Suruhanjaya Komunikasi dan Multimedia Malaysia
Malaysian Communications and Multimedia Commission

## STATISTICAL BRIEF NUMBER SEVENTEEN <br> HAND PHONE USERS SURVEY 2014




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Malaysian Communications and Multimedia Commission
MCMC Tower 1, Jalan Impact, Cyber 6
63000 Cyberjaya, Selangor Darul Ehsan
Tel: +60386888000 Fax: + 60386881000
Aduan MCMC: 1-800-188-030
http://www.manc.gov.my


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## EXECUTIVE SUMMARY

The objective of Hand Phone Users Survey (HPUS) 2014 is to gain insights into the current and changing profile, behaviour and preferences of Malaysian hand phone users over time. Some of the questions addressed in this survey are as follows:
a) What is the cellular hand phone penetration rate by state?
b) How many percent of users are accessing the Internet via hand phones?
c) What is the increment in the percentage of smartphone users?
d) What is the demographics of smartphone users?
e) Why do users switch their service providers?
f) Children's use of hand phone and parental concerns

The development of HPUS 2014 questionnaire was a collaborative effort with Malaysian telecommunications service providers. This approach is adopted as service providers are the frontiers in accessing the needs of their users. All figures and opinions considered show that there are exciting opportunities for service providers, policy makers and the business community to predict the hand phone behaviour of Malaysian users and start crafting better experiences for all.

The day where data services revenue overtaking voice revenues are very close. Rapid smartphone popularity and the larger footprint of hand phone Internet services take credit for this possibility. Service providers that used to dominate the market will likely be seen changing gears to improve their business strategies in order to compete effectively again. In a nutshell, value-for-money hand phones coupled with seamless connectivity plans matter most for users.


## INTRODUCTION

## TARGET AND SAMPLE POPULATION

The target population is all users of hand phones on all digital platforms in Malaysia. These were the main users of the $010,011,012,013,014,016,017,018$ and 019 networks. Both segments of postpaid and prepaid users were covered.

However, the sampled population was not drawn from a frame of individuals. They were the main users of hand phones with Mobile Station International Subscriber Directory Number (MSISDN) identical to randomly generated numbers.

## REFERENCE DATE

The reference date was set at 31 March 2014.

## METHODOLOGY

The survey adopted confidence level of $95 \%$ and precision of $\pm 2 \%$.
As at reference date, there were $43,248,000$ hand phone subscriptions with a penetration rate of 144.2 per 100 inhabitants, a high enough penetration for the subscriber base to be treated as a virtual frame of individuals.

There was only one stage of sample selection as the survey adopted a simple random sample (SRS) approach. Meaningful stratification was not possible because a suitable variable for stratification was not available. For instance, the survey could not be ascertained to furnish the characteristic of sex within a particular state due to the mobility of hand phone users.

## FIELDWORK

Fieldwork started on 16 August 2014 and ended on 11 September 2014.
The survey was canvassed using a Computer Assisted Telephone Interview (CATI) system operating out of the MCMC CATI Centre in Kuala Lumpur. The questionnaire was administered by CATI. Trained interviewers called main users of selected hand phone numbers to seek their co-operation. Answers given to pre-coded questions were clicked in, while open-ended answers were typed in.

The survey reached to a sample of 2,401 hand phone users.

## DATA COLLECTION

Two types of data were collected, a core set and a trends set. The core set includes questions that are collected every survey round to provide a time series that will allow meaningful tracking and trends set comprise of questions on user trends, experiences and preferences that change over time.

The core data were demographic and socio-economic in nature and included:
a) nationality;
b) sex;
c) ethnicity;
d) age group;
e) usual state of residence;
f) income category;
g) educational attainment; and
h) urban/rural distribution.

Data collected on trends, experiences and preferences studied in HPUS 2014 included:
a) active SIM cards;
b) dual SIM ownership;
c) children's use of hand phone;
d) parental concern;
e) smartphone usage;
f) awareness of MNP;
g) importance of phone; and
h) SIM purchase behaviour.

