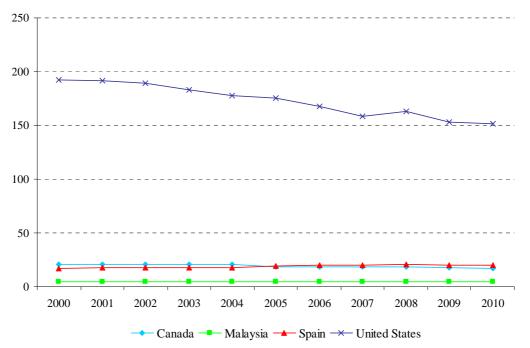
ICT FACTS ON FOUR COUNTRIES 2012 FIRST DRAFT

Table of contents

1
3
9
13
13
16
30
30
33
43
43
46
53
53
56
65



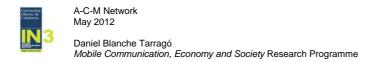
1. Fixed telephones



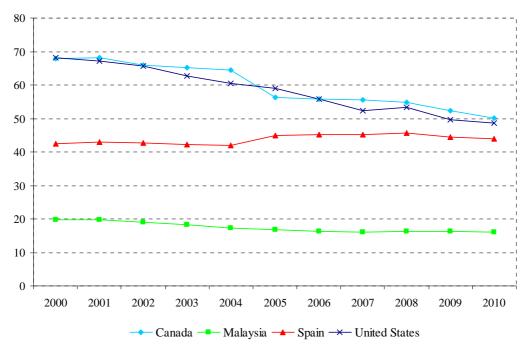
1.1 Fixed telephone lines (millions)¹

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Canada	20,84	21,12	20,62	20,61	20,56	18,14	18,23	18,28	18,25	17,62	17,02
Malaysia	4,62	4,70	4,66	4,57	4,44	4,36	4,34	4,35	4,51	4,52	4,57
Spain	17,10	17,53	17,64	17,75	17,93	19,46	19,86	20,19	20,57	20,23	20,20
United States	192,51	191,57	189,25	182,93	177,69	175,16	167,45	158,41	162,76	152,96	151,17

¹ A fixed telephone line (previously called main telephone line in operation) is an active line (those that have registered an activity in the past three months) connecting the subscriber's terminal equipment to the public switched telephone network (PSTN) and which has a dedicated port in the telephone exchange equipment.



1.2 Fixed telephone lines per 100 inhabitants²

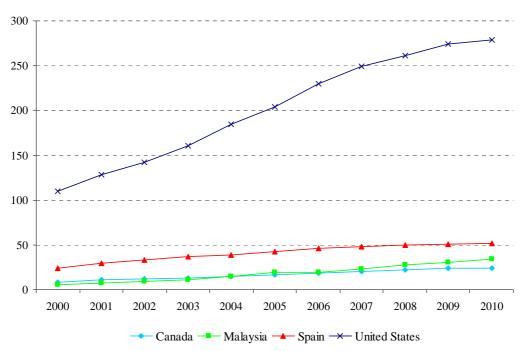


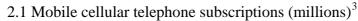
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009 202	10
Canada	67.95	68.22	65.92	65.21	64.37	56.21	55.89	55.43	54.75	52.33 50.0	03
Malaysia	19.76	19.65	19.04	18.24	17.37	16.72	16.33	16.08	16.41	16.18 16.	10
Spain	42.45	43.00	42.64	42.24	41.96	44.84	45.12	45.27	45.57	44.33 43.8	85
United States	68.14	67.08	65.60	62.80	60.42	59.01	55.90	52.40	53.36	49.71 48.7	70

 $^{^{2}}$ Calculated by dividing the number of fixed telephone lines by the population and multiplying by 100.



2. Mobile cellular telephones

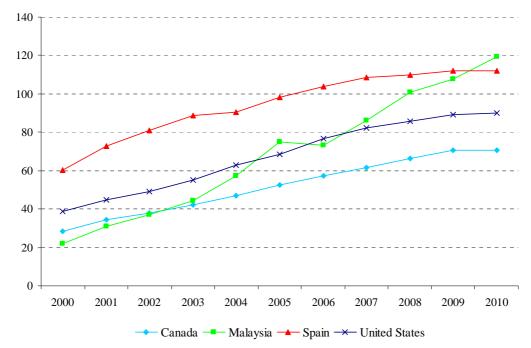




	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Canada	8,72	10,64	11,87	13,29	15,02	17,01	18,74	20,27	22,09	23,81	24,03
Malaysia	5,12	7,38	9,05	11,12	14,61	19,54	19,46	23,34	27,71	30,14	33,85
Spain	24,26	29,65	33,53	37,21	38,62	42,69	45,69	48,42	49,62	51,08	51,60
United States	109,4	128,5	141,8	160,63	184,81	203,7	229,6	249,3	261,3	274,3	278,9

³ Refers to the subscriptions to a public mobile telephone service and provides access to Public Switched Telephone Network (PSTN) using cellular technology, including number of pre-paid SIM cards active during the past three months. This includes both analogue and digital cellular systems (IMT-2000 (Third Generation, 3G) and 4G subscriptions, but excludes mobile broadband subscriptions via data cards or USB modems. Subscriptions to public mobile data services, private trunked mobile radio, telepoint or radio paging, and telemetry services should also be excluded. This should include all mobile cellular subscriptions that offer voice communications.





2.2 Mobile cellular telephone subscriptions per 100 inhabitants⁴

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Canada	28.45	34.38	37.95	42.04	47.02	52.71	57.46	61.48	66.28	70.70	70.66
Malaysia	21.87	30.81	36.92	44.38	57.09	74.88	73.20	86.30	100.76	107.85	119.21
Spain	60.22	72.74	81.06	88.53	90.38	98.38	103.81	108.55	109.91	111.93	111.98
United States	38.75	45.00	49.15	55.14	62.85	68.62	76.64	82.47	85.67	89.14	89.85

⁴ Refers to the subscriptions to a mobile cellular telephone service, including number of pre-paid SIM cards active during the past three months, divided by the population and multiplied by 100.



Canada — Malaysia — Spain — United States

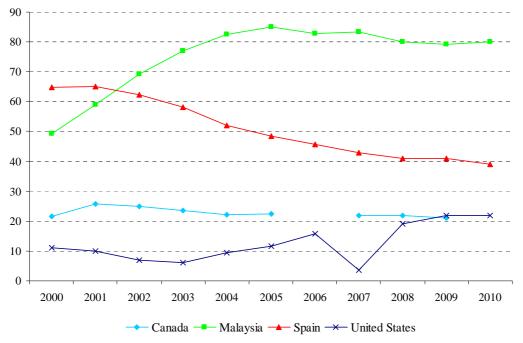
2.3 Prepaid mobile telephone subscriptions per 100 inhabitants⁵

Source: Own elaboration based on ITU (2011), Statistics Canada, Demography Division (2011), Department of Statistics Malaysia (2011), National Institute of Statistics (2011), and United States Census Bureau, Population Division (2011).

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Canada	6.16	8.93	9.46	9.99	10.47	11.90		13.63	14.55	15.00	
Malaysia	10.73	18.08	25.39	33.79	46.54	62.77	59.98	71.51	80.49	85.60	95.79
Spain	38.85	46.87	49.89	50.62	46.45	46.96	46.70	45.93	44.00	44.66	42.83
United States	4.26	4.50	3.42	3.32	5.99	7.93	12.15	2.87	16.32	19.67	19.83

⁵ Calculated by dividing the number of mobile cellular subscriptions (a subscription refers to a line) that used prepaid refills by the population and multiplying by 100. Regarding prepaid subscriptions, this includes both analogue and digital cellular systems subscriptions. Only active prepaid subscriptions that have used the system (as shown by traffic or whether they have recharged the card) during the past three months should be included.



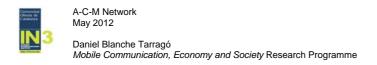


2.4 Percentage of prepaid mobile telephone lines over total mobile subscriptions⁶

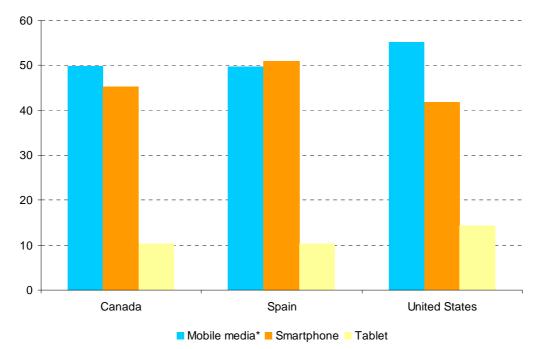
Source: Own elaboration based on ITU (2011)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Canada	21.57	25.86	24.85	23.66	22.16	22.45		22.00	21.80	21.11	
Malaysia	49.25	59.07	69.35	76.93	82.52	85.03	82.69	83.27	79.99	79.21	80.16
Spain	64.85	64.98	62.25	58.10	51.95	48.51	45.69	42.88	40.93	40.87	39.03
United States	11.00	9.99	6.94	6.00	9.50	11.51	15.79	3.47	19.00	22.00	22.00

⁶ Calculated by dividing the number of mobile cellular subscriptions that used prepaid refills by the number of subscriptions to a public mobile telephone service and multiplying by 100. Mobile telephone subscriptions refers to the service that provides access to Public Switched Telephone Network (PSTN) using cellular technology, including number of pre-paid SIM cards active during the past three months. This includes both analogue and digital cellular systems (IMT-2000 (Third Generation, 3G) and 4G subscriptions, but excludes mobile broadband subscriptions via data cards or USB modems. Subscriptions to public mobile data services, private trunked mobile radio, telepoint or radio paging, and telemetry services should also be excluded. This should include all mobile cellular subscriptions that offer voice communications.



2.5 Share of mobile media and mobile devices (Smartphones and tablets) among mobile users. 2011^7



*Browsing the mobile web, accessing applications or downloading content. Source: (ComScore, 2012, pp. 6–7, 37)

	Mobile media	Smartphone	Tablet
Canada	49.9	45.3	10.3
Spain	49.7	51.0	10.3
United States	55.2	41.8	14.3

⁷ 3 months average ending December 2011 for mobile media and Smartphone, and December 2011 only for tablet. Surveyed nationally representative samples of mobile subscribers age 13+. Mobile phone owners sample size: Canada (only one reported quarterly): 5,000; Spain: 4,000; United States: 10,000.



	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Canada	90				94	97	98	98	98	99	
Malaysia		95					96	92.5	92	95	95
Spain	99	99	99	99	99	99	99	99	99	99.8	99.8
United States	99	99	99	99	99	99	99.8	99.6	99.6	99.6	99.8

2.6 Percentage of the population covered by a mobile cellular network⁸

·· Data not available

Source: ITU (2011)

2.7 Percentage of the population covered by at least a 3G mobile network⁹

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Canada								78		96	
Malaysia	••									74	81
Spain									83	91.4	95.1
United States								82	92	98.1	98.5

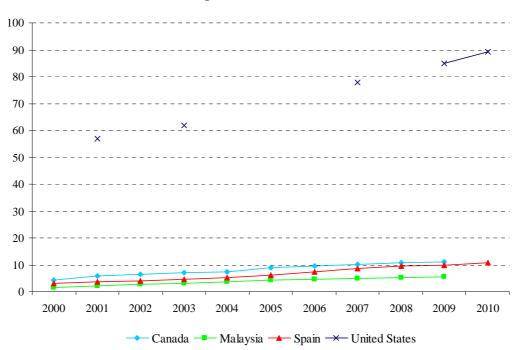
·· Data not available

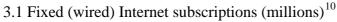
⁸ This indicator measures the percentage of inhabitants that are within range of a mobile cellular signal, irrespective of whether or not they are subscribers. This is calculated by dividing the number of inhabitants within range of a mobile cellular signal by the total population. Note that this is not the same as the mobile subscription density or penetration. When there are multiple operators offering the service, the maximum amount of population covered should be reported.

