low even if it has increased to 8 per cent.

HOUSEHOLDS WILLING TO BE EQUIPPED (% of households unequipped with fixed line)

- Yes: 8%
- No: 92%
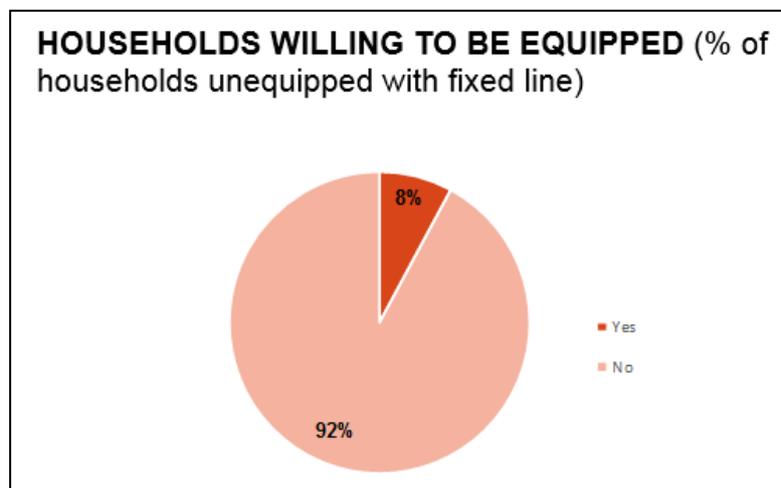
3.2.4   *The Use of the Internet: a Growing Motivation in Fixed Line Equipment*

In 2013, telephony and Internet access remained the two main factors that motivate household equipment in fixed telephony. But if the telephony remains the primary motivation for household equipment in fixed telephony (94 per cent in 2013), Internet access has become, in 2013, a major reason of the equipment in fixed telephony for a large proportion of households (59 per cent).
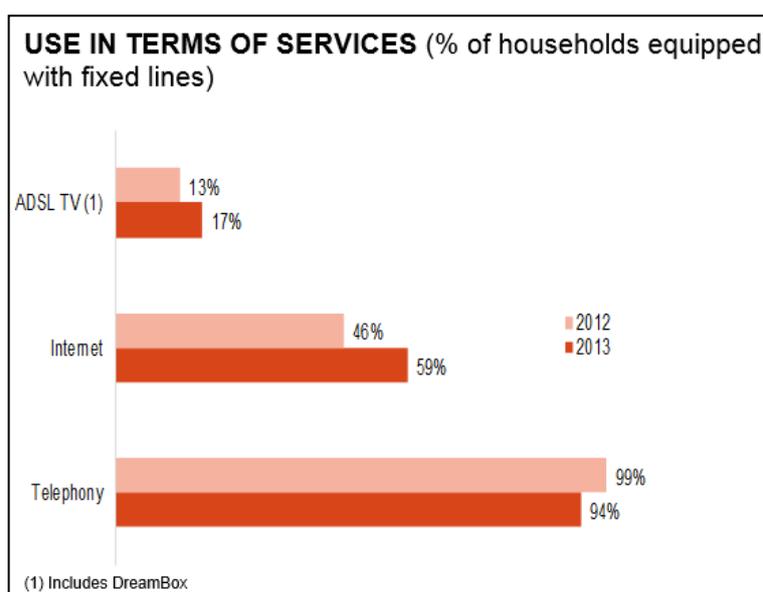
3.3   Computer Equipment and Use for Households[1]

3.3.1   *Almost Half of the Moroccan Households Are Equipped With a Computer*

The households' equipment rate in computer and/or tablet registered an increase in 2013, reaching nearly half of the households (47 per cent), which represents approximately 3.2 million of households. This equipment rate is four times higher than 10 years ago (11 per cent in 2004).

In 2013, the increase in households' equipment rate in computer and/or tablet was recorded among both urban and rural areas. The gap between households living in urban and rural areas slightly decreased, but it remains very important with a 36 points difference in 2013.

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[1] Computers include personal computers, laptops and tablets.

HOUSEHOLDS EQUIPPED WITH COMPUTER AND/OR TABLET (% of all households in e.a.)
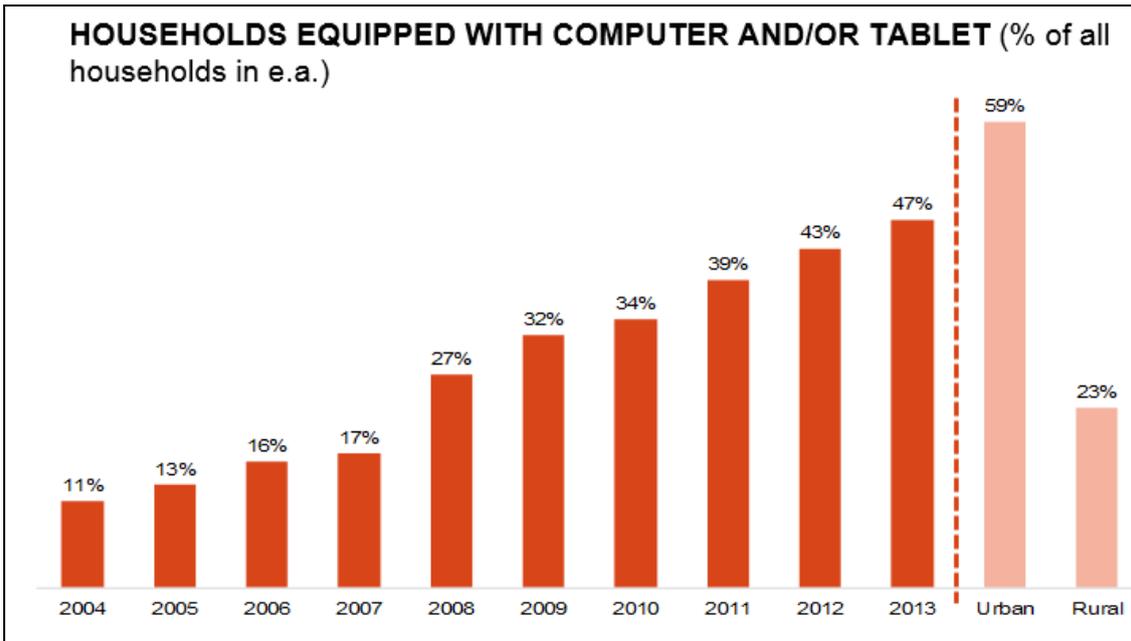
3.3.2   *Equipped Households Own an Average of 1.4 Computers*

In 2013, more than a quarter (26 per cent) of households had two computers and 13 per cent had three computers or more. At a whole, 39 per cent of households were multi-equipped in 2013 with an average of 1.4 computers.

