1 Patterns of Internet usage in the Philippines[1]

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Abstract

This chapter reports on the patterns of Internet use in the Philippines using survey data gathered by Social Weather Stations (SWS), a social research institute in the Philippines. As of March 2014, Internet usage rose to 35 percent of the population compared to 9 percent in 1998. However, the data indicates the presence of digital divide in Internet use with Internet use being higher in the capital city, in urban areas, among the middle-to-upper classes, college graduates and the youth. Filipino Internet users access the Internet largely for social networking rather than information seeking or learning, creativity and commercial activities, and entertainment and leisure.

Keywords: Internet use, Philippines, social networking, digital divide, Internet digital divide.

1. Introduction

The first Filipino logged on to the Internet on March 29, 1994, when the Philippine Network Foundation obtained the country's first public permanent connection to the Internet (Minges, Magpantay, Firth, & Kelly, 2002). Since then, the number of Filipino Internet users has grown, gradually at first, but with

1. An earlier version of this chapter was presented as a paper at the Annual Conference of the World Association of Public Opinion Research (WAPOR) in Amsterdam, Netherlands, 2011. Prior to the conference, a draft version was written by the author in 2011 and is available on the web: http://wapor.org/wp-content/uploads/2011/09/Labucay.pdf. This chapter is based on the earlier papers but draws on updated research that was specifically done for this book project.

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considerable rapidity in the last few years. The International Communication Union (ITU) estimates that the percentage of Filipino Internet users has grown from a mere 0.006 percent in 1998 to 36 percent in 2012 (World Bank, 2014). From these statistics, it is clear that Filipinos, indeed, are getting "sucked into [the] worldwide web" (Ho, 2009).

Yet despite this substantial growth of Internet use in the Philippines, there seems to be a scarcity of data on the Filipino Internet users' online behavior. The Yahoo!-Nielsen Net Index initiative, conducted since 2009, only gathers data on Internet users in National Urban Philippines in the 22 major cities across the country. In 2009, the Asia Institute of Journalism and Communication conducted for the United Nations Children's Fund (UNICEF) a nationwide survey on Internet access and use by Filipino schoolchildren. These studies, however, did not provide a comprehensive picture of the socio-demographic factors that promote (or hinder) access to and use of the Internet. Moreover, government-produced statistics on the usage of the Internet –or on information communication technology (ICT) for that matter– are limited, and do not separate the data by relevant socio-demographics. For instance, the Philippines does not have an entry on the official ITU table on percentage of Internet users, disaggregated by gender.

In this chapter, I aim to fill this research gap by presenting data from a series of nationally representative surveys on the patterns of Internet use among Filipino adults aged 18 and above. Using survey data gathered by SWS[1], a non-stock, non-profit, social research organization in the Philippines, I address these core questions:

- Who can access online?
- Who are online?
- How often do they go online?
- What do they do online?

1. Social Weather Stations (SWS) was established in August 1985 as a non-stock, non-profit, and non-partisan social research organization (www.sws.org.ph). Considered as Asia's oldest barometer, SWS has been generating survey-based national statistics on the quality of life, governance and public opinion in the Philippines.

In particular, I examine the socio-demographic differences that contribute to the digital divide in the Internet use and online activities of Filipinos. Digital divide, simply defined as the gap between the 'haves' and the 'have-nots', occurs at different levels: the "accessing divide" at the first level, and the "using divide" at the second level (Attewell, 2001; Cheong, 2007; Chinn & Fairlie, 2004; Norris, 2001; Zeng, 2011). *Accessing divide* refers to the gap in access and ownership of computers, by and large the most convenient way and, until recently, the only way to access the Internet. *Using divide*, on the other hand, refers to the gap that exists between/among the users themselves, particularly in the socio-demographic characteristics of the Internet users.