⁹ Refers to the percentage of inhabitants that are within range of at least a 3G mobile cellular signal, irrespective of whether or not they are subscribers. This is calculated by dividing the number of inhabitants that are covered by at least 3G mobile cellular signal by the total population.



3. Internet



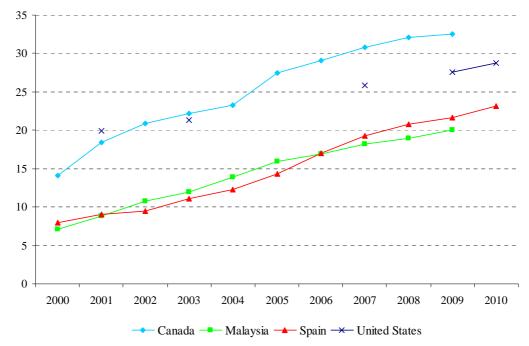


Source: ITU (2011)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Canada	4,32	5,70	6,54	7,01	7,44	8,88	9,48	10,16	10,71	10,95	
Malaysia	1,65	2,11	2,63	2,99	3,54	4,15	4,48	4,93	5,22	5,59	
Spain	3,22	3,67	3,92	4,68	5,25	6,23	7,50	8,59	9,39	9,85	10,65
United States		56,99		62				77,98		84,91	89,09

¹⁰ The number of total Internet subscriptions with fixed (wired) Internet access, which includes dial-up and total fixed (wired) broadband subscriptions. Only active subscriptions that have used the system within the past 3 months should be included.





3.2 Fixed (wired) Internet subscriptions per 100 inhabitants¹¹

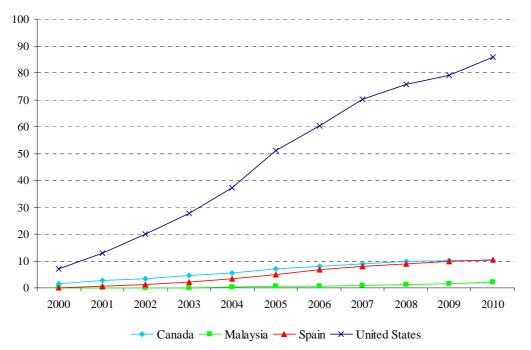
Source: ITU (2011)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Canada	14.09	18.42	20.92	22.18	23.29	27.50	29.05	30.81	32.14	32.52	
Malaysia	7.08	8.84	10.73	11.93	13.85	15.91	16.88	18.22	18.98	20.00	
Spain	7.99	9.01	9.48	11.13	12.29	14.36	17.05	19.26	20.80	21.60	23.13
United States		19.95		21.28				25.79		27.59	28.70

¹¹ Refers to the number of total Internet subscriptions with fixed (wired) Internet access (includes dial-up and total fixed (wired) broadband subscriptions) divided by population and multiplied by 100.



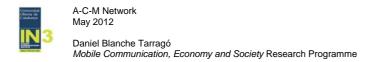
A-C-M Network May 2012 Daniel Blanche Tarragó *Mobile Communication, Economy and Society* Research Programme

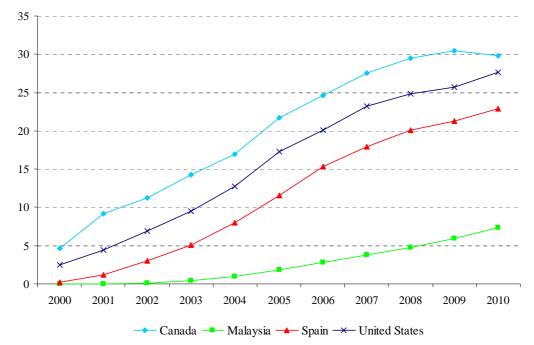


3.3 Fixed (wired) broadband Internet subscriptions (millions)¹²

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Canada	1,41	2,83	3,51	4,51	5,41	7,00	8,04	9,07	9,84	10,27	10,13
Malaysia	0	0,004	0,019	0,11	0,25	0,48	0,75	1,02	1,31	1,67	2,07
Spain	0,076	0,466	1,24	2,12	3,40	5,03	6,73	7,99	9,05	9,70	10,53
United States	7,06	12,79	19,88	27,74	37,35	51,15	60,23	70,20	75,70	79,05	85,72

¹² Total fixed (wired) broadband Internet subscriptions refers to subscriptions to high-speed access to the public Internet (a TCP/IP connection), at downstream speeds equal to, or greater than, 256 kbit/s. This can include for example cable modem, DSL, fibre-to-the-home/building and other fixed (wired) broadband subscriptions. This total is measured irrespective of the method of payment. It excludes subscriptions that have access to data communications (including the Internet) via mobile cellular networks. If countries use a different definition of broadband, this should be indicated in a note. It should exclude technologies listed under wireless broadband category.





3.4 Fixed (wired) broadband Internet subscriptions per 100 inhabitants¹³

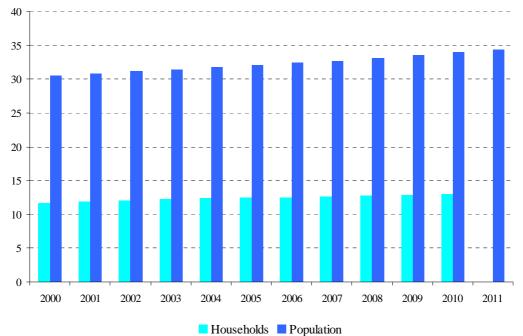
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Canada	4.60	9.15	11.23	14.27	16.95	21.69	24.65	27.51	29.53	30.51	29.80
Malaysia	0	0.01	0.07	0.44	0.98	1.85	2.82	3.78	4.79	5.98	7.31
Spain	0.18	1.14	3.01	5.04	7.95	11.60	15.30	17.91	20.05	21.26	22.86
United States	2.50	4.48	6.89	9.52	12.70	17.23	20.10	23.22	24.82	25.69	27.61

¹³ Refers to total fixed (wired) broadband Internet subscriptions (that is, subscriptions to high-speed access to the public Internet (a TCP/IP connection) at downstream speeds equal to, or greater than 256 kbit/s) divided by population and multiplied by 100.



4. Canada

4.1 Demographics

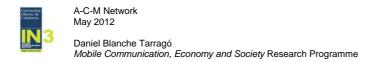


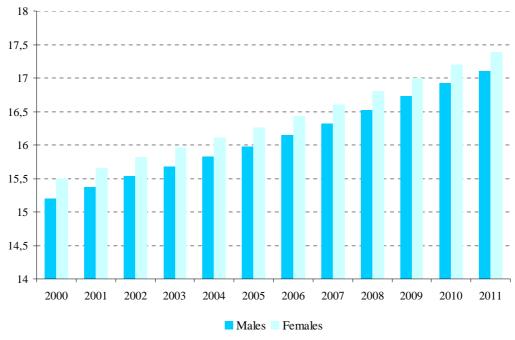
4.1.1 Population and households (millions). Canada

Source: Households, ITU (2011); Population, Statistics Canada, Demography Division (2011)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Households	11,6	11,8	12,0	12,1	12,3	12,4	12,5	12,6	12,7	12,8	12,9	
Population ¹⁴	30,5	30,8	31,1	31,4	31,7	32,0	32,3	32,7	33,1	33,5	33,9	34,2

¹⁴ Final intercensal estimates from 1981 to 2006, final postcensal estimates for 2007, updated postcensal estimates from 2008 to 2010 and preliminary postcensal estimates for 2011. Population as of January 1.





4.1.2 Population by sex (millions). Canada¹⁵

Source: Statistics Canada (2011)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Males	15,19	15,36	15,53	15,67	15,82	15,97	16,14	16,32	16,52	16,72	16,92	17,10
Females	15,49	15,65	15,82	15,96	16,11	16,26	16,42	16,60	16,79	17,00	17,20	17,37

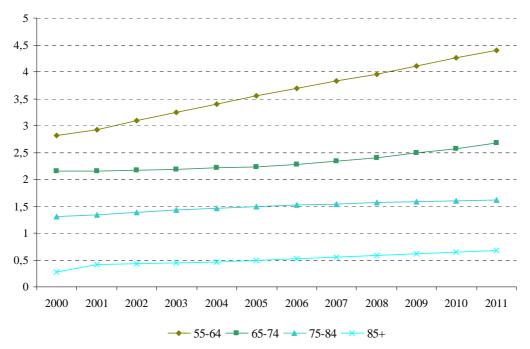
¹⁵ 1. Postcensal estimates are based on the latest census counts adjusted for census net undercoverage, incompletely enumerated Indian reserves and for the estimated population growth that occurred since that census. Intercensal estimates are based on postcensal estimates and census counts adjusted for the censuses preceding and following the considered year.

^{2.} Estimates are final intercensal up to 2005, final postcensal from 2006 to 2008, updated postcensal for 2009 and 2010 and preliminary postcensal for 2011.

^{3.} Data for persons aged 90 to 100 years and over will be available from 2001.

^{4.} The population growth, which is used to calculate population estimates, is comprised of the natural growth (CANSIM 51-0002 and 51-0013), international migration (CANSIM 51-0011) and interprovincial migration (CANSIM 51-0012).





4.1.3 Elder population by group age (millions). Canada¹⁶

Source: Own elaboration based on Statistics Canada (2011)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
55-64	2,80	2,91	3,08	3,24	3,39	3,54	3,68	3,82	3,95	4,10	4,25	4,39
65-74	2,14	2,16	2,17	2,19	2,21	2,23	2,28	2,33	2,40	2,48	2,57	2,67
75-84	1,30	1,34	1,38	1,42	1,46	1,49	1,52	1,54	1,56	1,58	1,60	1,62
85+	0,27	0,41	0,43	0,44	0,46	0,48	0,52	0,55	0,58	0,61	0,64	0,67

¹⁶ 1. Postcensal estimates are based on the latest census counts adjusted for census net undercoverage, incompletely enumerated Indian reserves and for the estimated population growth that occurred since that census. Intercensal estimates are based on postcensal estimates and census counts adjusted for the censuses preceding and following the considered year.

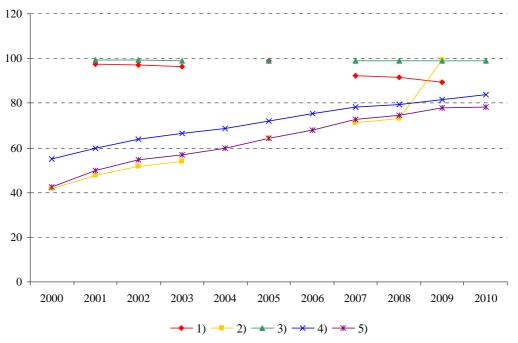
^{2.} Estimates are final intercensal up to 2005, final postcensal from 2006 to 2008, updated postcensal for 2009 and 2010 and preliminary postcensal for 2011.

^{3.} Data for persons aged 90 to 100 years and over will be available from 2001.

^{4.} The population growth, which is used to calculate population estimates, is comprised of the natural growth (CANSIM 51-0002 and 51-0013), international migration (CANSIM 51-0011) and interprovincial migration (CANSIM 51-0012).