DISTRIBUTION OF HOUSEHOLDS ACCORDING TO THEIR EQUIPMENT WITH COMPUTER and/or TABLET (% of households equipped with computers and/or tablets)
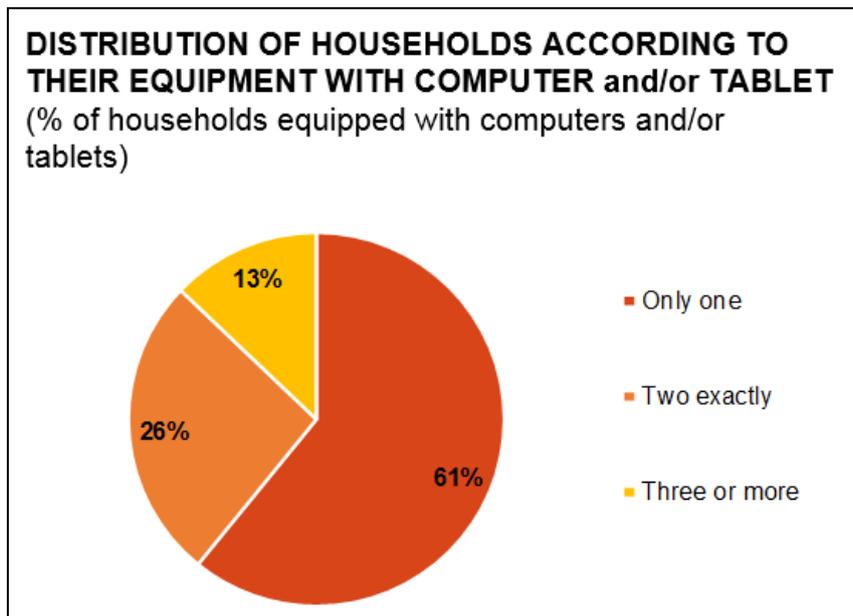
3.3.3   *The Share of Tablets in Overall Computer Market Keeps Growing*

After their arrival on the market in 2011, tablets continue to take an increasing share of the overall computer market in Morocco. Thus, in 2013, tablets represented 9 per

cent of the overall computer market, a 2-point increase compared to 2012 and a 7-point increase compared to 2011.

This evolution was accompanied by the first decrease in the share of laptops in three years which represent 55 per cent of the overall computer market in Morocco in 2013.

TYPES OF COMPUTERS
(% of computers in households)
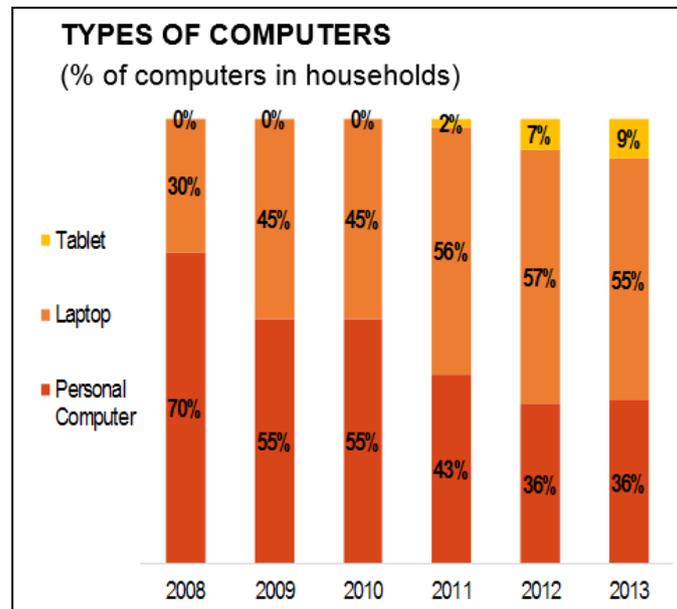
3.3.4 *Strong Intentions to Replace or Buy a Computer*

22 per cent of Moroccan households said they intend to replace or buy a computer in 2014. Tablet sales should continue to grow and at a higher rate than in 2013 since 8 per cent of Moroccan households say that they intend to acquire or replace a tablet.

INTENTION TO REPLACE / PURCHASE A COMPUTER (% of households; 2013)

INTENTION TO REPLACE / PURCHASE A TABLET (% of households ; 2013)
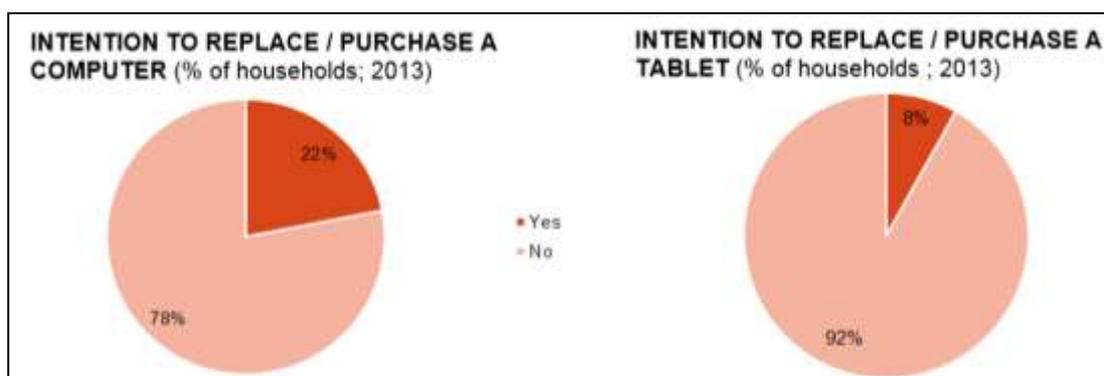
3.3.5 *Obstacles to Equipment with Computers*

Like in 2012, the main reason why households were not equipped with computer/tablet was the lack of need since almost half (48 per cent) of non-equipped households cited the lack of need as a barrier.

Price is less and less considered as an obstacle to equipment with computers since only a little bit more than one-third (36 per cent) of the households cited this reason for non-equipment.

FACTORS OF NON EQUIPMENT (% of computer-unequipped households in e.a.)
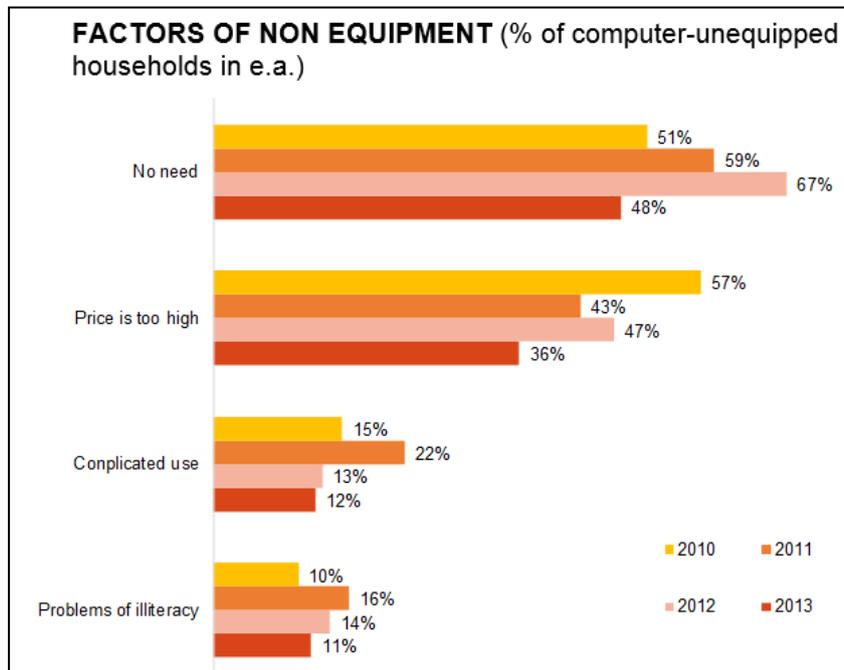
3.4 Households Equipment and Uses of the Internet

3.4.1 _Almost Half of the Moroccan Households Have Access to Internet at Home_

Households' Internet penetration rate registered another increase in 2013 and is 7 points higher than in 2012 to reach 46 per cent. Almost one fourth of the households living in rural areas have their own Internet connection. However, the gap between urban and rural areas remains important (25 points).