Previous research has shown that the patterns of access and use of the Internet vary across socio-demographic groups, and this would have a significant impact on how both the users and non-users could access the improved opportunities in education, employment and civic engagement brought on by the various aspects of the Internet (Norris, 2001; Ono & Zavodny, 2007). Moreover, socio-demographic characteristics have been found to be important predictors of a person's actions and behaviors (Ajzen & Fishbein, 1980, cited in Akman & Mishra, 2010, Zhang, 2005). I assume that knowing the trends in this gap between the Internet 'haves' and the 'have-nots' would enable policymakers to design initiatives specifically targeted at the 'have-nots'. In doing so, I also assume that bridging the digital divide is more pressing now that the benefits of the ICT and the Internet in human development and economic progress have been realized. In 1999, then UN Secretary General Kofi Annan considered the lack of access to ICT facilities as a deprivation as severe as the poor's lack of access to food, shelter and water:

> "People lack many things: jobs, shelter, food, health care, and drinkable water. Today, being cut off from basic telecommunications services is a hardship almost as acute as these other deprivations, and may indeed reduce the chances of finding remedies to them" (cited in Hassan, 2004, p. 67).

The UN initiative, *Millennium Development Goal* (MDG), identified in 2000 eight target areas for improvement in communications technology (UNICEF

website, 2012). In 2011, the United Nations Special Rapporteur on the promotion and protection of the right to freedom of opinion and expression submitted a report to the UN Human Rights Council, making several recommendations to promote and protect the "right to freedom of expression online". And since 2001, the World Economic Forum's Global Information Technology Report and the Networked Readiness Index (NRI) have been providing an update on the current state of ICT readiness of countries as a means to foster economic growth and competitiveness.

2. Methods

2.1. Data source

As mentioned above, the main data source for this chapter is survey data on Internet access and Internet use gathered by SWS from 1997 to 2014 through its quarterly Social Weather Surveys. Data were gathered through face-to-face interviews of a nationally representative sample of 1,200 voting age adults (18 years old and above) per quarter. The Philippines was divided into four major study areas: Metro Manila, Balance Luzon (areas outside of Metro Manila but within Luzon), Visayas and Mindanao. The sample size was equally divided into 300 respondents in each of the four study areas (sampling error margins of ±3.0 percent for national percentages, ±6.0 percent for each of the four study areas). Multi-stage probability sampling was used in selecting the adult respondents.

2.2. Measures

Starting in March 2011, Internet use was explored by simply asking "Do you ever go online to access the Internet or the World Wide Web or send and receive email?". Then, a follow-up question was asked to determine frequency of use, with the respondents choosing from six response categories: "a few times a day", "at least once a day", "3-5 days a week", "1-2 days a week", "every other week", and "less often". To simplify reporting, however, these seven response

categories were reduced to three categories: *frequent* (at least daily), *moderate* (at least weekly), and *infrequent* (less than weekly).

Social Weather Surveys also regularly obtain information and background characteristics of the respondents, such as gender, age, locale, educational attainment, marital status, work status, and household facilities. Socio-economic class was used as a proxy indicator of household income. Socio-economic classification, which is often used in market research, divides the population into four categories: the rich classes (AB), the middle class (C), the poor (D), and the very poor (E). Based on our standard SWS practice, the rich and the middle classes are combined as middle-to-upper classes (ABC). Unless otherwise specified, the annual data is presented as averages from the quarterly surveys.

3. Findings

3.1. Who can access online?

SWS data on household facilities from 1997 through 2013 shows that computer ownership in the Filipino household was generally low and hardly changed until 2008 when it reached double-digit levels. Data on computer ownership is an important measure of Internet use because computers have long been the only device needed to access the Internet.

The ownership of computers in the household has ranged from 3 percent in 1997 to 7 percent in 2007, before it increased to 10 percent in 2008. Sixteen percent of households in both 2012 and 2013 had computers at home. In absolute terms, the proportion of households with computers increased from 414,000 in 1997 (out of the projected 12.8 million households) to 3.8 million in 2013 (out of the projected 21.5 million households).

Computer penetration in the household has always been the highest in Metro Manila, in urban areas, and among middle-to-upper classes (ABC). Computer

ownership in the provincial areas, in rural localities and among classes D and E have considerably increased since 1997, but ownership among these demographics remains disproportionately lower.

As of 2013, households in Metro Manila were at least twice more likely than households in the provincial areas to own a computer. By locale, computer ownership was three times higher in urban households than in rural households. The disparity in access to computers was more noticeable across socio-economic classes: 53 percent of households in classes ABC owned a computer, twice the *combined* percentage of households in classes D and E who owned a computer.