4.2 Information and communication technologies



4.2.1 Household equipment (percent). Canada

Source: ITU (2011)



Daniel Blanche Tarragó Mobile Communication, Economy and Society Research Programme

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
1) Fixed line telephone ¹⁷		97.4	97	96.3		98.9		92.24	91.61	89.3	
2) Mobile cellular telephone ¹⁸	41.8	47.6	51.6	53.9		64.2		71.40	73.19	99.3	
3) TV ¹⁹		99.2	99.2	99		99		98.88	98.77	98.9	98.9
4) Computer ²⁰	54.9	59.9	64	66.6	68.7	72	75.45	78.42	79.4	81.7	83.87
5) Internet access at	42.6	49.9	54.5	56.9	59.9	64.3	68.1	72.72	74.58	77.8	78.2
home ²¹											

¹⁷ Refers to the percentage of households with a fixed line telephone. A fixed telephone line is defined as a telephone line connecting a customer's terminal equipment (e.g. telephone set, facsimile machine) to the public switched telephone network (PSTN) and which has a dedicated port on a telephone exchange. This term is synonymous with the terms "main station" or "Direct Exchange Line" (DEL) that are commonly used in telecommunication documents. It may not be the same as an access line or a subscriber.

¹⁸ Refers to the percentage of households with a mobile cellular telephone. Mobile cellular telephone refers to a portable telephone subscribing to a public mobile telephone service using cellular technology, which provides access to the PSTN. This includes analogue and digital cellular systems. Users of both postpaid subscriptions and prepaid accounts are included.

postpaid subscriptions and prepaid accounts are included. ¹⁹ Refers to the percentage of households with a TV. A TV (television) is a stand-alone device capable of receiving broadcast television signals, using popular access means such as over-the-air, cable and satellite. It excludes TV functionality integrated with another device, such as a computer or a mobile phone.

<sup>phone.
²⁰ Refers to the percentage of households with a computer. A computer can include a desktop, portable or handheld computer (e.g. a personal digital assistant). It does not include equipment with some embedded computing abilities such as mobile phones or TV sets.
²¹ Refers to the percentage of households with Internet. The Internet is a world-wide public computer</sup>

²¹ Refers to the percentage of households with Internet. The Internet is a world-wide public computer network. It provides access to a number of communication services including the World Wide Web and carries email, news, entertainment and data files. Access is not assumed to be only via a computer - it may also be by mobile phone, games machine, digital TV etc.



4.2.2 Individual usage of electronic devices and technologies (percent). Canada



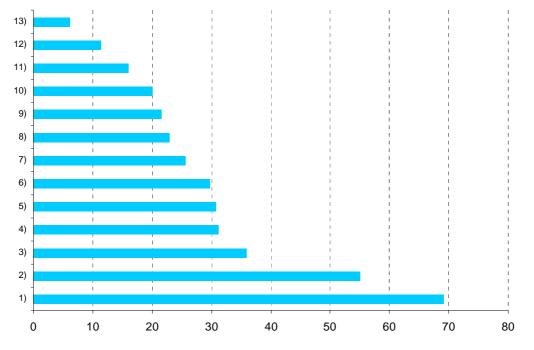
Source: ITU (2011)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
1) Computer ²²	65.3										
2) Internet ²³	51.3	60.2	61.5	64.2	65.9	71.6	72.4	73.2	76.7	80.3	81.6

²² Refers to the percentage of individuals using a computer. A computer can include a desktop, portable or handheld computer (e.g. a personal digital assistant). It does not include equipment with some embedded computing abilities such as mobile phones or TV sets.

computing abilities such as mobile phones or TV sets. ²³ Refers to the percentage of the population using the Internet. The Internet is a worldwide public computer network. It provides access to a number of communication services including the World Wide Web and carries e-mail, news, entertainment and data files. Internet use may be facilitated by any device enabling Internet access (not only a computer). This includes a mobile phone, PDA, games machine and digital TV. Use can be via a fixed or mobile network.





4.2.3 Selected mobile activities by share of total mobile audience (2011). Canada 24

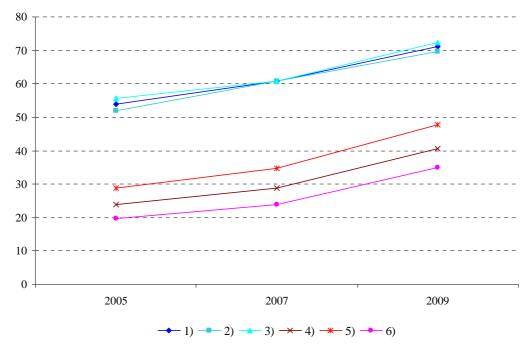
Source: (ComScore, 2012, p. 28)

1) Sent text message	69.2
2) Took photos	55.1
3) Used email	35.9
3) Accessed social networking/blog	31.2
4) Played games	30.8
5) Accessed weather	29.8
6) Accessed search	25.6
7) Listened to music	23.0
8) Accessed maps	21.6
9) Accessed news	20.1
10) Accessed sports info	16.0
11) Accessed financial news or stock quotes	11.4
12) Accessed online retail	6.1

²⁴ 3 months average ending December 2011. Surveyed nationally representative samples of mobile subscribers age 13+. Mobile phone owners sample size: Canada: 5,000.



4.2.4 Internet use among the elder population (percent). Canada²⁵



Source: Statistics Canada, (2010a)

		2005	2007	2009
1) Internet users aged 55 to 64 years	Both sexes	53.8	60.8	71.1
2)	Males	52.0	60.8	69.7
3)	Females	55.6	60.9	72.4
4) Internet users aged 65 years and over	Both sexes	23.8	28.8	40.7
5)	Males	28.7	34.6	47.8
6)	Females	19.8	24.0	34.9

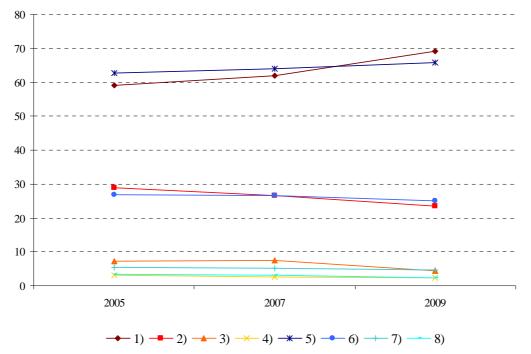
²⁵ 1. The target population for the Canadian Internet Use Survey has changed from individuals 18 years of age and older in 2005 to individuals 16 years of age and older in 2007.

^{2.} Percentage of all individuals aged 16 years old and over who responded to have used the Internet for personal non business purposes in the past 12 months from any location.

^{3.} Internet access from any location includes use from home, school, work, public library or other, and counts an individual only once, regardless of use from multiple locations.



4.2.5 Frequency of use of Internet among the elder population (percent). Canada²⁶



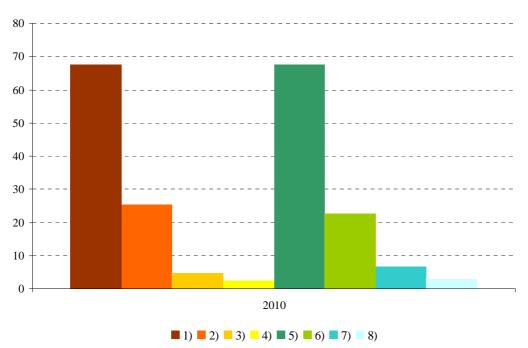
Source: (Statistics Canada, 2010b)

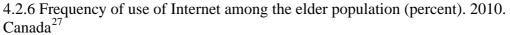
		2005	2007	2009
1) Internet users aged 55 to 64 years	At least once a day	59.0	61.9	69.1
2)	At least once a week (but not every day)	28.9	26.6	23.4
3)	At least once a month (but not every week)	7.3	7.4	4.5
4)	Less than once a month	3.1	2.6	2.3
5) Internet users aged 65 years and over	At least once a day	62.8	64.0	65.9
6)	At least once a week (but not every day)	26.8	26.6	25.1
7)	At least once a month (but not every week)	5.5	5.1	4.7
8)	Less than once a month	3.3	3.0	2.4

²⁶ 1. The target population for the Canadian Internet Use Survey has changed from individuals 18 years of age and older in 2005 to individuals 16 years of age and older in 2007.

^{2.} Internet users at home are individuals who answered they used the Internet from home in the past twelve months.







Source: Statistics Canada (2011b)

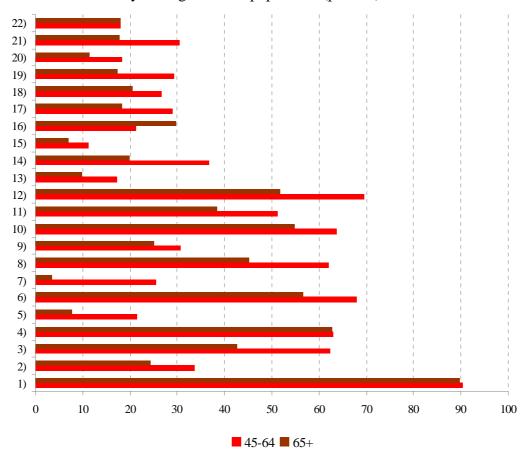
		2010
1) Internet users aged 45 to 64 years	At least once a day	67.5
2)	At least once a week (but not every day)	25.3
3)	At least once a month (but not every week)	4.7
4)	Less than once a month	2.5
5) Internet users aged 65 years and over	At least once a day	67.5
6)	At least once a week (but not every day)	22.7
7)	At least once a month (but not every week)	6.8
8)	Less than once a month	3.1

²⁷ 1. Internet users are individuals who answered that they used the Internet for personal non business use from any location in the past twelve months.

^{2.} The Canadian Internet Use Survey was redesigned for 2010 and its findings should not be compared with those from previous surveys.

^{3.} The 2010 series of Canadian Internet use tables replaces the terminated series of tables from 2005 to 2009.





4.2.7 Internet activity among the elder population (percent). 2010. Canada²⁸

Source: Statistics Canada (2011c)

²⁸ 1. Internet users are individuals who answered that they used the Internet for personal non business use from any location in the past twelve months.

^{2.} The Canadian Internet Use Survey was redesigned for 2010 and its findings should not be compared with those from previous surveys.

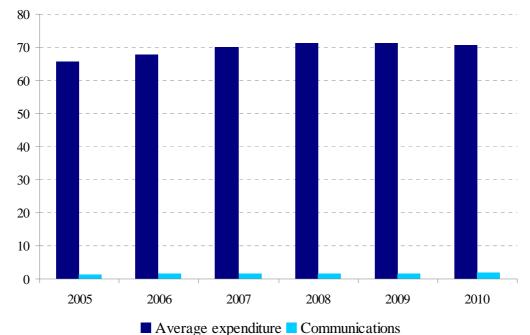
^{3.} The 2010 series of Canadian Internet use tables replaces the terminated series of tables from 2005 to 2009.