INTERNET PENETRATION IN HOUSEHOLDS (% of households in e.a.)
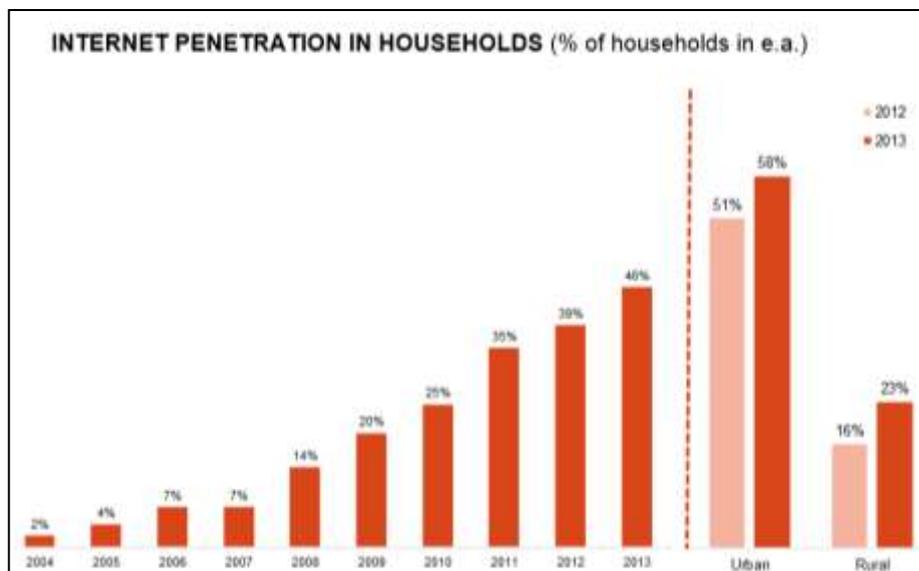
3.4.2 *Mobile Broadband Remains the Main Technology to Access the Internet*

A growing share of households has a connection to the Internet through mobile broadband technology. Thus, in 2013, 40 per cent of the Moroccan households had access to the Internet at home with a mobile broadband connection (34 per cent in 2012) and 11 per cent had a fixed broadband connection.

INTERNET ACCESS BY TECHNOLOGY (% of households in e.a.)

- Fixed Broadband Only
- Both
- Mobile Broadband Only

	2012	2013
Fixed Broadband Only	5%	6%
Both	4%	5%
Mobile Broadband Only	30%	35%
Total	**39%**	**46%**
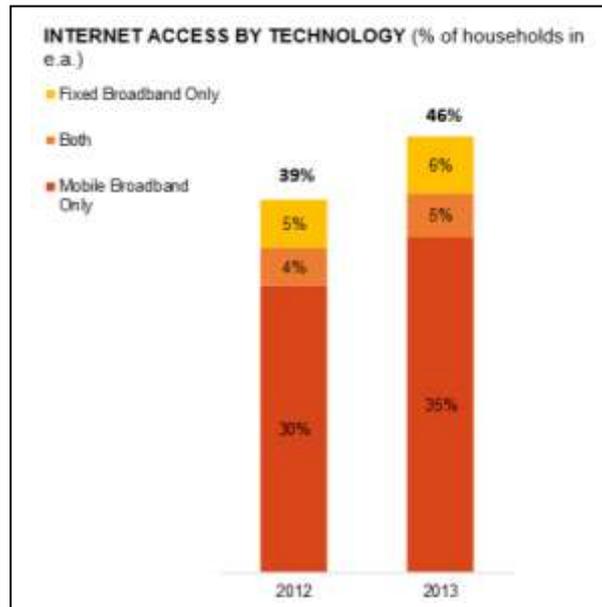
Internet access for households should experience another significant increase in 2014 since 22 per cent of non-equipped households have the intention to get an Internet connection at home, mainly through a mobile broadband technology (70 per cent).

EQUIPMENT INTENTION IN THE NEXT 12 MONTHS (% of unequipped households)

- Yes: 22%
- No: 78%

TYPE OF EQUIPMENT WANTED (% of unequipped households wanting to be equipped in the next 12 months)

- Fixed Broadband: 36%
- Mobile Broadband: 70%
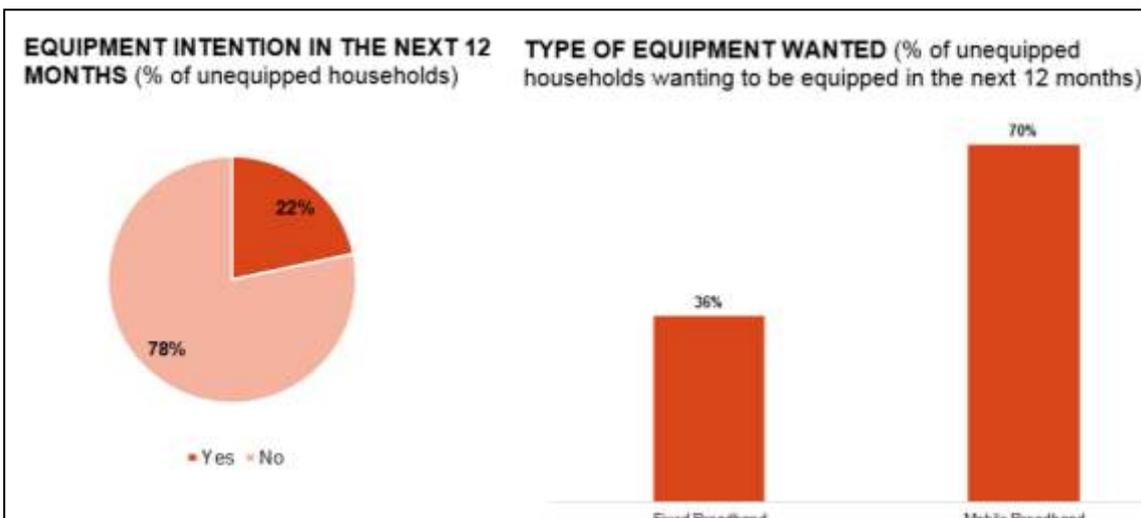
3.4.3 *Main Barriers to Internet Equipment among Households*

Like in 2012, a large proportion of households (62 per cent) that do not have access to the Internet cited the lack of utility as the main reason for non-equipment. The cost

was also an important reason for non-equipment. Insufficient quality and cultural reasons remained less important barriers for non-equipment.

BARRIERS TO HOUSEHOLDS INTERNET EQUIPMENT (% of unequipped households in e.a. ; 2013)