Table 1. Internet access in the household, Philippines, 1998 through 2013: percent of households with Internet connection[1]

	'98	'99	'00	'01	'02	'03	'04	'05	'06	'07	'08	'09	'10	'11	'12	'13
Total Philippines	2	1	2	2	3	3	2	2	2	2	4	4	6	7	8	9
Area																
Metro Manila	9	8	11	12	14	18	10	7	7	7	11	11	14	17	18	19
Balance Luzon	0	0	0	0	2	2	1	2	1	2	4	5	7	6	7	9
Visayas	0	1	1	1	1	1	1	1	2	2	3	3	6	8	10	7
Mindanao	0	0	0	0	1	0	0	1	2	1	1	1	2	2	3	5
Locale																
Urban	3	2	4	5	6	7	5	4	3	4	7	8	10	11	12	14
Rural	0	0	0	0	0	0	0	0	1	1	1	1	2	2	3	3
Socio-economic Class																
Classes ABC	13	12	18	21	24	29	10	10	10	13	19	21	29	27	26	38
Class D	0	0	0	0	1	1	2	2	2	2	4	5	6	7	9	10
Class E	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	1

Table 1 above shows that access to Internet in the household is even lower than computer ownership. The percentages of households with computers with

1. Source: Data from Social Weather Stations, Philippines, 1997 through 2013.

Internet connection have ranged between 1 percent to 4 percent from 1997 through 2009, before it slightly increased to 6 percent in 2010, 7 percent in 2011, 8 percent in 2012 and 9 percent in 2013. These correspond to an increase from 230,000 households with Internet access in 1998 (out of the projected 14.4 million households) to 2.2 million households with Internet access in 2010 (out of the projected 21.5 million households).

From 1998 to 2013, households with Internet connection in Metro Manila have ranged from 7 percent to 19 percent. In provincial areas, however, Internet penetration remains well below 10 percent. Internet penetration in urban households gradually increased from 3 percent in 1998 to 14 percent in 2010, but in the rural areas, Internet access was zero until the 1 percent mark was reached in 2006. By socio-economic class, Internet penetration is now 38 percent among ABC class households, in contrast to households in class D, where it is 10 percent at its highest in 2013, and in class E, where Internet penetration was zero until 2008.

3.2. Who are online?

As of March 2014, about one in three (32 percent) Filipino adults goes online to access the Internet or send and receive emails. This is equivalent to 19.4 million people out of the projected 59.8 million of the adult population in the nation.

The percentage of Internet users ranged from 9 percent to 12 percent between 2006 and 2009, then slightly increased to 16 percent in 2009 and 17 percent in 2011 before it doubled to 25 percent in 2012 and to 26 percent in 2013, before reaching the all-time high of 32 percent in 2014.

Table 2 shows the socio-demographic characteristics of adult Filipino Internet users from 2006 to 2014. Internet use remains highest in Metro Manila, in urban areas, among middle-to-upper classes ABC, youth aged between 18-24, and college graduates. Whereas Internet use has increased in the other demographic groups since 2006, the Internet digital divide still remains (more on this below).

Table 2. Demographics of Filipino Internet users, Philippines, averages per Year, 2006 – 2013[1]

	2006	2007	2008	2009	2010	2011	2012	2013	2014
Total Philippines	9	11	11	12	16	17	25	26	32
Area									
NCR	16	22	23	23	27	31	38	42	38
Balance Luzon	6	11	11	14	15	16	27	26	36
Visayas	14	9	9	10	16	15	22	28	29
Mindanao	8	5	6	6	10	10	17	16	24
Locale									
Urban	13	17	17	19	22	24	35	35	41
Rural	5	3	4	6	8	9	16	15	22
Socio-economic Class									
Classes ABC	16	25	26	31	30	38	51	49	66
Class D	10	12	13	14	17	18	28	28	35
Class E	6	4	4	6	8	6	11	13	18
Sex									
Men	10	12	12	13	16	17	25	26	34
Women	9	9	11	12	15	16	26	26	31
Age group									
18-24	27	26	32	35	47	44	58	62	74
25-34	11	13	16	15	21	22	35	37	45
35-44	8	10	7	11	14	14	23	24	37
45-54	4	3	6	5	5	9	16	15	13
55 and above	2	4	2	3	3	4	8	7	8
Educational Attainment									
No formal education/ Some elementary	1	0	0	1	1	1	1	3	6
Up to elementary graduate	2	3	2	3	4	5	9	10	14
Up to high school graduate	12	13	14	16	21	23	34	34	44
College graduate/Post-college	34	35	34	36	45	46	65	56	60
Civil Status									
Married/With Live-in Partner	7	8	7	9	11	13	21	21	28
Unmarried	21	22	20	21	26	34	38	42	46

1. Source: Data from Social Weather Stations, Philippines, 2006 to 2014.

Question wording from 2011 onwards was "Do you ever go online to access the internet or the World Wide Web or send and receive email?"; Question wording from 2006 to 2010 was "Do you use a computer at your workplace, at school, at home, or anywhere else at least on an occasional basis? IF YES, Do you ever go online to access the internet or the World Wide Web or send and receive email?"