## MAIN FINDINGS

## DEMOGRAPHICS AND SOCIO-ECONOMICS

## NATIONALITY

As expected, Malaysians account for the bulk of hand phone users with $87.9 \%$ of the subscriber base. Non-Malaysians make up the rest which is $12.1 \%$. Population estimates of the Department of Statistics, Malaysia (DOSM) state that Malaysians make up $91.3 \%$ while non-Malaysians account for $8.7 \%$ in the first quarter of 2014 in accordance to survey reference date.

|  | 2009 | 2010 | 2011 | 2012 | 2013 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Malaysian | 88.5 | 87.9 | 89.6 | 86.3 | 88.1 |
| Non-Malaysian | 11.5 | 12.1 | 10.4 | 13.7 | 11.9 |

Table 1 Percentage distribution of hand phone users by nationality

## SEX

The survey found that male users outnumbered female users. Males makeup $56.9 \%$ while females account for $43.1 \%$, a ratio of 1.32 . Population estimates of the DOSM state that males makeup 51.5\% while females account for 48.5\%, a ratio of 1.06 in the first quarter of 2014 in accordance to survey reference date. Hand phone usage by gender has recorded a stable trend throughout the year.


|  | 2009 | 2010 | 2011 | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 3}$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Male | 55.7 | 58.6 | 55.2 | 56.5 | 57.6 |
| Female | 44.3 | 41.4 | 44.8 | 43.5 | 42.4 |
| Ratio | 1.26 | 1.42 | 1.23 | 1.30 | 1.36 |

Table 2 Percentage distribution of hand phone users by sex

## ETHNICITY

Among hand phone users, Malays form the predominant ethnic group accounting for $65.2 \%$ of all users, followed by Chinese with 17.3\%, Bumiputera Sabah and Sarawak, 8.9\% and Indian, 8.1\%. The Orang Asli constituted $0.3 \%$ while others made up $0.2 \%$.

|  | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Malay | 63.1 | 60.8 | 61.9 | 61.1 | 65.2 | 65.2 |
| Bumiputera <br> Sabah/Sarawak | 9.2 | 8.2 | 9.0 | 9.0 | 7.8 | 8.9 |
| Orang Asli |  | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 |
| Chinese | 20.9 | 23.0 | 20.6 | 22.9 | 19.9 | 17.3 |
| Indian | 6.1 | 6.3 | 7.1 | 6.1 | 6.4 | 8.1 |
| Others | 0.5 | 1.6 | 1.2 | 0.5 | 0.4 | 0.2 |

Table 3 Percentage distribution of hand phone users by ethnicity

A comparison of the population base and user base in percentage appears below. The population base is an estimate of The 2010 Population and Housing Census of Malaysia (Census 2010) by DOSM. This comparison adds strength to the results of HPUS 2014 as the user base reflects the population base quite closely.


Note: Other Bumiputera is inclusive of Bumiputera Sabah/Sarawak and Orang Asli
Source: Projected population base is obtained from DOSM
Figure 1 Percentage distribution of hand phone users by ethnic group compared with projected population base

## AGE CATEGORY

As expected, hand phone users were dominated by young adults, from the age group of 20-24 with $18.8 \%$ users. The second largest group was 25-29 which accounted for $16.3 \%$.

| Age classes <br> 2009-2011 | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 1 1}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 4}$ | 2014 |
| :--- | ---: | :---: | :---: | :---: | :---: | :---: |
| Below 15 | 2.3 | 3.4 | 1.9 | 1.8 | 1.7 | 1.8 |
| $15-19$ | 12.4 | 10.9 | 10.4 | 11.4 | 13.0 | 10.7 |
| $20-24$ | 20.0 | 17.3 | 17.6 | 17.3 | 18.1 | 18.8 |
| $25-29$ | 15.9 | 15.9 | 16.5 | 15.8 | 16.3 | 16.3 |
| Age classes |  |  |  |  |  |  |
| 2012-2014 |  |  |  |  |  |  |

Table 4 Percentage distribution of hand phone users by age category



Source: Projected population base is obtained from DOSM
Figure 2 Percentage distribution of hand phone users by age category compared with projected population base