No need	62%
Equipment cost too high	49%
Service cost too high	42%
Lack of confidence, knowledge or skills	26%
Internet access somewhere else	19%
Worried about security and intimacy problems	7%
Not available in the region	6%
Cultural reasons	3%
Insuficient quality of service	2%
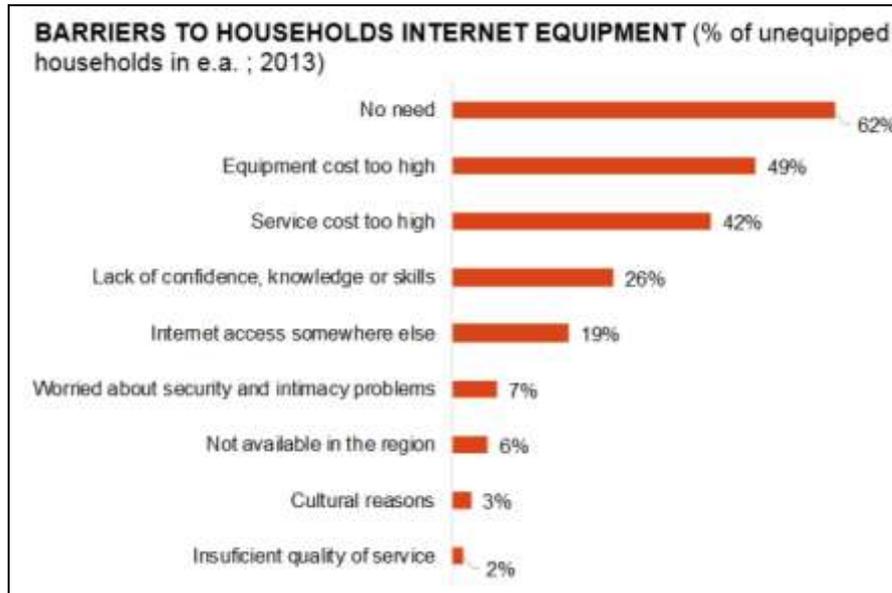
3.4.4   *Increase in Internet Users in 2013*[2]

In 2013, 56 per cent of individuals between ages 5-74 used the Internet at least once during the year. In total, about 16.3 million Moroccans used the Internet, which represents about 700,000 individuals more than in 2012.

INTERNET USERS (% of individuals 5-74 years in e.a.)

Internet users during last 12 months (% of individuals 5-74 years in e.a.)
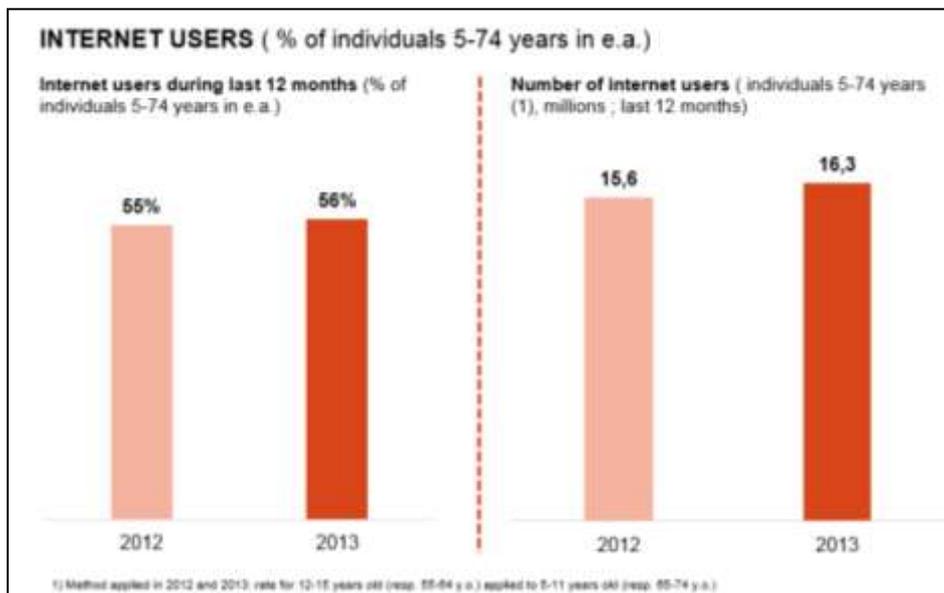- 2012: 55%
- 2013: 56%

Number of Internet users (individuals 5-74 years (1), millions ; last 12 months)
- 2012: 15,6
- 2013: 16,3

1) Method applied in 2012 and 2013: rate for 12-15 years old (resp. 55-64 y.o.) applied to 5-11 years old (resp. 65-74 y.o.)

By age groups, the share of Internet users is the highest among the 15-24 years old with 79 per cent of Internet users in 2013. On the other hand, the share of Internet users is lowest for the 65-74 years old with only 12 per cent of Internet users in 2013.

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[2] Data presented in this section are based on a larger population (5-74 years old individuals in electrified areas)

INTERNET USERS DURING THE LAST 12 MONTHS BY AGE GROUP (% of individuals 5-74 years in e.a. in each age group)
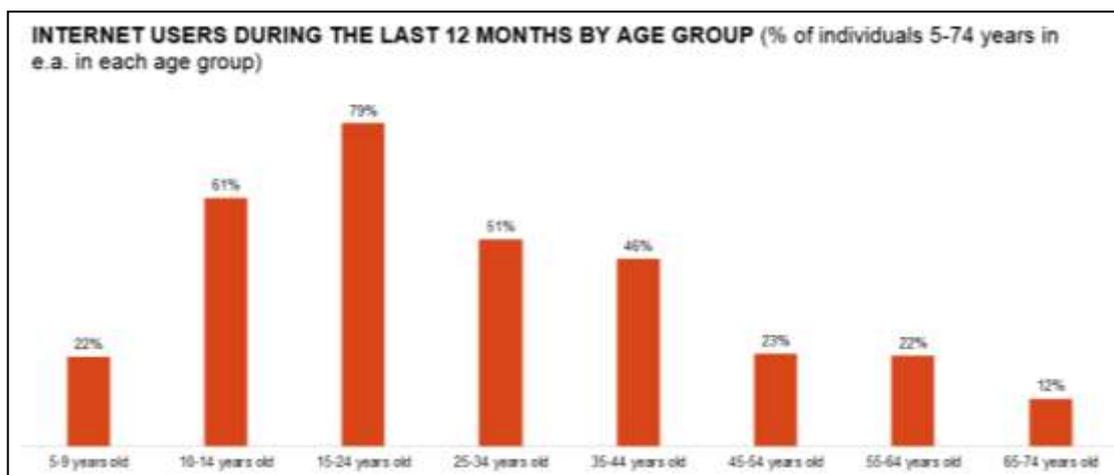
3.4.5 *More Than Half of the Internet Users Connect to the Internet on a Daily Basis*
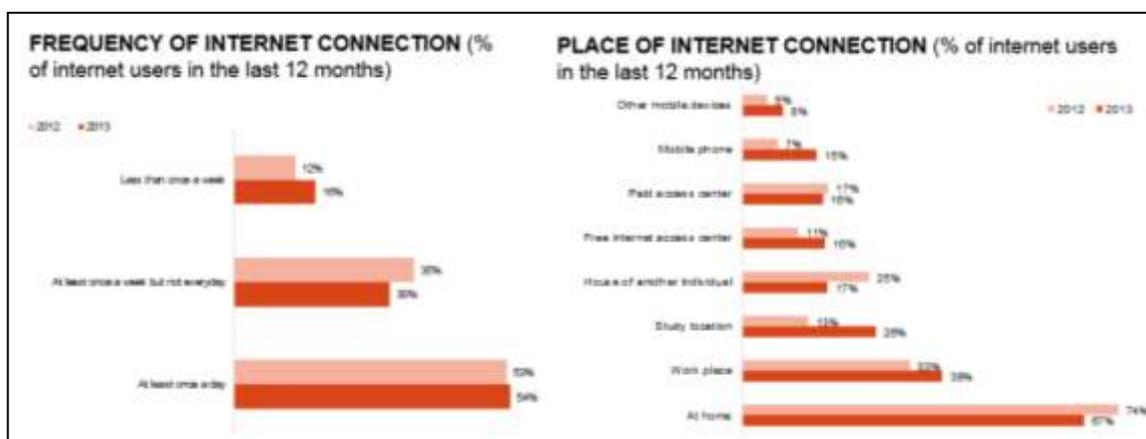
In 2013, 52 per cent of the Internet users in Morocco used the internet on a daily basis whereas 17 per cent did it less than once a week.