The year 2013 includes registered voters.

	2006	2007	2008	2009	2010	2011	2012	2013	2014
Work Status									
Working	12	13	12	13	16	17	24	23	33
Not working	8	10	9	11	15	22	26	30	31
Presence of Overseas Filipino Worker (OFW) in the Household									
With OFW in the Household	--	--	--	--	--	--	42	45	57
Without OFW in the Household	--	--	--	--	--	--	22	24	31

In 2014, the gap in Internet use in Metro Manila and the provincial areas has considerably narrowed down, as the percentage of Internet users reached all-time high levels in Balance Luzon (36 percent), Visayas (29 percent) and Mindanao (24 percent). Nevertheless, the Internet use gap remains higher in Metro Manila than in the provincial areas. By locale, the Internet use gap between urban and rural dwellers remains. About two-fifths (41 percent) of urban dwellers in 2014 are Internet users, about twice more than the 22 percent among rural dwellers.

In 2014, three-fifths (66 percent) of *middle-to-upper* classes ABC are Internet users, nearly twice more than *poor* class D (35 percent) and three times more than those from the *very poor* class E (18 percent) who are also Internet users. In the first quarter of 2014, Internet use among lower classes D and E reached all-time high levels, but the increase was offset by the corresponding increase among classes ABC. Internet use among classes ABC reached 25-26 percent level in 2007-2008, when it was only 12-13 percent among class D and 4 percent among class E. The rate of Internet adoption is higher among class D than class E.

Men and women are equally likely to use the Internet. In 2014, there are about one-third of both men and women who are Internet users, an increase from one-fourth in both 2012 and 2013.

Age is a strong predictor of Internet use, such that Internet use is highest among the youth and it decreases with age. Three-fourths of the intermediate youth aged 18-24 are Internet users, compared to only 13 percent among those aged 45-54 and 8 percent among those aged 55 and above. Internet adoption rates reached

an all-time high among those 25-34 and 35-44, but it hardly changed across time among those aged 45 and above. Among the 25-34, it increased from one-third in 2012-2013 to 45 percent in 2014, and among the 35-44, it increased from about one-fourth in 2012-2013 to 37 percent in 2014.

Internet use increases with education. In 2014, about three-fifths of college graduates are Internet users, compared to only about a tenth of those with elementary education or less. Internet usage has always been higher among college graduates than those with less education.

From 2006 to 2011, Internet usage among college graduates was about two times more than the combined Internet usage among those from the lower three levels of education: high school graduates, elementary graduates and non-elementary graduates. The gap has narrowed down in 2012 and 2013, especially between the college graduates and the high school graduates. Nonetheless, the rate of Internet adoption among those with less education remains far lower than college graduates.

Since 2006, Internet use has always been higher among the unmarried people than those who are married or who have live-in partners. As many as one-third of unmarried adults are Internet users, nearly three times more than the percentage of married people who use the Internet.

Work status is hardly a factor in Internet use, as Internet usage is about the same among working adults and non-working adults. In 2011, however, occupation types among those working was found to be a strong indicator of Internet use, with Internet use higher among the hired workers (particularly among the managers, professionals/technical workers, and those involved in clerical/ administrative/sales) than the employers and self-employed.

One important finding is that the presence of an Overseas Filipino Worker (OFW) in the household has a significant impact on Internet use. The Philippines is the second-largest labor-exporting country after Mexico, with 4.7 million Filipinos working in about 197 countries around the world (Guerrero, Labucay, Sandoval,

& Mangahas, 2009). In 2014, one in two of those with OFW in their households is an Internet user. From 2012 to 2014, Internet usage rate is twice as high among those with OFWs in the household compared to those without.

Internet use is higher among those who have access to computer and Internet connection in the household. Three-fifths of adults with computers in the household are Internet users, compared to only one-fourth of those without computers. As many as three-fourths of those with computers with Internet connection at home are Internet users, compared to only about one-fifth of those without Internet connection at home.