Daniel Blanche Tarragó Mobile Communication, Economy and Society Research Programme

Internet activity	45-64	65+
1) E-mail	90.3	89.7
2) Use instant messenger	33.5	24.3
3) Visit or interact with government websites	62.3	42.6
4) Search for medical or health-related information	63.0	62.8
5) Formal education, training or school work	21.4	7.7
6) Travel information or making travel arrangements	68.0	56.5
7) Search for employment	25.4	3.5
8) Electronic banking (paying bills, viewing statements, transferring funds between accounts)	62.0	45.2
9) Research investments	30.7	25.1
10) Read or watch the news	63.7	54.8
11) Research community events	51.2	38.4
12) Window shop or browse for information on goods or services	69.5	51.8
13) Sell goods or services (through auction sites)	17.2	9.8
14) Use social networking sites	36.7	19.9
15) Contribute content or participate in discussion groups (blogging, message boards, posting images)	11.2	7.0
16) Play online games	21.3	29.8
17) Obtain or save music (free or paid downloads)	28.9	18.3
18) Obtain or save software (free or paid downloads)	26.7	20.5
19) Listen to the radio online	29.4	17.4
20) Download or watch television online	18.4	11.4
21) Download or watch movies or video clips online	30.5	17.8
22) Make telephone calls online	17.9	18.0





4.2.8 Average expenditure per household (\$CAD)²⁹

Source: Statistics Canada (2010c, p. 20)

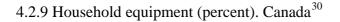
	2005	2006	2007	2008	2009	2010
Average expenditure	65,575	67,736	69,946	71,364	71,117	70,574
Communications	1,368	1,457	1,488	1,507	1,583	1,731
% of total	2.08	2.15	2.12	2.11	2.22	2.45

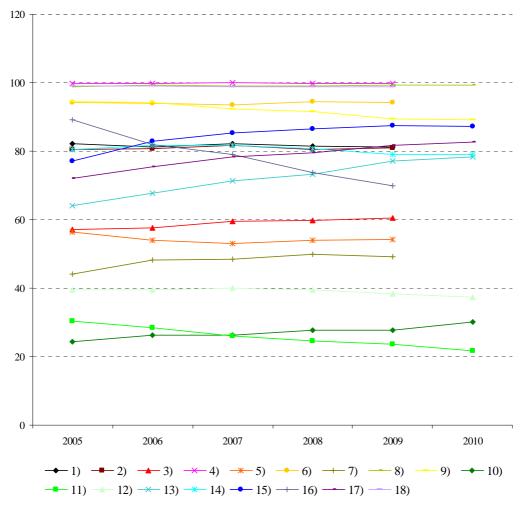
²⁹ 2005-2009: Beginning with 2006, the distinction between full-year and part-year members and households has been removed. Spending data are collected for the reference year for all members of the household at the time of the interview. Since the data for the 1997-2005 were based on full-year members only, to maintain the comparability with prior years, the data for 1997-2005 have been revised to include both full-year and part-year households.

^{2010: 1.} This table replaces CANSIM tables 203-0001 to 203-0018 which have been terminated with the release of the 2009 data due to changes in the methodology of this survey.

^{2.} Includes child care expenses, domestic and other custodial services, pet expenses, household cleaning supplies, paper, plastic and foil household supplies, garden supplies and services and other household supplies.







Source: Statistics Canada (2010c, 2012)

³⁰ 2005-2009: Beginning with 2006, the reference date for household composition, tenure, dwelling characteristics and household equipment are as of the time of the interview instead of December 31st of the reference year. The distinction between full-year and part-year members and households has been removed.

^{2010:} This table replaces CANSIM tables 203-0019 and 203-0020 which have been terminated with the release of the 2009 data due to changes in the methodology of this survey.



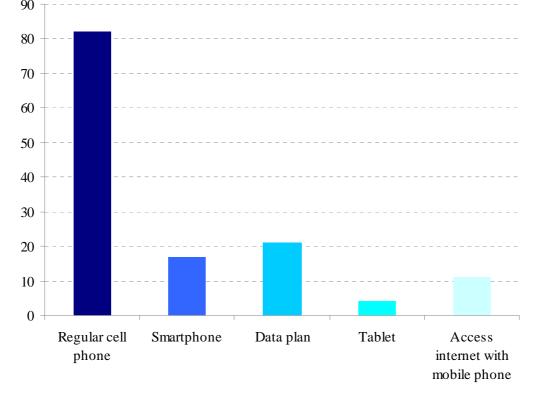
A-C-M Network May 2012

Daniel Blanche Tarragó Mobile Communication, Economy and Society Research Programme

	2005	2006	2007	2008	2009	2010
1) Washing machine	82.2	81.3	82.2	81.5	81.3	
2) Clothes dryer	80.4	80.8	81.8	80.5	81.0	
3) Dishwasher	57.2	57.7	59.4	59.8	60.4	
4) Refrigerator	99.7	99.8	99.9	99.8	99.8	
5) Freezer	56.3	53.9	53.0	54.0	54.1	
6) Microwave oven	94.1	93.9	93.5	94.4	94.2	
7) Air conditioning	44.2	48.1	48.4	49.8	49.2	
8) With a telephone (regular or cellular)	98.9	99,2	99,1	99,1	99,3	99,3
9) Telephones (includes business use)	94.4	94.1	92.2	91.6	89.3	89.1
10) 1 telephones	24.3	26.3	26.2	27.7	27.6	30.1
11) 2 telephones	30.4	28.4	26.0	24.5	23.5	21.7
12) 3 telephones	39.6	39.4	40.0	39.4	38.3	37.3
13) Cellular telephone	64.2	67.7	71.4	73.2	77.2	78.2
14) CD player	80.4	81.6	81.6	80.8	79.1	79.0
15) DVD player	77.1	83.0	85.3	86.4	87.5	87.3
16) Video cassette recorders	89.1	82.0	79.0	73.8	70.0	
17) Home computer	72.0	75.4	78.4	79.4	81.7	82.7
18) Colour televisions	99.0	99.0	98.9	98.8	98.9	



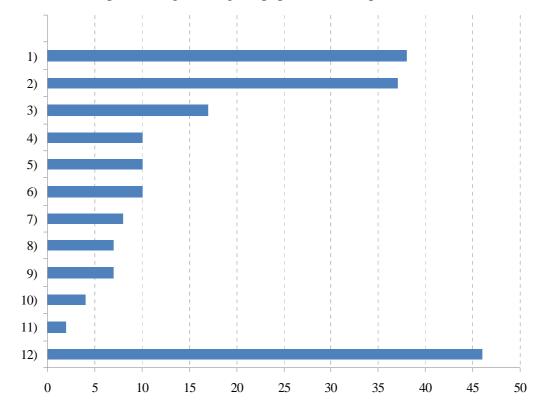
A-C-M Network May 2012 Daniel Blanche Tarragó *Mobile Communication, Economy and Society* Research Programme



Source: Quorus Consulting Group (2011, pp. 17-24)

Regular cell phone	82.0
Smartphone	17.0
Data plan	21.0
Tablet	4.0
Access internet with mobile phone	11.0





4.2.11 Mobile phone usage among the population 55+ (percent). 2011. Canada

Source: Quorus Consulting Group (2011, p. 29)

1) Send or receive text messages	38.0
2) Take pictures	37.0
3) Send or receive mails	17.0
4) Use instant messaging	10.0
5) Do online searches	10.0
6) Access maps/navigation instructions	10.0
7) Play games	8.0
8) Capture video	7.0
9) Listen to music uploaded to phone	7.0
10) Do social networking or blogging	4.0
11) Watch live TV or videos online	2.0
12) None of the above	46.0



5. Malaysia

5.1 Demographics



5.1.1 Population and households (millions). Malaysia³¹



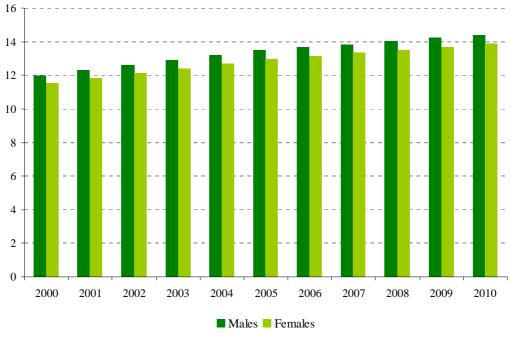
Source: Households, ITU (2011); Population, Department of Statistics Malaysia (2011)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Households	4,91	5,02	5,33	5,45	5,56	5,58	5,48	5,65	5,75	5,84	5,94
Population ³²	23,49	24,12	24,72	25,32	25,90	26,47	26,83	27,18	27,54	27,89	28,33

³¹ 1. Population projections based on the adjusted 2000 population.
2. The added total may differ due to rounding.
³² 2000-2011: Population projections based on the Population and Housing Census of Malaysia 2000, adjusted for under enumeration (Revised, unpublished).

^{2010:} Population Distribution and Basic Demographic Characteristics, Malaysia, 2010.





5.1.2 Population by sex (millions). Malaysia³³

Source: Department of Statistics Malaysia (2010)

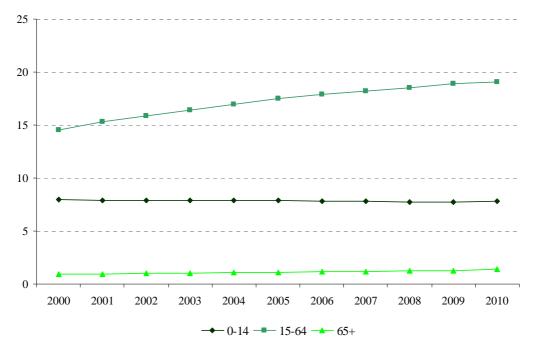
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009 2010
Males	11,96	12,28	12,60	12,91	13,21	13,50	13,68	13,85	14,03	14,20 14,37
Females	11,52	11,83	12,12	12,41	12,69	12,96	13,14	13,32	13,50	13,68 13,87

³³ 1. Population projections based on the adjusted 2000 population.

^{2.} The added total may differ due to rounding.



5.1.3 Population by age groups (millions). Malaysia

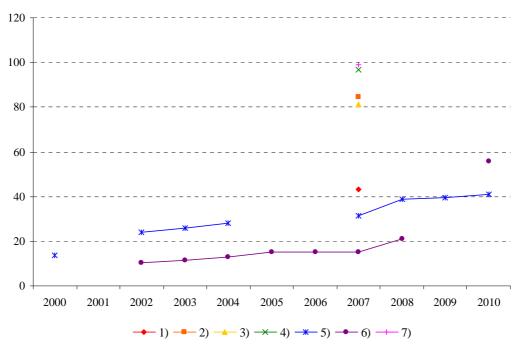


Source: Department of Statistics Malaysia (2011, p. 230)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
0-14	8,00	7,87	7,892	7,891	7,88	7,85	7,82	7,79	7,75	7,72	7,82
15-64	14,56	15,29	15,84	16,39	16,95	17,51	17,85	18,20	18,54	18,88	19,07
65+	0,93	0,95	0,98	1,02	1,06	1,10	1,15	1,19	1,23	1,28	1,42



5.2 Information and communication technologies



5.2.1 Household equipment (percent). Malaysia

Source: ITU (2011)



Daniel Blanche Tarragó Mobile Communication, Economy and Society Research Programme

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
1) Fixed line											
telephone ³⁴								43.2			
2) Mobile cellular											
telephone ³⁵								84.6			
3) Radio ³⁶								81.4			
4) TV ³⁷								96.9			
5) Computer ³⁸	13.5		24.0	26.0	28.2			31.3	38.7	39.6	41.0
6) Internet access											
at home ³⁹			10.5	11.4	13.0	15.0	15.0	15.2	21.1		55.6
7) Electricity ⁴⁰								99.0			

³⁴ Refers to the percentage of households with a fixed line telephone. A fixed telephone line is defined as a telephone line connecting a customer's terminal equipment (e.g. telephone set, facsimile machine) to the public switched telephone network (PSTN) and which has a dedicated port on a telephone exchange. This term is synonymous with the terms "main station" or "Direct Exchange Line" (DEL) that are commonly used in telecommunication documents. It may not be the same as an access line or a subscriber.

³⁵ Refers to the percentage of households with a mobile cellular telephone. Mobile cellular telephone refers to a portable telephone subscribing to a public mobile telephone service using cellular technology, which provides access to the PSTN. This includes analogue and digital cellular systems. Users of both postpaid subscriptions and prepaid accounts are included. ³⁶ Refers to the percentage of households with a radio. A radio is defined as a device (in working

³⁶ Refers to the percentage of households with a radio. A radio is defined as a device (in working condition) capable of receiving broadcast signals, using popular frequencies, such as FM, AM, LW and SW. It includes a radio set integrated in a car or an alarm clock and digital audio player (MP3 player) but excludes radios integrated in a mobile phone or in a computer.