Moreover, even if Internet users in Morocco mainly connected to the Internet at home in 2013 (69 per cent), the share of Internet users that used the mobile phone or another mobile device registered a significant increase to reach 23 per cent, which is almost twice upper the proportion observed in 2012 (12 per cent).

FREQUENCY OF INTERNET CONNECTION (% of internet users in the last 12 months)

PLACE OF INTERNET CONNECTION (% of internet users in the last 12 months)

3.4.6 *Diversification of Internet Uses*

In 2013, Internet users mainly surfed the web in order to participate in social networks, to download or watch multimedia contents and to use chat services.

INTERNET USES (% of internet users, 2013)

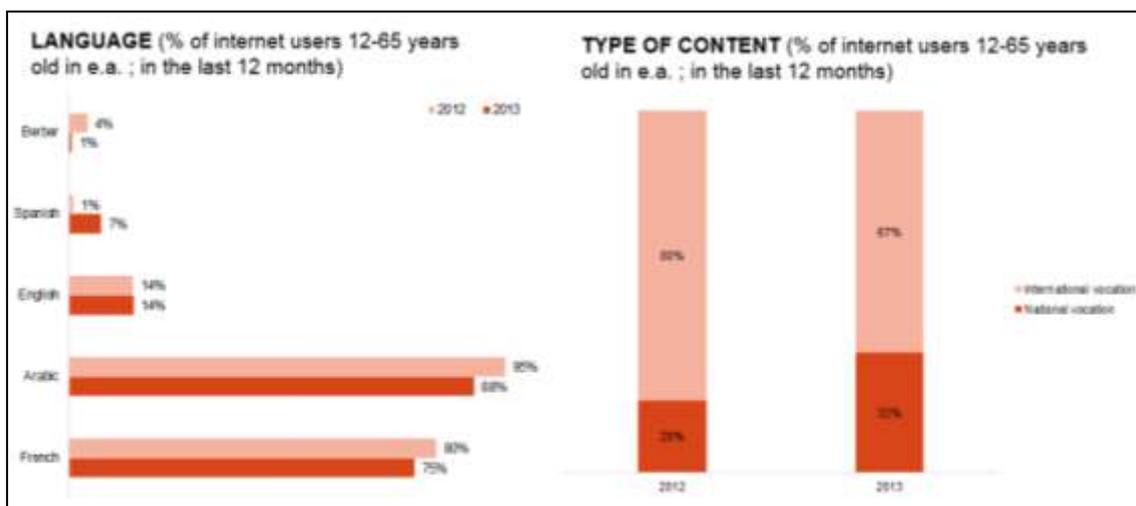| Use	%
Participating in social networks	74%
Watching (streaming)/downloading images, movies, videos or music	72%
Chatting/posting information or instant messages	57%
Consulting collaborative website and online encyclopedia for study purpose	51%
Sending or receiving emails	50%
Making phone calls over the Internet/Skype	46%
Reading/downloading books, online newspapers or magazines	41%
Downloading softwares/applications	40%
Obtaining information on goods/services	30%
Obtaining health services/information	22%
Watching television (free or paid)	22%
Looking for a job (consulting job offers, sending CVs, etc.)	18%
Listening to radio (paid or free)	18%
Uploading personal content on a website	16%
Educational activities/learning	16%
Managing a personal page	15%
Obtaining information from public organizations/authorities	14%
Using online file hosting and sharing services (Google Drive, Dropbox, iCloud for example)	13%
Posting or reading classified advertising	12%
Using online word/data processor softwares	10%
Sharing opinions on politics or society via websites	10%
Make an appointment with health profesionals	9%
Managing/adding content on a blog	9%
Purchasing or ordering online	9%
Selling goods or services	8%
Participating in profesional social networks (Linkedin, Viadeo for example)	8%
Participating in an online consultation related to politics or society	7%
Using travel services (transport, hotel, etc.)	7%
Interacting with public organizations/authorities	7%
Using online banking services	5%

3.4.7   *A Special Interest in Local Content*

The content of the websites consulted is mainly in Arabic or in French and websites with national content attract more and more users with an increasing number of Moroccans visiting them in 2013.


LANGUAGE (% of internet users 12-65 years old in e.a. ; in the last 12 months)

TYPE OF CONTENT (% of internet users 12-65 years old in e.a. ; in the last 12 months)
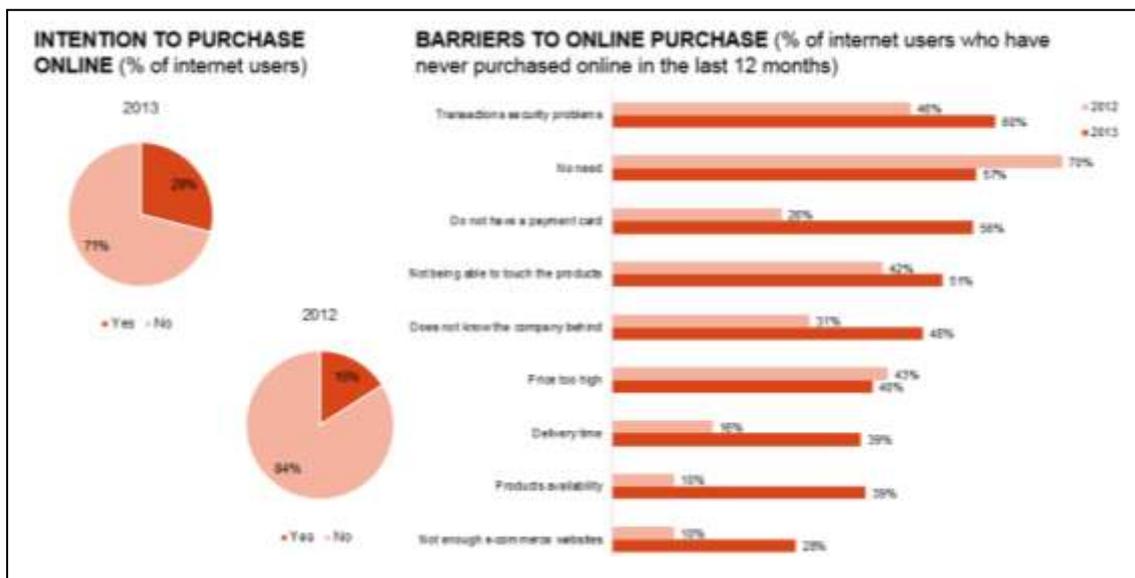
4 NEW SERVICES

4.1 E-Commerce

4.1.1 *More than 750,000 Moroccans purchased online in 2013*

An increasing number of Moroccans are purchasing online. In 2013, the number of individuals who bought online registered a significant increase to reach more than 750,000. Most of them made several purchases during the year.

NUMBER OF INDIVIDUALS PURCHASING ONLINE BY FREQUENCY (in thousands)
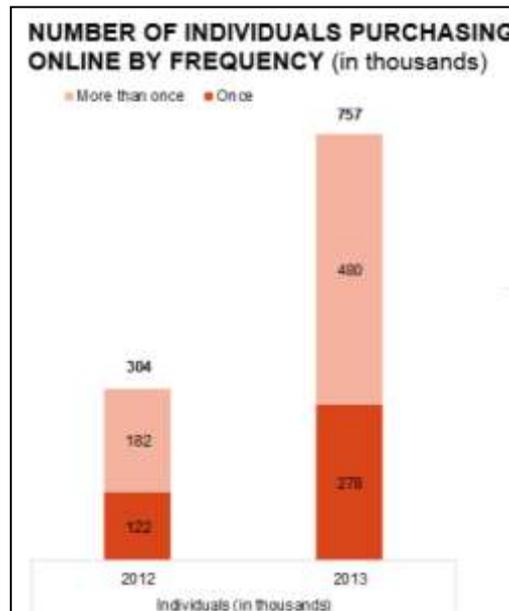
The number of online buyers is expected to keep growing since the intentions to buy online increased significantly, from 16 per cent of Internet users in 2012 to 29 per cent in 2013.