3.2.1. Internet use by proxy

Despite the low percentage of Internet use among adult Filipinos, a large majority of the non-Internet users are, in fact, 'proxy users'. Proxy Internet users are defined in Dutton, Helsper and Gerber (2009) as those "who use the Internet through another person, such as a family member, but who do not use it themselves in a more direct way" (p. 17). Seventy percent of non-Internet users say they know of someone who could access the Internet on their behalf. Non-users are mostly likely to ask their friends and children/grandchildren to access the Internet on their behalf.

As shown in Table 3, the demographics (particularly class and educational attainment) of proxy Internet users closely resemble the demographics of Internet users. By area, proxy Internet use is about four-fifths in Metro Manila and Balance Luzon and about three-fifths in Visayas, compared to about two-fifths in Mindanao. Four-fifths of classes ABC and 70 percent of class D are proxy Internet users, compared to 64 percent among class E. Proxy Internet use increases with education: about four-fifths among college graduates, compared to 50 percent among non-elementary graduates.

In contrast, proxy Internet use is highest among the oldest age group. Nearly all of those aged 45 and above are proxy Internet users, compared to only 47 percent among the 18-24 age group.

Table 3. Demographics of proxy Internet users, Philippines: percent of non-Internet users who could ask other people to use the Internet for them[1] – (% of each group of Filipino adults 18 and above who do not use the Internet)

	Proxy Internet Users (%)
Total Philippines	70
Area	
Metro Manila	80
Balance Luzon	76
Visayas	69
Mindanao	35
Locale	
Urban	70
Rural	69
Socio-economic class	
Classes ABC	80
Class D	70
Class E	64
Gender	
Men	67
Women	74
Age	
18-24	47
25-34	67
35-44	74
45-54	95
55 and above	95
Educational Attainment	
No formal education/Some elementary	50
Up to elementary graduate	75
Up to high school graduate	62
College graduate/Post-college	83

1. Source: Data from Social Weather Stations, Philippines, 2011.

Question wording: "If you need to use the Internet to send/receive an email or do something using the Internet, do you know someone who could access the Internet and do this for you? And who could you ask for help in accessing for you? (SHOWCARD) (ALLOW MULTIPLE RESPONSE)".

3.3. How often do they go online?

About half to three-fifths of Internet users are *frequent* to *moderate* users, while one-third are *infrequent* users (less than once per week). Frequent users are those who use the Internet at least once daily, while moderate users are those who use it at least once a week. Across time, the percentage of frequent to moderate users hardly varied.

Internet users from Metro Manila, urban areas, classes ABC and who are college graduates use the Internet more frequently than the other groups. As high as half of Internet users in Metro Manila and about two-fifths in Balance Luzon are frequent Internet users. By class, as high as 58 percent of classes ABC are frequent Internet users, compared to only about two-fifths among class D. Frequency of Internet use hardly varies by age. Nevertheless, in 2011 and in 2014, about half of those 55 and above are frequent Internet users, higher than the younger age groups.

The percentage of frequent Internet users has always been higher among college graduates than those with less education. About two-fifths of the college graduates are daily Internet users, compared to about one-fifth to one-third among those with less education.

Two-fifths of the college graduates are frequent users, compared to about one-fourth of the less educated who are also daily users. About half of Internet users in households who own computers and 54 percent of those in households with Internet connection are also frequent users.

3.4. What do they do online?

The surveys tested for nine Internet activities that are classified into five broad categories based on the typology used by the Internet in a Britain report are:

- *social networking* (online social networking like Facebook, Twitter);
- *information seeking or learning* (to access news, get health information, etc.);

- *creativity and production* (blogging, share own photos, videos and stories);
- *entertainment and leisure* (play online games);
- *commercial activity* (online purchasing).

Social networking is by far the single most popular online activity among Filipino Internet users, with as many as 95 percent who access online social networking sites such as Facebook (or Friendster), although Twitter is only used by about two-fifths of the Internet users. The least popular online activities are blogging and online shopping, with less than a tenth of Internet users utilizing either of these. Social networking is followed in a distant second by about half who share online (presumably through social networks) things that they have created themselves, such as their own artwork, photos, stories or videos.