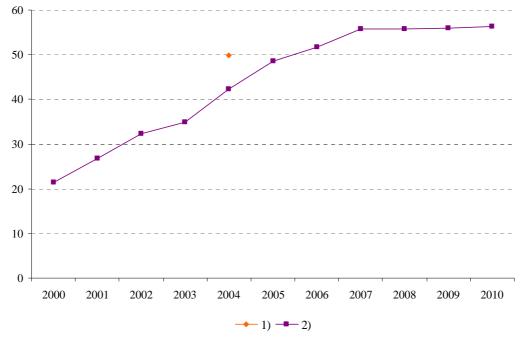
³⁷ Refers to the percentage of households with a TV. A TV (television) is a stand-alone device capable of receiving broadcast television signals, using popular access means such as over-the-air ,cable and satellite. It excludes TV functionality integrated with another device, such as a computer or a mobile phone.

³⁸ Refers to the percentage of households with a computer. A computer can include a desktop, portable or handheld computer (e.g. a personal digital assistant). It does not include equipment with some embedded computing abilities such as mobile phones or TV sets.

³⁹ Refers to the percentage of households with Internet. The Internet is a world-wide public computer network. It provides access to a number of communication services including the World Wide Web and carries email, news, entertainment and data files. Access is not assumed to be only via a computer - it may also be by mobile phone, games machine, digital TV etc.

⁴⁰ Refers to the percentage of households with electricity. Electricity access may be by a grid/mains connection, or from power generated locally (including at the dwelling). Local power includes electricity generated by a fuel-powered generator, or from renewable resources such as wind, water or solar. It excludes sole use of energy storage devices, such as batteries (though these may be used to store electricity from other sources).





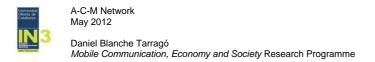
5.2.2 Individual usage of electronic devices and technologies (percent). Malaysia

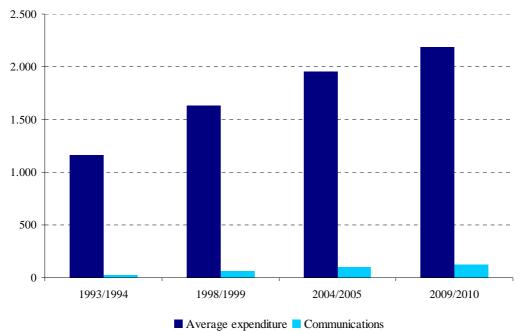
Source: ITU (2011)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
1) Mobile cellular											
telephone ⁴¹					49,8						
2) Internet ⁴²	21,38	26,69	32,33	34,97	42,25	48,62	51,63	55,7	55,8	55,9	56,3

⁴¹ Refers to the percentage of individuals using a mobile cellular telephone. Mobile cellular telephone refers to a portable telephone subscribing to a public mobile telephone service using cellular technology, which provides access to the PSTN. This includes analogue and digital cellular systems, as well as IMT-2000 (3G). Users of both postpaid subscriptions and prepaid accounts are included.

 $^{^{42}}$ Refers to the percentage of the population using the Internet. The Internet is a worldwide public computer network. It provides access to a number of communication services including the World Wide Web and carries e-mail, news, entertainment and data files. Internet use may be facilitated by any device enabling Internet access (not only a computer). This includes a mobile phone, PDA, games machine and digital TV. Use can be via a fixed or mobile network.





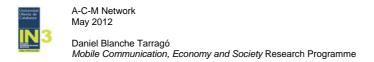
5.2.3 Household expenditure (MYR). Malaysia 43

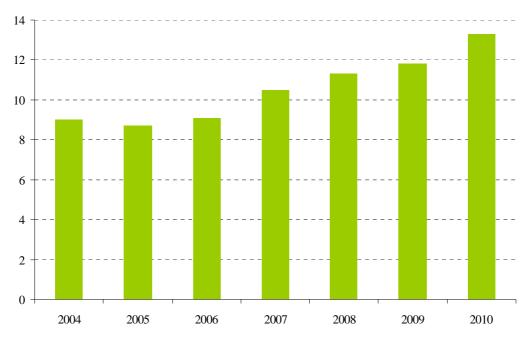
Average expenditure Commi

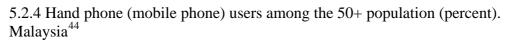
Source: Department of Statistics Malaysia (2011b)

	1993/1994	1998/1999	2004/2005	2009/2010
Average expenditure	1,161	1,631	1,953	2,190
Communications	24	59	103	124
% of total	2.1	3.6	5.3	5.6

⁴³Data for 1993/1994 and 1998/1999 were adjusted according to COICOP.







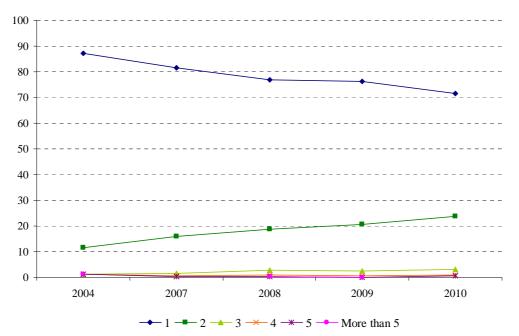
Source: Malaysian Communications and Multimedia Commission (2004, p. 7, 2012, p. 11)

	2004	2005	2006	2007	2008	2009	2010
50+	9.0	8.7	9.1	10.5	11.3	11.8	13.3

 $^{^{44}}$ Percentages among age groups may not add up to 100 because of rounding. Relative sampling error: 1) 2004: +/- 5.43%; 2) 2005-2010: +/- 5.2%.



5.2.5 Multiple hand phone (mobile phone) subscriptions (percent). Malaysia⁴⁵

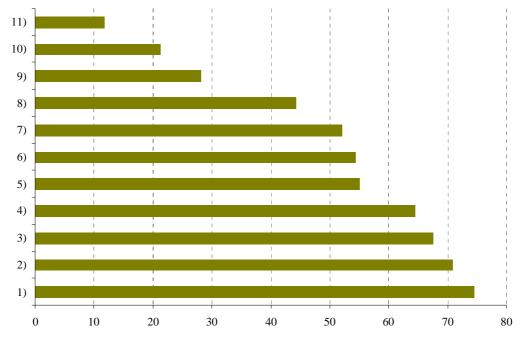


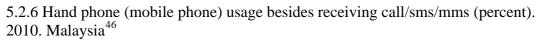
Source: Malaysian Communications and Multimedia Commission (2012, p. 15)

Number of hand phones	2004	2007	2008	2009	2010
1	87.1	81.7	77.0	76.2	71.5
2	11.6	15.9	18.7	20.6	23.9
3	1.2	1.7	2.7	2.5	3.0
4	1.2	0.5	0.9	0.5	0.9
5	1.2	0.2	0.3	0.1	0.7
More than 5	1.2		0.4	0.1	

⁴⁵This topic was not probed in Hand Phone Users Survey 2005 and 2006. Relative sampling error respectively: 1) +/- 1.3%; 2) +/- 3.6%; 3) +/- 11.6%; 4) +/- 21.7%; 5) +/- 24.9%.







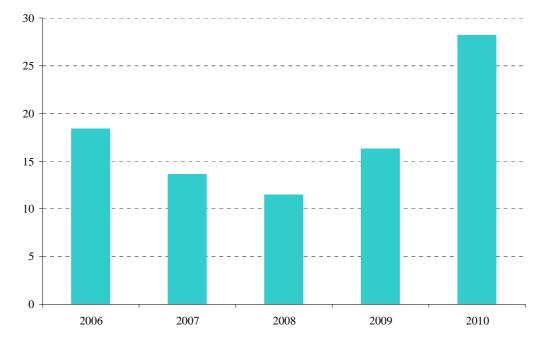
Source: Malaysian Communications and Multimedia Commission (2012, p. 16)

1) Calendar	74.6
2) Calculator	70.9
3) Alarm clock	67.6
4) Camera	64.4
5) Media player	55.1
6) Bluetooth	54.4
7) Games	52.1
8) Note/Memo	44.3
9) Internet	28.2
10) GPS	21.3
11) Others	11.8

⁴⁶Relative sampling error respectively: 1) +/- 1.4%; 2) +/- 1.3%; 3) +/- 1.2%; 4) +/- 2.3%; 5) +/- 1.8%; 6) +/- 2.0%; 7) +/- 1.5%; 8) +/- 1.9%; 9) +/- 3.9%; 10) +/- 3.3%; 11) +/- 5.6%.



May 2012 Daniel Blanche Tarragó Mobile Communication, Economy and Society Research Programme



5.2.7 Internet access through hand phones (mobile phones) (percent). Malaysia⁴⁷

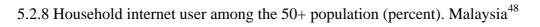
Source: Malaysian Communications and Multimedia Commission (2007, p. 16, 2008, p. 12, 2010, p. 17, 2011, p. 22, 2012, p. 16)

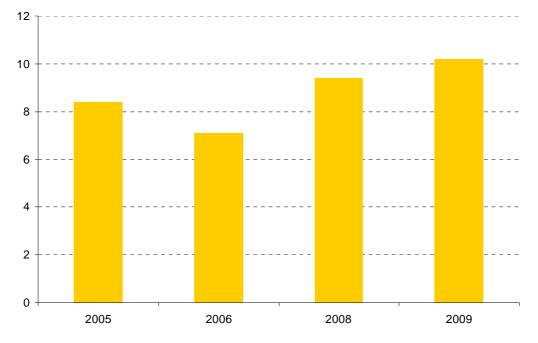
2006	2007	2008	2009	2010
18.4	13.7	11.5	16.3	28.2

⁴⁷ Relative sampling error respectively: 1) +/- 3.5%; 2) +/- 4.0%; 3) +/- 4.4%; 4) +/- 3.2%; 5) +/- 3.3%.



-





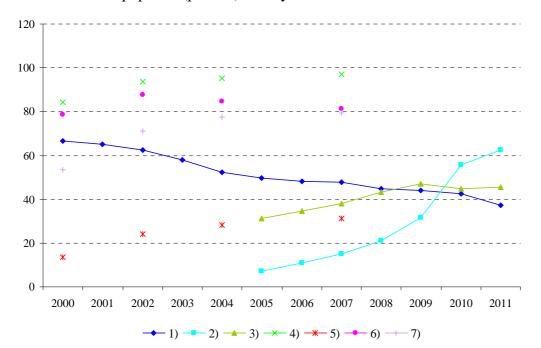
Source: Malaysian Communications and Multimedia Commission (2005, p. 8, 2006, p. 7, 2008b, p. 5, 2009, p. 10)

2005	2006	2008	2009
8.4	7.1	9.4	10.2

⁴⁸Relative sampling error respectively: 1) +/- 5.4%; 2) +/- 5.9%; 3) +/- 5.0%; 4) +/- 5.7%.



5.2.9 Household equipment (percent). Malaysia⁴⁹



Source: Malaysian Communications and Multimedia Commission (2011b)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
1) Fixed telephone	66.4	65.1	62.3	58.0	52.3	49.5	48.3	47.8	44.9	44.0	42.5	37.3
2) Broadband						7.0	10.9	15.2	21.1	31.7	55.6	62.3
3) Pay TV						31.1	34.5	38.1	43.4	47.1	44.6	45.5
4) TV	84.3		93.8		95.2			96.9				
5) Personal computer	13.5		24.1		28.2			31.1				
6) Radio/Hi-fi	78.8		87.5		84.5			81.4				
7) Video/VCD/ DVD	53.5		71.0		77.4			79.4				

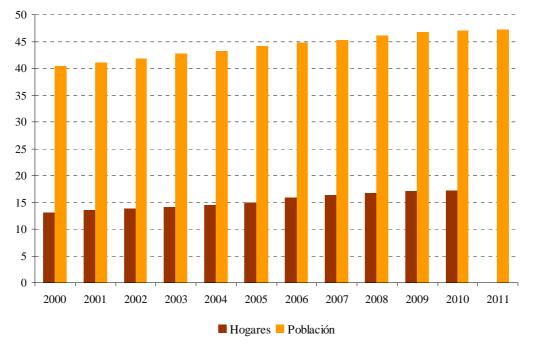
⁴⁹1. Data for fixed telephone and broadband penetration rates correspond to fourth quarter for years 2009 and 2011.