INTENTION TO PURCHASE ONLINE (% of internet users)

BARRIERS TO ONLINE PURCHASE (% of internet users who have never purchased online in the last 12 months)

4.2   Mobile Applications and M-Banking

4.2.1   *Strong Increase in the Use of Mobile Applications*

More than one fourth (27 per cent) of individuals equipped with smartphones used a mobile application in 2013 whereas only 12 per cent did it in 2012. Mobile applications are more used in urban areas (34 per cent) than in rural areas (9 per cent).

In 2013, more than half (57 per cent) of mobile applications users used them on a daily basis.
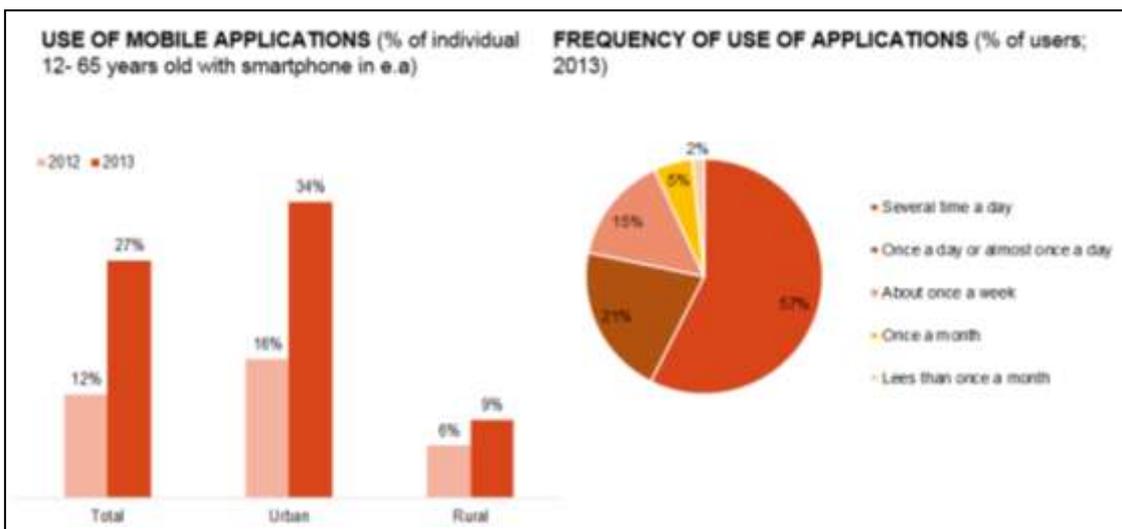
In 2013, a large majority (96 per cent) of users downloaded free applications. Social network applications are among the most used (35 per cent) together with games/entertainment applications (28 per cent) and communication services applications (24 per cent).
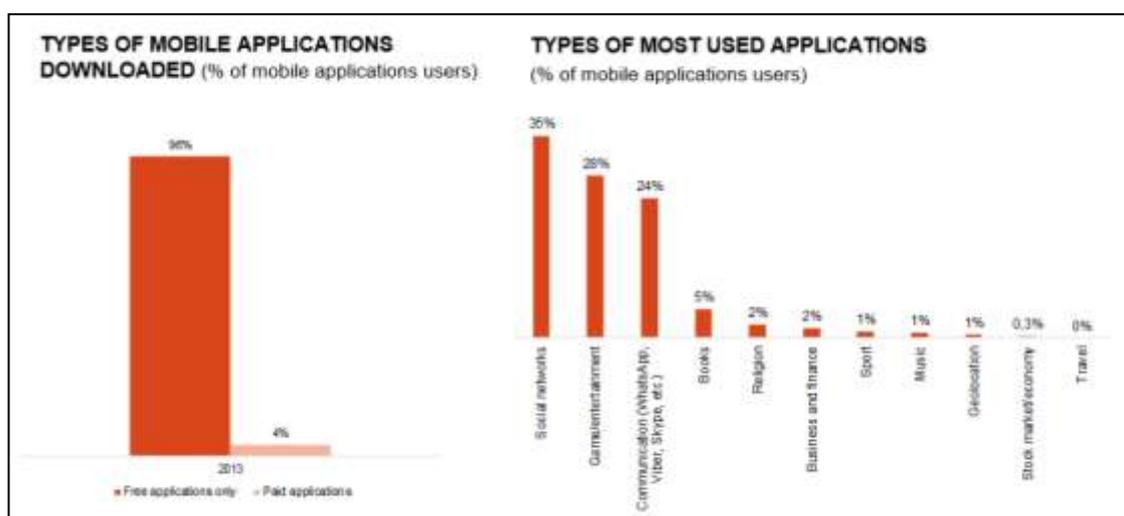
4.2.2 *M-payment Seduces Few Moroccans*

In 2012, only 2 per cent of Moroccans said they had used m-payment services. Once again in 2013, m-payment services seduced very few individuals in Morocco since only 0.3 per cent of them said they used the service during the year.
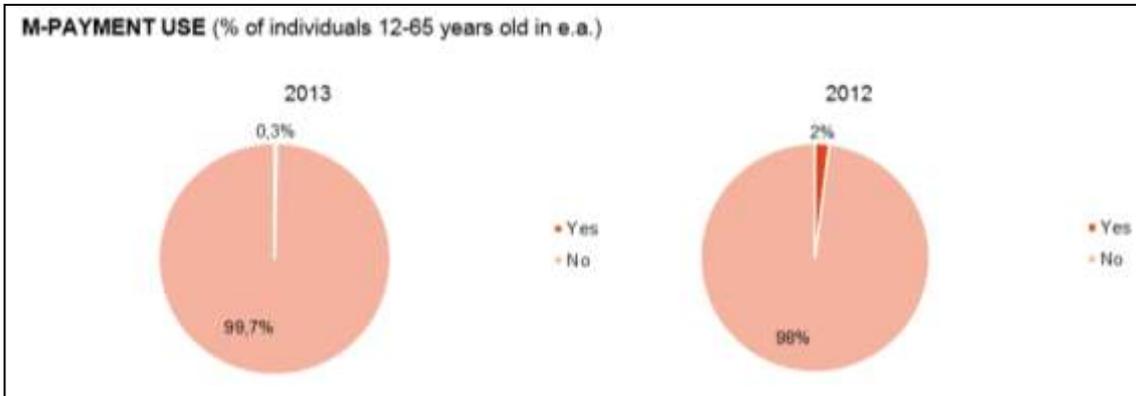