Of the three *information seeking or learning* activities tested, the most common ones are: getting news on current events and searching for information on health, dieting and fitness. There are slightly fewer users who search for sensitive health information or health topics that are difficult to talk about, like drug use, sexual health and depression. As shown in Table 4, Table 5, and Table 6, there are mixed socio-demographic patterns on the online activities of Filipino Internet users.

3.4.1. Social networking

Online social networking is dominant across socio-demographic groups, but is noticeably higher among those aged 18 to 34 than those aged 35 and above. Use of social media is also higher amongst those with at least an elementary education than those who did not graduate from elementary school. Across the period 2011 through 2014, use of online social networking has increased from about 80 percent to more than 90 percent in Visayas and Mindanao and among class E.

Twitter use is only slightly more popular in Metro Manila than in the other large cities, especially among the 18-34 age group and college graduates.

Table 4. Internet Activities: Online social networking, by socio-demographic characteristics, 2011 through 2014[1]

	Online social networking like Facebook					Use Twitter			
	2011	2012	2013	2014		2011	2012	2013	2014
Total Philippines	89	87	89	95		15	19	14	19
Area									
Metro Manila	86	93	93	93		20	19	24	20
Balance Luzon	93	86	89	95		12	23	13	21
Visayas	85	82	88	93		12	13	11	13
Mindanao	86	86	85	99		24	17	8	18
Locale									
Urban	93	89	90	95		15	19	15	23
Rural	78	84	88	95		17	21	12	11
Socio-economic class									
Classes ABC	91	76	88	94		21	21	18	6
Class D	89	90	90	95		15	20	14	20
Class E	91	86	84	96		8	11	12	20
Gender									
Men	88	87	87	94		16	25	14	22
Women	91	87	91	96		14	14	14	16
Age									
18-24	93	97	93	96		18	26	18	22
25-34	87	85	94	98		18	23	16	19
35-44	90	81	87	95		13	12	10	18
45-54	75	83	69	88		0	10	9	13
55 and above	100	78	72	86		17	10	13	17
Educational Attainment									
No formal education/ Some elementary	73	84	18	100		0	26	0	16
Up to elementary graduate	89	83	88	95		21	18	4	12
Up to high school graduate	90	90	91	94		13	20	14	17
College graduate/ Post-college	89	82	87	98		18	18	19	29

1. Question wording: "We're interested in the kinds of things you do on the Internet. Please just tell me whether you ever do each activity in the Internet, or not. Do you ever... [MENTION ACTIVITY]? (SHUFFLE CARDS)" [Use an online social networking sites like Facebook or Friendster, Use Twitter].

Table 5. Internet Activities: Information seeking/learning, by socio-demographic characteristics, 2011 through 2014[1]

	Current Events or Politics				Health, Dieting and Fitness				Sensitive Health information			
	2011	2012	2013	2014	2011	2012	2013	2014	2012	2013	2014	2014
Total Philippines	40	41	33	46	37	31	43	47	28	24	30	29
Area												
Metro Manila	41	40	37	54	49	33	49	50	33	27	35	36
Balance Luzon	36	41	36	47	37	28	51	50	32	25	33	30
Visayas	30	43	23	48	28	34	26	48	18	16	22	37
Mindanao	62	43	28	33	30	38	28	32	19	21	19	12
Locale												
Urban	41	40	36	49	38	32	47	49	30	23	32	30
Rural	37	44	23	39	35	29	33	42	21	25	24	27
Socio-economic class												
Classes ABC	51	37	37	57	48	39	61	63	42	20	44	63
Class D	39	43	33	45	37	30	43	48	28	26	29	28
Class E	29	38	23	45	24	23	24	29	6	15	20	17
Gender												
Men	36	46	36	51	33	29	42	43	24	22	25	32
Women	43	38	29	40	42	33	44	50	32	25	34	26
Age												
18-24	43	43	34	40	37	21	41	40	29	25	32	28
25-34	33	41	33	54	38	30	45	48	21	23	28	26
35-44	52	35	32	39	47	54	43	50	44	22	31	33
45-54	21	49	24	46	22	39	48	44	16	31	28	28
55 and above	70	42	33	56	30	12	43	57	30	13	33	36
Educational Attainment												
No formal education	0	26	0	31	0	68	0	19	0	42	0	0
Up to elementary graduate	33	29	9	32	36	9	13	24	21	9	4	17
Up to high school graduate	37	40	30	47	37	28	42	46	26	22	29	29
College graduate/ Post-college	49	49	47	52	40	42	57	62	35	30	41	39

1. Note. Question wording: "We're interested in the kinds of things you do on the Internet. Please just tell me whether you ever do each activity in the Internet, or not. Do you ever... [MENTION ACTIVITY]? (SHUFFLE CARDS)" [Go online or to the Internet to get news or information about current events or politics, Look online or in the Internet for information on health, dieting, or physical fitness, Look for information online or in the Internet about a health topic that's hard to talk about, like drug use, sexual health, or depression].