^{2.} Data for pay TV penetration rates correspond to fourth quarter for years 2006, 2007, 2008, 2009 and 2011.



6. Spain

6.1 Demographics

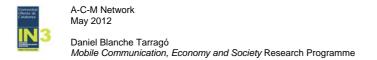


6.1.1 Population and households (millions). Spain

Source: National Institute of Statistics (2011)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Households	13,08	13,46	13,84	14,18	14,52	14,86	15,85	16,28	16,74	17,06	17,17	
Population ⁵⁰	40,49	41,11	41,83	42,71	43,19	44,10	44,70	45,20	46,15	46,74	47,02	47,19

⁵⁰ Population as of January 1.



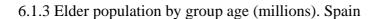


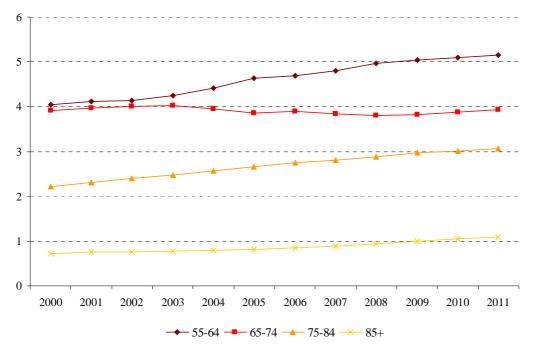
6.1.2 Population by sex (millions). Spain

Source: National Institute of Statistics

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Males	19,82	20,16	20,56	21,03	21,28	21,78	22,10	22,33	22,84	23,11	23,22	23,28
Females	20,67	20,95	21,27	21,68	21,91	22,32	22,60	22,86	23,31	23,62	23,79	23,90







Source: Own elaboration based on National Institute of Statistics

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
55-64	4,04	4,11	4,13	4,24	4,42	4,64	4,68	4,80	4,95	5,03	5,08	5,14
65-74	3,91	3,96	4,00	4,01	3,94	3,85	3,88	3,83	3,80	3,83	3,86	3,92
75-84	2,22	2,31	2,39	2,48	2,56	2,66	2,74	2,813	2,88	2,96	3,01	3,06
85+	0,72	0,75	0,76	0,77	0,79	0,81	0,85	0,88	0,93	0,98	1,04	1,09



6.2 Information and communication technologies



6.2.1 Household equipment (percent). Spain

Source: ITU (2011)



Mobile Communication, Economy and Society Research Programme

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
1) Fixed line telephone ⁵¹	95.0		90.2	88.14	90.07	88.61	83.25				
2) Mobile cellular telephone ⁵²			58.8	73.71	76.89	79.96	88.0				
3) Radio ⁵³			77.1	90.0	88.51	88.41					
4) TV ⁵⁴			99.5	99.53	99.62	99.48	100	99.5			
5) Computer ⁵⁵	30.42	34.0	36.1	47.0	52.0	55.0	57.0	60.4	63.56	66.27	68.72
6) Internet access at home ⁵⁶			17.4	27.54	33.64	35.50	39.07	44.62	51.04	53.95	59.1

⁵¹ Refers to the percentage of households with a fixed line telephone. A fixed telephone line is defined as a telephone line connecting a customer's terminal equipment (e.g. telephone set, facsimile machine) to the public switched telephone network (PSTN) and which has a dedicated port on a telephone exchange. This term is synonymous with the terms "main station" or "Direct Exchange Line" (DEL) that are commonly used in telecommunication documents. It may not be the same as an access line or a subscriber.

⁵² Refers to the percentage of households with a mobile cellular telephone. Mobile cellular telephone refers to a portable telephone subscribing to a public mobile telephone service using cellular technology, which provides access to the PSTN. This includes analogue and digital cellular systems. Users of both postpaid subscriptions and prepaid accounts are included. ⁵³ Refers to the percentage of households with a radio. A radio is defined as a device (in working

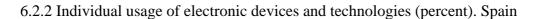
⁵³ Refers to the percentage of households with a radio. A radio is defined as a device (in working condition) capable of receiving broadcast signals, using popular frequencies, such as FM, AM, LW and SW. It includes a radio set integrated in a car or an alarm clock and digital audio player (MP3 player) but excludes radios integrated in a mobile phone or in a computer.

⁵⁴ Refers to the percentage of households with a TV. A TV (television) is a stand-alone device capable of receiving broadcast television signals, using popular access means such as over-the-air, cable and satellite. It excludes TV functionality integrated with another device, such as a computer or a mobile phone.

³⁵ Refers to the percentage of households with a computer. A computer can include a desktop, portable or handheld computer (e.g. a personal digital assistant). It does not include equipment with some embedded computing abilities such as mobile phones or TV sets.

⁵⁶ Refers to the percentage of households with Internet. The Internet is a world-wide public computer network. It provides access to a number of communication services including the World Wide Web and carries email, news, entertainment and data files. Access is not assumed to be only via a computer - it may also be by mobile phone, games machine, digital TV etc.







Source: ITU (2011)

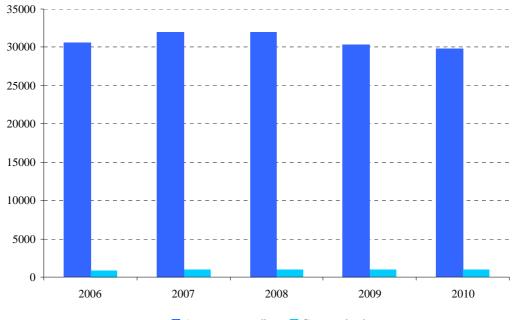
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
1) Computer ⁵⁷			20.33	45.21	52.0	55.0	57.0	59.83	63.70	65.76	69.66
2) Mobile cellular telephone ⁵⁸							82.97	86.47	88.75		
3) Internet ⁵⁹	13.62	18.14	20.39	39.93	44.01	47.88	50.37	55.11	59.6	62.4	65.8

⁵⁷ Refers to the percentage of individuals using a computer. A computer can include a desktop, portable or handheld computer (e.g. a personal digital assistant). It does not include equipment with some embedded computing abilities such as mobile phones or TV sets.

⁵⁸ Refers to the percentage of individuals using a mobile cellular telephone. Mobile cellular telephone refers to a portable telephone subscribing to a public mobile telephone service using cellular technology, which provides access to the PSTN. This includes analogue and digital cellular systems, as well as IMT-2000 (3G). Users of both postpaid subscriptions and prepaid accounts are included.

⁵⁹ Refers to the percentage of the population using the Internet. The Internet is a worldwide public computer network. It provides access to a number of communication services including the World Wide Web and carries e-mail, news, entertainment and data files. Internet use may be facilitated by any device enabling Internet access (not only a computer). This includes a mobile phone, PDA, games machine and digital TV. Use can be via a fixed or mobile network.





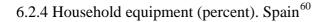
6.2.3 Household expenditure (EUR). Spain

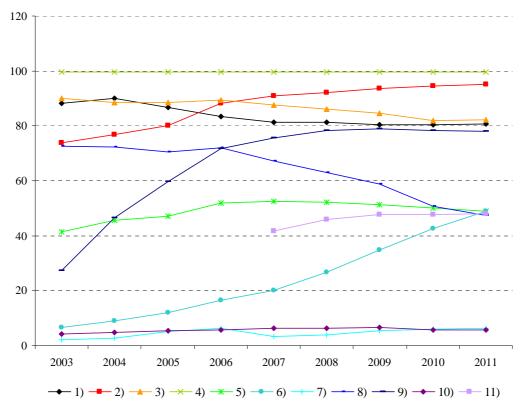
Average expenditure Communications

Source: National Institute of Statistics

	2006	2007	2008	2009	2010
Average expenditure	30,561.61	32,000.75	31,953.24	30,410.74	29,782.34
Communications	866.74	932.78	970.8	953.45	925.85
% of total	2.84	2.91	3,04	3.14	3.11







Source: National Institute of Statistics

	2003	2004	2005	2006	2007	2008	2009	2010	2011
1) Fixed telephone	88.14	90.07	86.81	83.3	81.2	81.3	80.3	80.3	80.6
2) Mobile telephone	73.71	76.89	79.96	88.1	90.9	92.1	93.5	94.6	95.1
3) Radio	90	88.51	88.41	89.4	87.7	86	84.5	82	82.1
4) TV	99.53	99.62	99.48	99.7	99.5	99.7	99.6	99.5	99.6
5) Computer desktop	41.43	45.51	47.25	52	52.4	52.2	51.3	50.1	48.9
6) Computer laptop	6.52	8.95	11.91	16.4	20.2	26.6	34.7	42.5	48.8
7) Other computers (PDA, Pocket PC)	1.97	2.63	5.02	6.2	3.2	3.9	5.5	6	6.2
8) Video	72.58	72.29	70.38	72	67.1	62.9	58.7	50.8	47.5
9) DVD	27.35	46.36	59.79	71.6	75.6	78.3	78.8	78.4	77.9
10) Fax	4.29	4.65	5.37	5.8	6.4	6.2	6.6	5.7	5.6
11) MP3/MP4					41.8	45.9	47.8	47.6	48

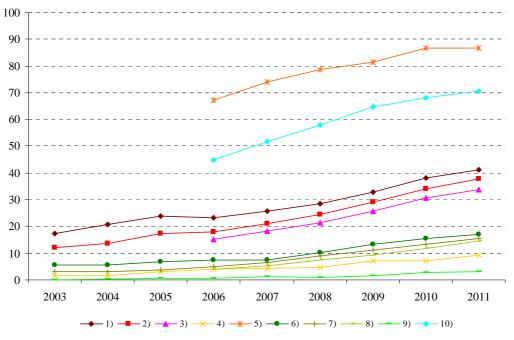
 $^{^{60}\}ensuremath{\text{l}}$. Households with at least one member between 16 and 74 years.

^{2.} Data for years 2005 and 2006 correspond to first semester.



A-C-M Network May 2012 Daniel Blanche Tarragó *Mobile Communication, Economy and Society* Research Programme

6.2.5 Usage of information and communication technologies among the elder population (percent). Spain 61



Source: National Institute of Statistics

⁶¹Surveyed sample between 16 and 74 years.