4.3 E-Government Services

4.3.1 *9 per Cent of the Internet Users Used E-Gov Services in 2013*

9 per cent of the Internet users used E-Gov services in 2013. E-Gov services save time and distance for administrative formalities for nearly half of Moroccans (45 per cent).
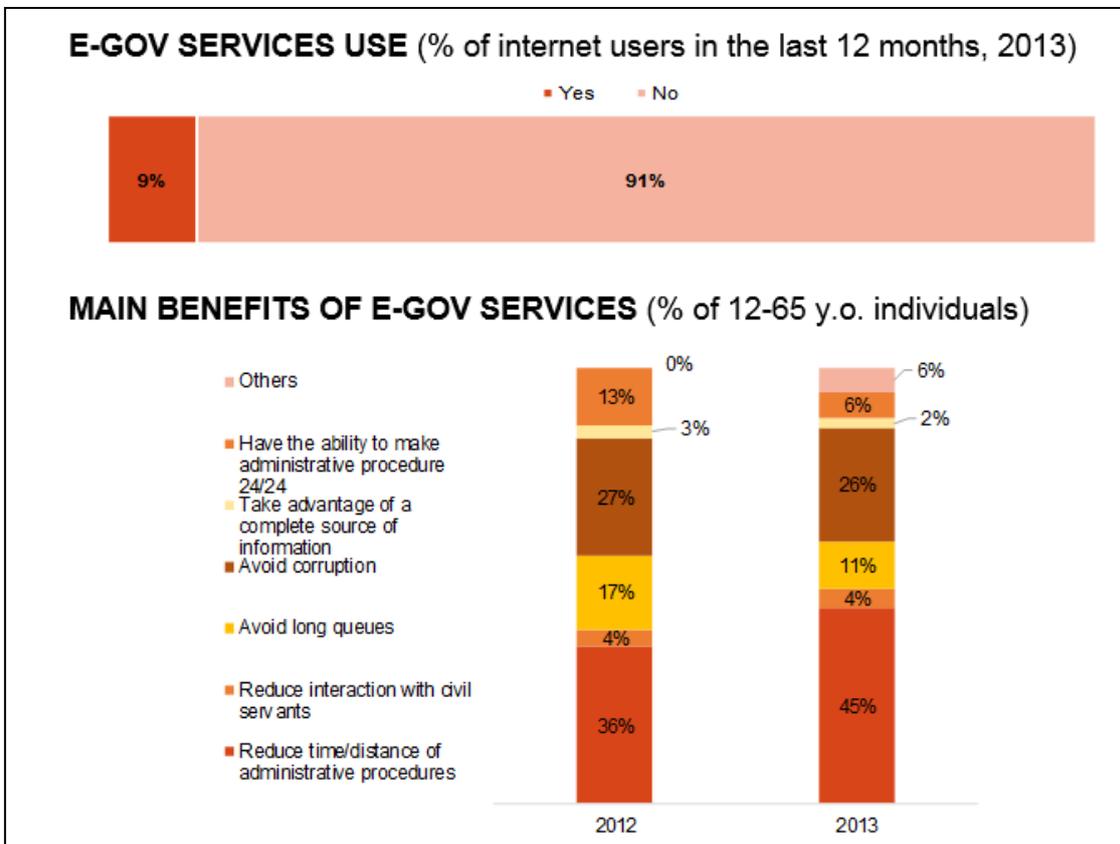
### 4.3.2 *More Users Are Ready to Pay for E-Gov Services*

Most of the users (61 per cent) of E-Gov are ready to pay for those services, which represents 11 points more than in 2012. Almost half of the individuals (49 per cent) are willing to pay between 5 to 20 dirhams.
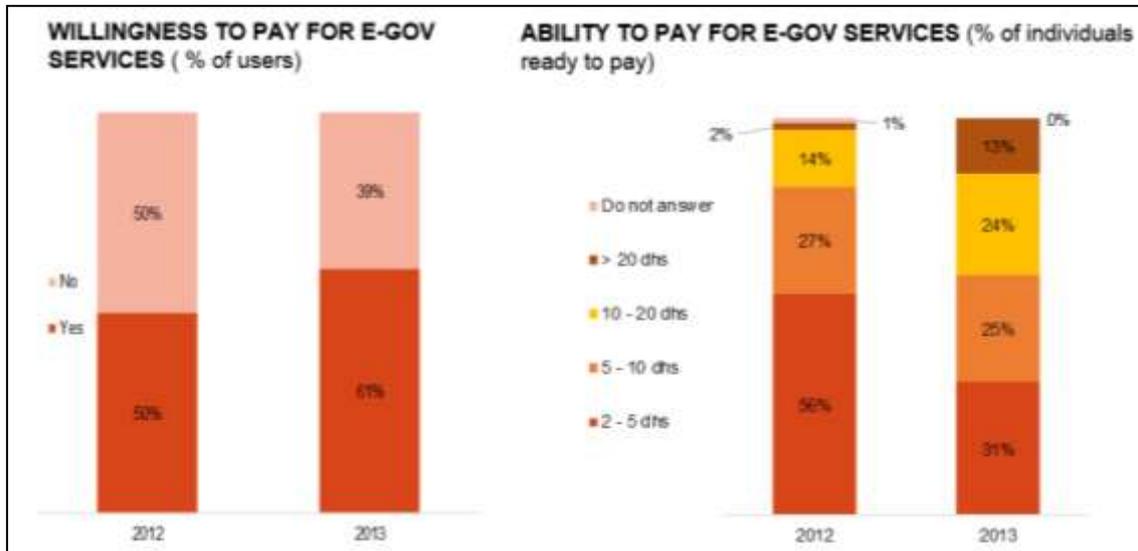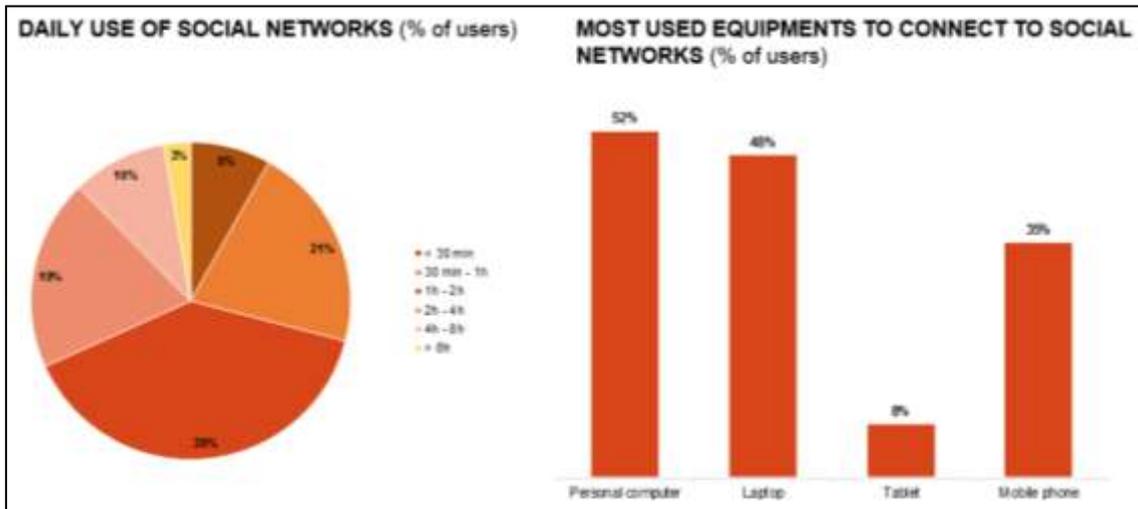

4.4 Social Networks

4.4.1 *Almost Half of the Internet Users Participated to Social Networks in 2013*