Grouped into broad generational age bands, it can be seen that adults account for $73.1 \%$ of all users followed by pre-teens and teens by $12.5 \%$ and seniors with $14.4 \%$. The disparity in the percentage of below 15 category is unsurprising as population base is inclusive of newborns and toddlers who are incompetent to take part in our survey.

|  | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 1 1}$ | $\mathbf{2 0 1 2}$ |
| :--- | :---: | :---: | :---: | :---: |
|  <br> Teens | 14.7 | 14.3 | 12.3 | 13.2 |
| 2013 | 14.7 | 12.5 |  |  |
| Adults | 73.4 | 72.3 | 74.3 | 73.3 |
| Seniors | 11.8 | 13.3 | 13.4 | 13.5 |

Table 5 Percentage distribution of hand phone users by age bands
Pre-teens \& teens: Up to 19 years old at last birthday
Adults: 20 to 49 years old at last birthday
Seniors: 50 years and older at last birthday

## STATE OF RESIDENCE

As in previous years, Selangor has the largest share of hand phone users with $20.9 \%$ in relative to its most populous state status in Malaysia based on estimates of Census 2010. This is followed by Johor with $12.7 \%$ users. WP Kuala Lumpur ranked third with $8.9 \%$, tailed closely by Sabah with $8.6 \%$ and Perak with $8.5 \%$. It should be noted that the statistics below refer to the percentage share of hand phone user base by state and not the penetration rate of the state.

| State | 2009 | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 1 1}$ | $\mathbf{2 0 1 2}$ | 2013 | 2014 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Johor | 12.6 | 11.2 | 11.7 | 11.6 | 11.5 | 12.7 |
| Kedah | 6.5 | 7.0 | 6.4 | 6.2 | 6.5 | 5.7 |
| Kelantan | 5.1 | 4.2 | 4.8 | 4.6 | 5.0 | 4.6 |
| Melaka | 3.3 | 3.0 | 3.9 | 3.2 | 2.3 | 3.2 |
| Negeri Sembilan | 4.1 | 4.5 | 4.5 | 4.0 | 4.2 | 3.8 |
| Pahang | 4.9 | 4.7 | 3.9 | 5.5 | 4.8 | 5.5 |
| Perak | 8.9 | 8.0 | 8.2 | 7.2 | 7.0 | 8.5 |
| Perlis | 1.0 | 0.7 | 0.8 | 0.9 | 0.7 | 0.6 |
| Pulau Pinang | 6.2 | 6.0 | 5.5 | 6.0 | 6.2 | 5.5 |
| Selangor | 19.0 | 21.2 | 20.4 | 22.8 | 22.1 | 20.9 |
| Terengganu | 3.3 | 3.4 | 3.7 | 3.8 | 3.7 | 4.1 |
| Sabah | 8.7 | 9.0 | 7.9 | 7.8 | 9.0 | 8.6 |
| Sarawak | 6.5 | 5.6 | 6.6 | 7.0 | 7.3 | 6.8 |
| WP Kuala Lumpur | 9.5 | 10.8 | 11.0 | 9.1 | 9.4 | 8.9 |
| WP Putrajaya | 0.1 | 0.2 | 0.4 | 0.2 | 0.2 | 0.4 |
| WP Labuan | 0.3 | 0.2 | 0.3 | 0.2 | 0.2 | 0.4 |

Table 6 Percentage distribution of the hand phone users by usual state of residence


The state shares show consistent pattern that emerges between the user and population base. This indicates that the composition of this survey is reflective of Census 2010.


Source: Projected population base is obtained from DOSM
Figure 3 Percentage distribution of hand phone users by usual state of residence compared with projected population base

These percentages allow estimates for the cellular telephone penetration rate per 100 inhabitants by state. The table below depicts the rates. All states have recorded penetration rate of above $100 \%$ which implies multiple subscriptions.