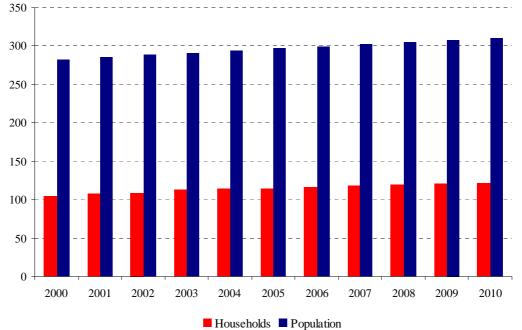
Daniel Blanche Tarragó Mobile Communication, Economy and Society Research Programme

		2003	2004	2005	2006	2007	2008	2009	2010	2011
1) 55-64	Have used the computer in the last 3 months	17.38	20.65	23.92	23.3	25.7	28.6	32.9	38.0	41.3
2)	Have used the Internet in the last 3 months Have used the Internet	12.01	13.67	17.32	17.9	21.1	24.6	29.1	34.2	37.7
3)	at least once a week in the last 3 months Have purchased				15.1	18.3	21.5	25.6	30.5	33.9
4)	through the Internet in the last 3 months	1.4	1.5	3.18	3.9	4.4	4.6	7.2	7.1	9.2
5)	Use a mobile telephone				67.2	74.0	78.7	81.4	86.6	86.6
6) 65-74	Used the computer in the last 3 months	5.49	5.52	6.7	7.5	7.5	10.3	13.2	15.4	16.9
7)	Used the Internet in the last 3 months Used the Internet at	3.21	2.96	3.73	5.0	6.4	8.9	11.0	13.4	15.6
8)	least once a week in the last 3 months				4.0	5.2	7.4	9.3	11.7	14.6
9)	Have purchased through the Internet in the last 3 months	0.15	0.17	0.65	0.6	1.3	1.0	1.7	2.7	3.0
10)	Use a mobile telephone				45.0	51.7	57.9	64.8	68.2	70.7



7. United States

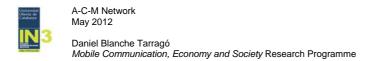
7.1 Demographics

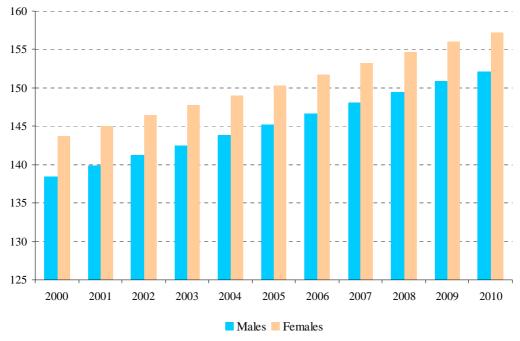


7.1.1 Population and households (millions). United States

Source: Households, ITU (2011); Population, United States Census Bureau, Population Division (2011)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Households	104,7	108,2	109,3	112,6	113,8	114,5	116,4	118,2	119,4	120,5	121,6
Population	282,1	284,9	287,6	290,1	292,8	295,5	298,3	301,2	304,0	306,7	309,3



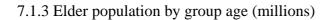


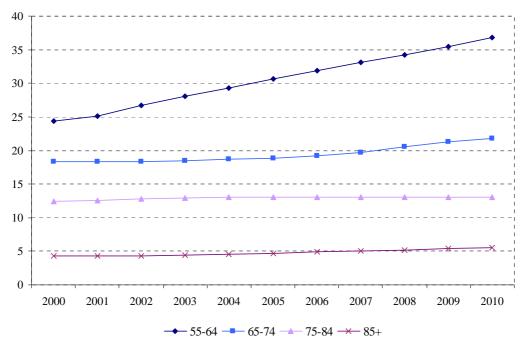
7.1.2 Population by sex (millions). United States

Source: United States Census Bureau

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Males	138,44	139,89	141,23	142,42	143,82	145,19	146,64	148,06	149,48	150,80	152,10
Females	143,71	145,07	146,39	147,67	148,97	150,31	151,73	153,16	154,60	155,96	157,24





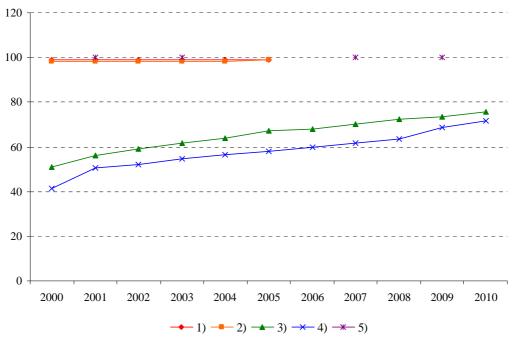


Source: Own elaboration based on United States Census Bureau

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
55-64	24,42	25,10	26,70	28,00	29,30	30,64	31,93	33,12	34,15	35,40	36,76
65-74	18,38	18,38	18,38	18,50	18,66	18,88	19,20	19,69	20,50	21,23	21,84
75-84	12,42	12,59	12,76	12,89	12,98	13,07	13,09	13,08	13,07	13,02	13,06
85+	4,26	4,31	4,36	4,46	4,54	4,69	4,86	5,03	5,19	5,36	5,53



7.2 Information and communication technologies



7.2.1 Household equipment (percent). United States

Source: ITU (2011)



A-C-M Network May 2012 Daniel Blanche Tarragó

Mobile Communication, Economy and Society Research Programme

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
1) Radio ⁶²	99.0	99.0	99.0	99.0	99.0	99.0					
2) TV ⁶³	98.2	98.2	98.2	98.2	98.2	98.90					
3) Computer ⁶⁴	51.0	56.2	59.0	61.8	64.0	67.10	68.06	70.18	72.45	73.63	75.54
4) Internet access at home 65	41.5	50.5	52.0	54.7	56.4	58.1	59.9	61.7	63.6	68.68	71.62
5) Electricity ⁶⁶		99.9		99.9				99.96		99.96	

⁶² Refers to the percentage of households with a radio. A radio is defined as a device (in working condition) capable of receiving broadcast signals, using popular frequencies, such as FM, AM, LW and SW. It includes a radio set integrated in a car or an alarm clock and digital audio player (MP3 player) but excludes radios integrated in a mobile phone or in a computer.
⁶³ Refers to the percentage of households with a TV. A TV (television) is a stand-alone device capable of

⁶³ Refers to the percentage of households with a TV. A TV (television) is a stand-alone device capable of receiving broadcast television signals, using popular access means such as over-the-air, cable and satellite. It excludes TV functionality integrated with another device, such as a computer or a mobile phone.

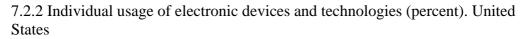
⁶⁴ Refers to the percentage of households with a computer. A computer can include a desktop, portable or handheld computer (e.g. a personal digital assistant). It does not include equipment with some embedded computing abilities such as mobile phones or TV sets.

⁶⁵ Refers to the percentage of households with Internet. The Internet is a world-wide public computer network. It provides access to a number of communication services including the World Wide Web and carries email, news, entertainment and data files. Access is not assumed to be only via a computer - it may also be by mobile phone, games machine, digital TV etc.

⁶⁶ Refers to the percentage of households with electricity. Electricity access may be by a grid/mains connection, or from power generated locally (including at the dwelling). Local power includes electricity generated by a fuel-powered generator, or from renewable resources such as wind, water or solar. It excludes sole use of energy storage devices, such as batteries (though these may be used to store electricity from other sources).







Source: ITU (2011)

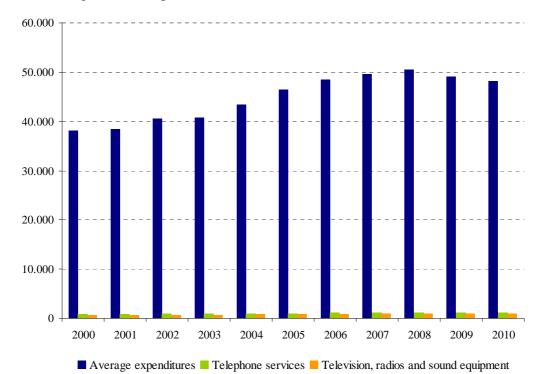
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
1) Computer ⁶⁷		59.8		63.7	68.0	72.0					
2) Internet ⁶⁸	43.0	49.0	58.7	61.6	64.7	67.9	68.9	75.0	74.0	71.0	74.0

 $\cdot\cdot$ Data not available

⁶⁷ Refers to the percentage of individuals using a computer. A computer can include a desktop, portable or handheld computer (e.g. a personal digital assistant). It does not include equipment with some embedded computing abilities such as mobile phones or TV sets.

⁶⁸ Refers to the percentage of the population using the Internet. The Internet is a worldwide public computer network. It provides access to a number of communication services including the World Wide Web and carries e-mail, news, entertainment and data files. Internet use may be facilitated by any device enabling Internet access (not only a computer). This includes a mobile phone, PDA, games machine and digital TV. Use can be via a fixed or mobile network.





7.2.3 Average annual expenditures (\$USD). United States

Source: Bureau of Labor Statistics



A-C-M Network May 2012

Daniel Blanche Tarragó Mobile Communication, Economy and Society Research Programme

	2000	2001	2002	2003	2004	2005
Average expenditures ⁶⁹	38,045	38,518	40,677	40,817	43,395	46,409
Telephone services ⁷⁰	877	914	957	956	990	1,048
% of total	2.3	2.3	2.4	2.3	2.3	2.3
55-64 ⁷¹	2.3	2.2	2.2	2.2	2.2	2.2
65-74	2.3	2.3	2.5	2.3	2.2	2.2
75+	2.3	2.4	2.4	2.3	2.2	2.3
Television, radios and sound equipment ⁷²	622	660	692	730	788	888
% of total	1.6	1.7	1,7	1.8	1.8	1.9
55-64	1.5	1.5	1.6	1.7	1.7	1.7
65-74	1.5	1.6	1.7	1.7	1.7	2.1
75+	1.5	1.6	1.6	1.7	1.8	1.8
	200	6	2007	2008	2009	2010
Average expenditures	48.39	8 49	9.638	50.486	49.067	48,109

	2006	2007	2008	2009	2010
Average expenditures	48,398	49,638	50,486	49,067	48,109
Telephone services	1,087	1,110	1,127	1,162	1,178
% of total	2.2	2.2	2.2	2.4	2.4
55-64	2.2	2.1	2.1	2.2	2.4
65-74	2.2	2.2	2.3	2.3	2.4
75+	2.2	2.2	2.2	2.2	2.4
Television, radios and sound equipment	906	987	1,036	975	954
% of total	1.9	2.0	2.1	2.0	2.0
55-64	1.8	1.8	2.0	2.0	2.1
65-74	1.9	1.9	2.1	2.2	2.1
75+	1.8	1.9	2.0	2.1	2.2

⁶⁹ A consumer unit comprises either: (1) all members of a particular household who are related by blood, marriage, adoption, or other legal arrangements; (2) a person living alone or sharing a household with others or living as a roomer in a private home or lodging house or in permanent living quarters in a hotel or motel, but who is financially independent; or (3) two or more persons living together who use their income to make joint expenditure decisions. Financial independence is determined by the three major expense categories: Housing, food, and other living expenses. To be considered financially independent, at least two of the three major expense categories have to be provided entirely, or in part, by the respondent.

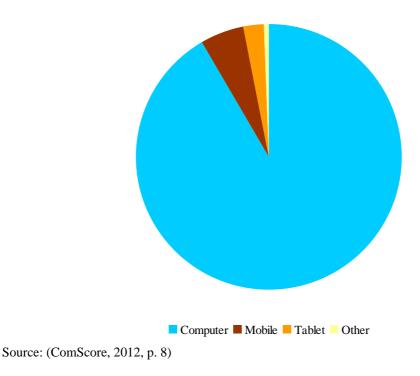
⁷⁰ Refers to telephone charges.

⁷¹ The first member mentioned by the respondent when asked to "Start with the name of the person or one of the persons who owns or rents the home." It is with respect to this person that the relationship of the other consumer unit members is determined.

⁷² Television, radio, and sound equipment includes television sets, video recorders, video cassettes, tapes, discs, disc players, video game hardware, video game cartridges, cable TV, radios, phonographs, tape recorders and players, sound components, records, compact discs, and tapes (including records, compact discs, and tapes purchased through mail order clubs), musical instruments, and rental and repair of TV and sound equipment.