Almost half of Internet users (49 per cent) said they used social networks every day or almost every day in 2013, a similar share to the one registered in 2012 (50 per cent). The daily use of social networks is more important for individuals living in urban areas (57 per cent) than for those in rural areas (22 per cent).
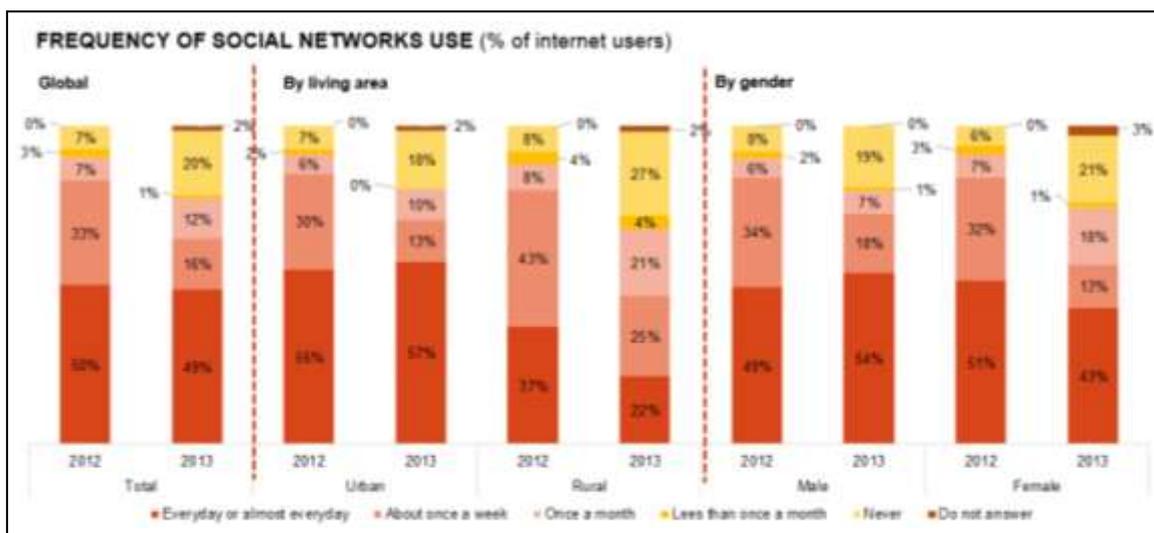
4.4.2 _More Than One-Third of the Users Accessed Social Networks From One to Two Hours a Day_

39 per cent of the users of social networks used them from one to two hours a day in 2013 and half of the users accessed social networks via a personal computer (52 per cent), while 48 per cent did it via a laptop and 35 per cent via a mobile phone.


4.4.3 _Facebook is the Most Popular Social Network_

Among all the social networks, Facebook is by far the most popular. Uses of the Moroccans in terms of social networks are multiple and diverse (chatting, meeting people, searching information, sharing links, photos, and videos, etc.).
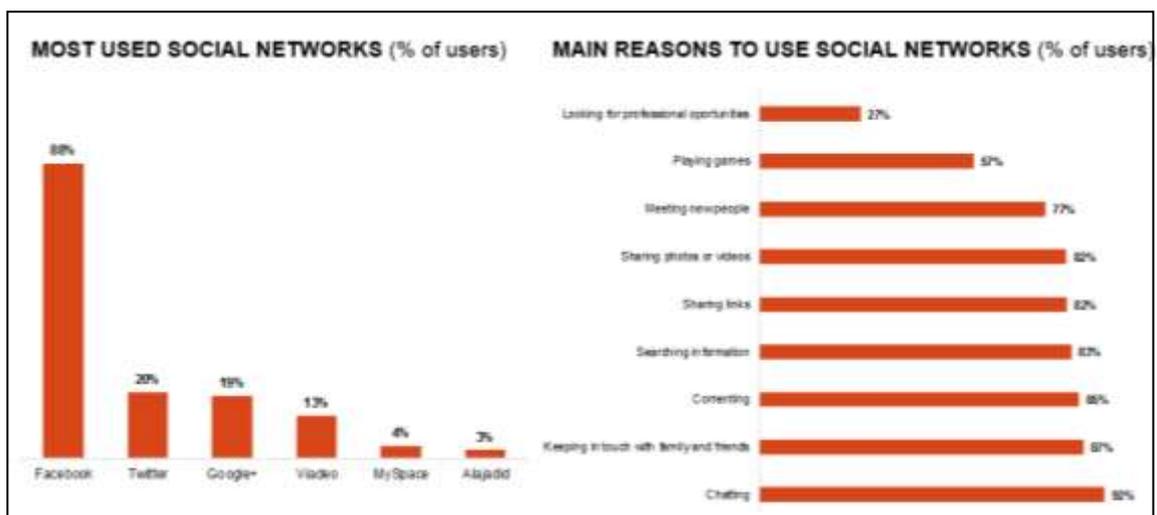
5   YOUNG CHILDREN AND ICT

In the 2013 edition, a section of the questionnaire has been dedicated to the ICT equipment and uses among young children (less than 12 years old). A parent or a guardian answered the questions.

In 2013, 16 per cent of the young Moroccans are equipped with a mobile phone and 55 per cent stated that they know how to use a computer.
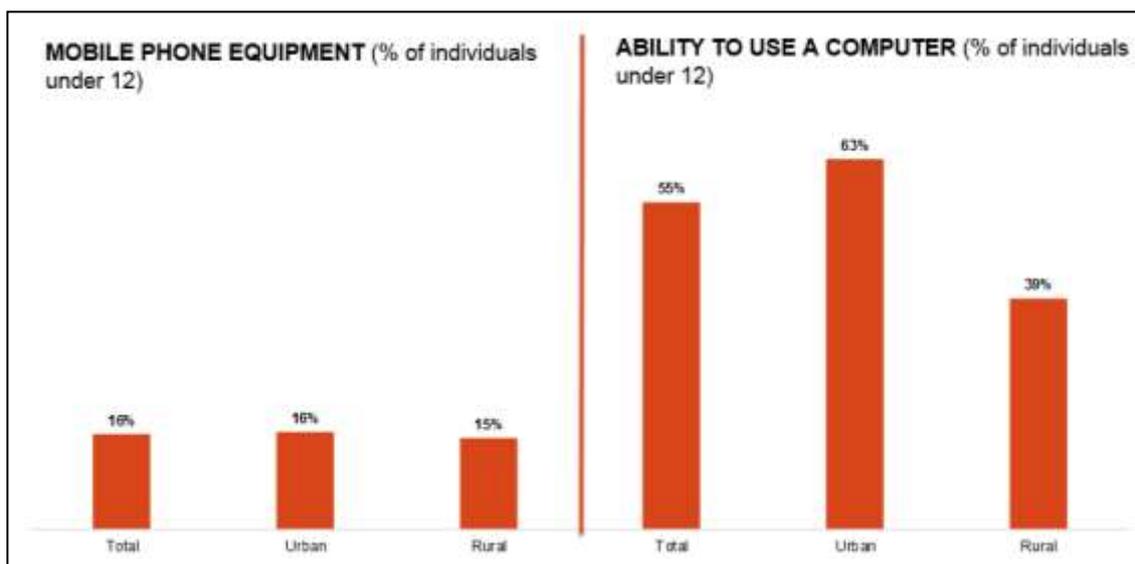
Almost half (47 per cent) of the young Moroccans aged under 12 accessed Internet in 2013, but the share of Internet users was higher in urban areas (50 per cent) than in rural areas (40 per cent). A bit more than one-fourth (28 per cent) of the young Moroccans had the authorization to use the Internet on their own in 2013. Finally, 14 per cent of them were social networks users, with a greater share in urban areas (17 per cent) than in rural areas (7 per cent).