| State | 2009 | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 1 1}$ | $\mathbf{2 0 1 2}$ | 2013 | 2014 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Johor | 105.9 | 112.8 | 126.5 | 128.7 | 140.9 | 156.7 |
| Kedah | 92.1 | 117.2 | 116.4 | 118.8 | 137.0 | 121.9 |
| Kelantan | 88.1 | 83.3 | 103.3 | 107.8 | 127.9 | 117.5 |
| Melaka | 120.4 | 128.9 | 182.3 | 143.6 | 115.0 | 159.2 |
| Negeri Sembilan | 115.7 | 148.8 | 158.4 | 144.7 | 167.2 | 153.3 |
| Pahang | 90.2 | 101.7 | 91.7 | 134.8 | 130.0 | 148.3 |
| Perak | 105.5 | 107.7 | 119.7 | 114.6 | 122.4 | 149.2 |
| Perlis | 112.3 | 92.0 | 124.5 | 139.6 | 123.5 | 103.7 |
| Pulau Pinang | 110.5 | 125.5 | 123.9 | 142.3 | 162.2 | 143.8 |
| Selangor | 104.3 | 138.5 | 145.4 | 154.4 | 164.5 | 156.1 |
| Terengganu | 84.2 | 107.8 | 125.3 | 132.6 | 141.7 | 156.5 |
| Sabah | 77.8 | 92.6 | 88.8 | 87.6 | 111.9 | 107.4 |
| Sarawak | 73.3 | 74.3 | 94.8 | 105.7 | 120.8 | 113.0 |
| WP Kuala Lumpur | 163.8 | 208.6 | 229.0 | 203.5 | 231.2 | 220.8 |
| WP Labuan |  |  |  | 87.0 | 91.3 | 171.2 |
| WP Putrajaya |  |  |  | 120.6 | 103.3 | 191.3 |

Note: 2009 until 2011 Sabah includes WP Labuan, Selangor includes WP Putrajaya
Table 7 Cellular telephone penetration rate per 100 inhabitants by state

## URBAN-RURAL DISTRIBUTION

The survey found urban to a rural ratio of 1.7 to 1 in the year 2014. Census 2010 captured urbanisation ratio of 2.4:1 in Malaysia. There is no obvious change noticed in the urbanisation level of users from year 2013 to 2014.


Figure 4 Percentage distribution of hand phone users by rural-urban dissection

## INCOME

The table below indicates that the highest percentage of income range for hand phone users is RM1,000 - RM3,000 (36.6\%). The income range of less than RM1,000 has declined by about threefold from 2008 to 2014 and a stable growth is observed in the other income ranges. This reflects on the steady percentage increases in Malaysian salaries after factoring in inflation. Another reason includes, implementation of Malaysia's minimum wage of RM900 for the Peninsular and RM800 for East Malaysia on 1 January 2013.

|  | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 1 1}$ | $\mathbf{2 0 1 2}$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Dependents | - | - | 30.3 | 32.1 | 33.7 |
| Less than RM1,000 | 61.5 | 61.7 | 24.8 | 23.2 | 19.6 |
| RM1,000-RM3,000 | 30.3 | 31.4 | 35.2 | 34.3 | 36.5 |
| RM3,000-RM5,000 | 5.5 | 4.5 | 6.1 | 6.7 | 7.7 |
| RM5,000 or more | 2.7 | 2.4 | 3.6 | 3.7 | 3.2 |

Table 8 Percentage distribution of hand phone users by monthly income

## EDUCATION

In terms of educational attainment, this survey found that one third of users (33.7\%) have attained a medium level of education. Medium in this context, refers to the SPM/SPVM and STPM. This is followed by low education group (27.8\%) and high level of education (21.7\%). The percentage of illiterate users have reduced to 0.9 in 2014 from 2.4 in 2012. Statistically, education is not a strong indicator of hand phone usage as most phones are made user friendly.

|  | 2012 | 2014 |
| :--- | :---: | :---: |
| None | 2.4 | 0.9 |
| Still in school/university | 15.7 | 15.8 |
| Low education | 30.4 | 27.8 |
| Medium education | 33.1 | 33.7 |
| High education | 18.4 | 21.7 |

Table 9 Percentage distribution of hand phone users by educational attainment

Low education: Primary school, Secondary school, PMR<br>Medium education: SPM/SPVM and STPM<br>High education: Diploma, Advance diploma, Degree and higher Dependents: Housewives, Retirees, Unemployed and Students



## TRENDS

## ACTIVE SIM CARDS

In terms of active hand phone number usage, the survey found that $62.3 \%$ of users use only one active number. Here, an active number is synonymous to a SIM card, not the number of hand phones.