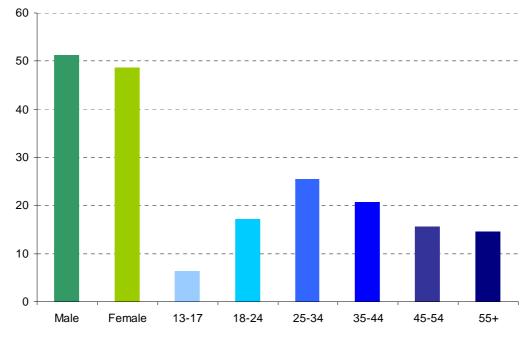
7.2.3 Share of Internet connected devices traffic. 2011. United States⁷³



Computer	91.8
Mobile	5.2
Tablet	2.5
Other	0.5

⁷³ December 2011. Internet traffic is measured as census-level page view data collected from more than a million domains tagging with comScore.



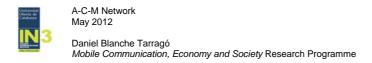


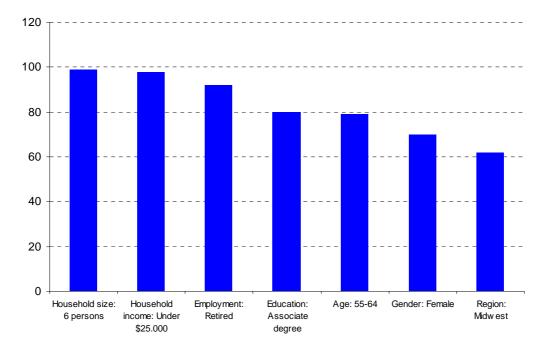
7.2.4 Share of Smartphone users by sex and age. 2011. United States⁷⁴

Source: ComScore (2012, p. 17)

Male	Female	13-17	18-24	25-34	35-44	45-54	55+
51.3	48.7	6.3	17.2	25.6	20.7	15.6	14.6

⁷⁴ 3 months average December 2011. Surveyed nationally representative samples of mobile subscribers age 13+. Mobile phone owners sample size: Canada (only one reported quarterly): 5,000; Spain: 4,000; United States: 10,000.





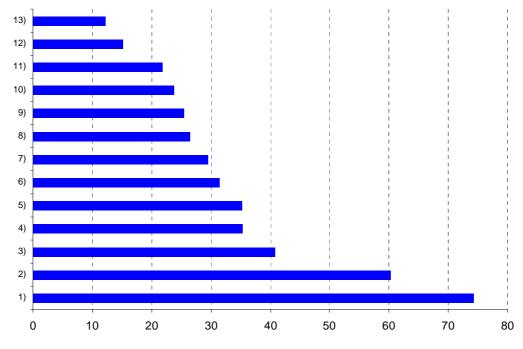
7.2.5 Fastest growing demographic segments among Smartphone users (percent). 2011. United States⁷⁵

Source: ComScore (2012, p. 18)

Household size: 6 persons	99.0
Household income: Under \$25.000	98.0
Employment: Retired	92.0
Education: Associate degree	80.0
Age: 55-64	79.0
Gender: Female	70.0
Region: Midwest	62.0
5	

⁷⁵ 3 months average ending December 2011 vs. December 2010. Surveyed nationally representative samples of mobile subscribers age 13+. Mobile phone owners sample size: Canada (only one reported quarterly): 5,000; Spain: 4,000; United States: 10,000.





7.2.6 Selected mobile activities by share of total mobile audience $(2011)^{76}$

Source: ComScore (2012, p. 28)

1) Sent text message	74.3
2) Took photos	60.3
3) Used email	40.8
4) Accessed social networking/blog	35.3
5) Accessed weather	35.2
6) Played games	31.4
7) Accessed search	29.5
8) Accessed maps	26.5
9) Accessed news	25.5
10) Listened to music	23.8
11) Accessed sports info	21.8
12) Accessed financial news or stock quotes	15.1
13) Accessed online retail	12.2

^{76 3} months average ending December 2011. Surveyed nationally representative samples of mobile subscribers age 13+. Mobile phone owners sample size: Canada (only one reported quarterly): 5,000; Spain: 4,000; United States: 10,000.



References

ComScore. (2012). 2012 mobile future in focus. n.p.: Author.

Department of Statistics Malaysia. (2010). Population quick info. Retrieved May 23,

2012, from

http://www.statistics.gov.my/portal/index.php?option=com_wrapper&view=wra
pper&Itemid=129

Department of Statistics Malaysia. (2011a). Population statistics (No. 21). Malaysia

Economic Statistics - Time Series 2011 (pp. 225–235). Malaysia: Author.

Retrieved from

 $http://www.statistics.gov.my/portal/download_Economics/files/DATA_SERIES$

 $/2011/pdf/21Perangkaan_Penduduk.pdf$

Department of Statistics Malaysia. (2011b). *Household expenditure trend 1993/94-2009/10*. Malaysia: Author. Retrieved from

http://www.statistics.gov.my/portal/images/stories/files/LatestReleases/househol d/HES_0910.pdf

ITU. (2011). World Telecommunication/ICT Indicators Database (15th ed.). Geneva, Switzerland.

Malaysian Communications and Multimedia Commission. (2004). *Hand phone users survey 2004* (No. 1). Statistical brief. Selangor Darul Ehsan: Author. Retrieved from

http://www.skmm.gov.my/link_file/facts_figures/stats/pdf/HpUsersSurvey2004. pdf Malaysian Communications and Multimedia Commission. (2005). *Household use Internet survey 2005* (No. 2). Statistical brief. Selangor Darul Ehsan: Author.
Retrieved from
http://www.skmm.gov.my/link_file/facts_figures/stats/pdf/Household_use_inter
net_survey2005.pdf
Malaysian Communications and Multimedia Commission. (2006). *Household use Internet survey 2006* (No. 5). Statistical brief. Selangor Darul Ehsan: Author.
Retrieved from

http://www.skmm.gov.my/link_file/facts_figures/stats/pdf/HUIS06.pdf

Malaysian Communications and Multimedia Commission. (2007). *Hand phone users survey 2006* (No. 4). Statistical brief. Selangor Darul Ehsan: Author. Retrieved from

http://www.skmm.gov.my/link_file/facts_figures/stats/pdf/HPSurvey2006.pdf

Malaysian Communications and Multimedia Commission. (2008a). *Hand phone users survey 2007* (No. 6). Statistical brief. Selangor Darul Ehsan: Author. Retrieved from

http://www.skmm.gov.my/link_file/facts_figures/stats/pdf/Handphone_Users_S urvey_2007.pdf

Malaysian Communications and Multimedia Commission. (2008b). *Household use Internet survey 2008* (No. 7). Statistical brief. Selangor Darul Ehsan: Author. Retrieved from

http://www.skmm.gov.my/link_file/facts_figures/stats/pdf/HUIS08_02.pdf

Malaysian Communications and Multimedia Commission. (2009). *Household use Internet survey 2009* (No. 10). Statistical brief. Selangor Darul Ehsan: Author.



Retrieved from

http://www.skmm.gov.my/link_file/facts_figures/stats/pdf/inlayHUIS2009.pdf Malaysian Communications and Multimedia Commission. (2010). *Hand phone users survey 2008* (No. 8). Statistical brief. Selangor Darul Ehsan: Author. Retrieved from

http://www.skmm.gov.my/link_file/facts_figures/stats/pdf/Handphone_Users_S urvey_2008.pdf

- Malaysian Communications and Multimedia Commission. (2011a). *Hand phone users survey 2009* (No. 9). Statistical brief. Selangor Darul Ehsan: Author. Retrieved from http://www.skmm.gov.my/link_file/facts_figures/stats/pdf/HPUS-2009.pdf
- Malaysian Communications and Multimedia Commission. (2011b). *Communications and multimedia: Pocket book of statistics* (No. Q4). Statistical bulletins. Selangor Darul Ehsan: Author. Retrieved from http://www.skmm.gov.my/attachment/pdf/Q4%202011%20C&M%20Pocket%2

0Book%20of%20Statistics.pdf

Malaysian Communications and Multimedia Commission. (2012). *Hand phone users survey 2010* (No. 11). Statistical brief. Selangor Darul Ehsan: Author. Retrieved from http://www.skmm.gov.my/attachment/Resources/HPUS%202010.pdf

National Institute of Statistics. (2011). Official population figures: Revision of the municipal Register. Retrieved May 23, 2012, from http://www.ine.es/jaxi/menu.do;jsessionid=1F30F9C204C7680AC130356A353 97EA7.jaxi02?type=pcaxis&path=/t20/e260/&file=inebase&L=0

Quorus Consulting Group. (2011). 2011 Cell phone consumer attitudes study. n.p.: Canadian Wireless Telecommunications Association. Retrieved from



Daniel Blanche Tarragó Mobile Communication, Economy and Society Research Programme

http://www.cwta.ca/CWTASite/english/facts_figures_downloads/Consumer201 1.pdf

Statistics Canada. (2010a). Table 358-0124: Canadian Internet use survey, Internet use, by location of access, sex and age group, every 2 years (percent). Retrieved May 23, 2012, from http://www5.statcan.gc.ca/cansim/pickchoisir?lang=eng&id=3580124&pattern=3580124&searchTypeByValue=1&p2

=42

- Statistics Canada. (2010b). Table 358-0129: Canadian Internet use survey, Internet use at home, by age group and frequency of use, every 2 years (percent). Retrieved May 23, 2012, from http://www5.statcan.gc.ca/cansim/pickchoisir?lang=eng&id=3580129&pattern=3580129&searchTypeByValue=1&p2 =42
- Statistics Canada. (2010c). *Spending patterns in Canada 2009* (No. 62-202-X). Ottawa, Canada: Author. Retrieved from http://www.statcan.gc.ca/pub/62-202-x/62-202x2008000-eng.pdf
- Statistics Canada. (2010d). Table 203-0019: Survey of household spending (SHS), dwelling characteristics at the time of interview, by province, territory and selected metropolitan areas, annual. Retrieved May 23, 2012, from http://www5.statcan.gc.ca/cansim/pick-

choisir?lang=eng&id=2030019&pattern=2030019&searchTypeByValue=1&p2 =42

Statistics Canada. (2011a). Table 051-0001: Estimates of population, by age group and sex for July 1, Canada, provinces and territories, annual (persons unless



otherwise noted). Retrieved May 23, 2012, from http://www5.statcan.gc.ca/cansim/a26

- Statistics Canada. (2011b). Table 358-0155: Canadian Internet use survey, Internet use, by age group and frequency of use, occasional (percent). Retrieved May 23, 2012, from http://www5.statcan.gc.ca/cansim/pickchoisir?lang=eng&id=3580155&pattern=3580155&searchTypeByValue=1&p2 =42
- Statistics Canada. (2011c). Table 358-0153: Canadian Internet use survey, Internet use, by age group and Internet activity, occasional (percent). Retrieved May 23, 2012, from http://www5.statcan.gc.ca/cansim/pickchoisir?lang=eng&id=3580153&pattern=3580153&searchTypeByValue=1&p2 =42
- Statistics Canada. (2012). Table 203-0027: Survey of household spending (SHS), dwelling characteristics and household equipment at time of interview, Canada, regions and provinces, annual (number unless otherwise noted). Retrieved May 23, 2012, from http://www5.statcan.gc.ca/cansim/pickchoisir?lang=eng&id=2030027&pattern=2030027&searchTypeByValue=1&p2 =42
- Statistics Canada, Demography Division. (2011, August 22). Tables for population growth: Canada, provinces and territories, 2010 (Table A1-1). Retrieved May 23, 2012, from http://www.statcan.gc.ca/pub/91-209x/2011001/article/11508/tbl/pop-tbl-eng.htm#a1
- United States Census Bureau, Population Division. (2011, September). Intercensal estimates of the resident population by sex and age for the United States: April



1, 2000 to July 1, 2010 (US-EST00INT-01). Retrieved May 23, 2012, from

http://www.census.gov/popest/data/intercensal/national/tables/US-EST00INT-

01.xls