Table 6. Internet Activities: Creative activities, by socio-demographic characteristics, 2011 through 2014[1]

	Share something you created online					Create or work on own blog			
	2011	2012	2013	2014		2012	2013	2014	2014
Total Philippines	44	38	50	51		5	8	4	6
Area									
Metro Manila	51	41	60	57		10	10	5	6
Balance Luzon	46	40	51	51		2	11	4	7
Visayas	35	32	45	53		7	2	1	7
Mindanao	38	31	34	40		5	2	4	1
Locale									
Urban	44	37	49	49		4	9	4	8
Rural	42	39	51	53		8	7	2	1
Socio-economic class									
Classes ABC	59	32	51	72		8	9	7	5
Class D	42	41	50	49		5	9	3	5
Class E	37	26	44	46		4	2	4	14
Gender									
Men	48	39	48	51		6	7	5	6
Women	38	36	51	50		4	10	3	6
Age									
18-24	46	45	55	59		5	4	4	6
25-34	35	43	50	52		8	13	5	8
35-44	57	33	47	45		4	9	3	3
45-54	39	29	36	50		0	7	0	3
55 and above	30	5	43	33		0	0	6	12
Educational Attainment									
No formal education/Some elementary	51	26	0	44		0	0	0	10
Up to elementary graduate	52	31	49	46		7	13	4	5
Up to high school graduate	36	40	51	49		5	8	4	6
College graduate/ Post-college	54	36	49	58		5	8	5	6

1. Question wording: "We're interested in the kinds of things you do on the Internet. Please just tell me whether you ever do each activity in the Internet, or not. Do you ever... [MENTION ACTIVITY]? (SHUFFLE CARDS)" [Share something online that you created yourself, such as your own artwork, photos, stories or videos; Create or work on your own online journal or blog.

3.4.2. Information seeking/learning

In all three information seeking/learning online activities, class and education appears to be an important predictor of usage, to the extent that use of the Internet for news or health information increases the higher the class and educational attainment of the Internet users.

Using the Internet to access news articles is slightly more popular among Internet users from classes ABC and D, those aged 55 and above and college graduates.

Searching for health information, on the other hand, is more popular in Metro Manila and Balance Luzon, among classes ABC, among the 35-44 age group and college graduates.

Searching for sensitive health information, meanwhile, is more popular in Metro Manila and Balance Luzon, among classes ABC, and college graduates.

3.4.3. Creativity and production

Sharing online blogs and photos that individuals created themselves is a popular Internet activity in Metro Manila and Balance Luzon, amongst classes ABC, those aged 18-45, and those with some elementary education or higher.

Blogging activity is low and hardly varies across all demographics.

3.4.4. Entertainment and leisure

Playing online games is more popular among Internet users in Metro Manila, Visayas and Mindanao than in Balance Luzon. Online games are also more popular among Internet users classes D and E, who are males, aged 18-34, and who have some elementary education or higher.

Online purchasing, like blogging, is low and hardly varies across all demographics.

4. Discussion

In this chapter I have outlined the patterns of Internet use in the Philippines using data gathered from various nationally representative surveys. Survey data show that while the percentage remains low compared to developed countries, Internet use has grown considerably in the nation over the last few years. Access to computers and Internet connection in the household has also started to increase. Yet the findings indicate that the Philippines is experiencing a 'digital divide', and because of this, the barriers to overcome Internet connectivity and use need to be urgently addressed.

Survey data from the Philippines is in keeping with previous findings which showed that households in the provincial areas, rural localities, and those who belong to lower socio-economic classes are less likely to own a computer and have Internet connection at home than households from the capital city, urban areas and upper-to-middle classes (see Attewell, 2001; Chinn & Fairlie, 2004; Norris, 2001).

Results from the Philippines, to some extent, correspond with previous findings on the variations in Internet use across socio-demographic groups. One finding specifically related to the Philippines' socio-economic setting is that the adults in households with family members who are working overseas are twice more likely to use the Internet than those without an overseas worker in the household. For the families left in the country, the Internet has become a convenient and efficient means of communicating with their family members abroad. Indeed, it is now easier to communicate with people using Internet applications such as web chats, online video calls, or even posting photos and pictures through Facebook.

Internet use is higher in the Metro Manila area than in provincial areas and the same applies in urban areas compared to rural areas, confirming Gardner and Oswald's (2001) findings of a north/south divide in Internet use. Internet use is also higher among those from upper-to-middle classes ABC than those from lower classes D and E, and the more educated (see Choi, 2008; Gardner &

Oswald, 2001; Howard, Rainie, & Jones, 2002; Norris, 2001; Smith et al., 2008). Internet users from classes ABC are also more likely to use the Internet more frequently than those from classes D and E.

Filipino men and women are equally likely to use the Internet, supporting the findings of Jackson, Ervin, Gardner, and Schmitt (2001) and Smith et al. (2008)[1].

Youth are the key drivers of Internet use in the Philippines in the sense that while about three in four of those aged 18-24 are Internet users, only about a tenth of those aged 55 and above are Internet users. This pattern clearly validates the stereotype that younger individuals are greater Internet users than the older individuals (see Chinn & Fairlie, 2004; Choi, 2008; Gardner & Oswald, 2001; Howard et al., 2002; Norris, 2001; Smith et al., 2008).

While Internet use among adult Filipinos is still low compared with other countries, survey data also indicates that the majority of non-users are proxy Internet users who could ask their family members and their friends to access the Internet on their behalf. The demographics of proxy Internet users are similar to those of actual Internet users, however, this could further widen the gap in Internet use between those from the capital city or near the capital city, and those from classes ABC and D and E. Notably, almost all of the older age groups 45 and above are proxy Internet users.

As to the patterns of what Filipino Internet users do online, online social networking is largely the most popular online activity, and its usage hardly varies across socio-demographic groups. To some extent, Philippines' results are consistent with previous research that younger Internet users tend to do more fun activities such as online social networking, playing online games while older people do more information seeking/learning activities, particularly viewing news on current events (see Howard et al., 2002; Madden & Rainie, 2003). The

1. It should be noted, however, that other studies show contradictory findings, reporting higher Internet use among men than women (see Bimber, 2000; Choi, 2008; Gardner & Oswald, 2001; Howard et al., 2002; Norris, 2001; Ono & Zavodny, 2003). Nevertheless, it has also been predicted that the gender divide in Internet use is likely to narrow as the educational and income status of women improve.

more educated classes and those from higher socio-economic classes also tend to go online to access news and health information.

5. Conclusion

This chapter contributes to a greater understanding of the current trends in Internet use among Filipinos nationwide. By showing that there are differences in Internet use and access across socio-demographic groups nationwide, it is hoped that the data presented would be considered in the efforts of the government and private sector to bridge the digital divide by focusing on those who do not have access to or do not use the Internet; those in the provinces, the rural areas, the poor and lower income individuals. It should be noted that increasing the percentage of Internet users is part of the MDG indicators, and that the government, therefore, should not only focus on addressing the MDG indicators related to hunger and poverty. After all, as noted by Kofi Annan, the lack of access to Internet is also a deprivation.

Moreover, the trends in Internet use should also be understood within the context of improving the interconnectedness of the various stakeholders of the Philippines' economy. In the 2014 Networked Readiness Index, the Philippines improved its ranking to become slightly higher than the average of the lower-middle-income countries. Nevertheless, the Philippines still lags behind Singapore, Malaysia and Thailand, and is only slightly higher than Vietnam.

Bridging the Internet divide is imperative for the government if it wants to further bolster the competitiveness of the Philippines' economy, particularly by 2015 when the ASEAN Economic Community will be launched. While Internet adoption rate in the Philippines is higher than the other developing countries, like Myanmar (1 percent), Cambodia (5 percent), Laos (11 percent), Indonesia (15 percent), and Thailand (26 percent), it is comparably lower than the Internet adoption rates in Malaysia (66 percent) and Singapore (74 percent).

It is hoped that further research on Filipino Internet users can be undertaken, especially with regard to the social impact of the Internet, particularly online social networking.

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