Figure 5 Percentage distribution of user by number of active SIMs

Of those who use more than one active number (37.7\%), we wanted to know whether they use numbers from the same operator or otherwise. As expected, $70.0 \%$ of user have a preference towards different operators.

SIM card determines the number one can contact another. For some users, there are situations where having more than one number makes sense and the chart below shows the reasons for their use.

Separate for data usage and normal voice/SMS

## $00000000000005 \mathbf{5 7 . 6 \% \%}$

Privacy 000000000000000 55.1\%
saak te 00000000000 44.1\%

Nemono coverase atal times $0000000000_{\text {40.6\% }}$


Figure 6 Reasons users need more than one active SIM

By far, separation between data usage and normal voice/SMS is a consumers' most important criteria. In fact, $57.6 \%$ of users favored this rational as they get the best of both worlds.
$55.1 \%$ of users say that separate SIMs for personal and/or office use ensure their privacy. This shows users prefers to keep their work life and personal separately. Running multiple SIMs serves as a backup for $44.1 \%$ of users. Another reason of choice was advantage of different rates with $42.3 \%$. This is evident that users are taking smart decisions by making the most from different tariffs. Rather than spending a huge sum of money on one big plan, sometimes it might be cheaper to opt for two or more tariffs.

Further, the ability to get network coverage at all times amount to 40.6\%. For instance, the primary number could offer truly unlimited data but its coverage might not be satisfactory in rural areas. In such situation, multiple SIMs comes handy. $24.7 \%$ say it's convenient for travelling purposes and about one tenth of users received their additional numbers from others.


Figure 7 Percentage usage of free call and messaging apps by year

Observing users trend based on Hand Phone Users Survey 2013, it is evident that the percentage of the free call app and free messaging app of users have increased tremendously from year 2012.

At the same time, this pattern is reversed in the number of SMSes sent. A drop of $15.4 \%$ was recorded from 2012 to 2013 and a further decline of $36.1 \%$ was noted from 2013 to 2014. This could serve as a reason for the increment in the free app usages as illustrated in the above diagram.

Observing the users' reasons for having more than one active SIMs together with these findings suggest that Malaysian users care most about having seamless, easy access to content and calls, and better tariff rates. As such, service providers delivering on that demand will certainly win the market.

## HAND PHONE OWNERSHIP

In terms of hand phone ownership in 2014, 66.8\% of users carry only one hand phone. 28.9\% of users carry two, $3.4 \%$ users use three hand phones while $0.8 \%$ require four or more. Here, only hand phones that were actively in usage at the time of the survey was counted.


Figure 8 Trend of hand phone ownership from 2004 to 2014

Over the years, the percentage of one hand phone ownership has seen a decreasing trend whereas ownership of two and three and more hand phones observed an inclining trend as depicted in the line graph above. A 27-year old user claimed that the growth of low priced hand phone equipped with equally good specification was the reason why he added another hand phone. In some cases, users kept their old phone after upgrading their older models.

## DUAL SIM PHONE

We were interested to study users' awareness and behaviour on dual SIM phones. The basic feature of a dual SIM phone is one which holds two SIM cards. Findings revealed that as high as $86.3 \%$ of users are aware of the existence of dual SIM handsets. And of these, $31.1 \%$ are dual SIM phone users.


Figure 9 Awareness and usage of dual SIM phone

A question that triggered our interest was, 'If the user was a dual SIM phone owner, what is the chance of him utilising the device's basic feature?' Further analysis on the $31.1 \%$ of dual SIM users produced the results below.

| Active number(s) | Number of hand phone(s) |  |  |
| :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 and more |
| 1 | 34.6\% | 2.8\% | 0.9\% |
| 2 | 25.9\% | 21.0\% | 0.6\% |
| 3 and more | 0.5\% | 9.0\% | 4.7\% |

Table 10 Percentage distribution of dual SIM phone by active numbers and number of hand phone

The results show that $34.6 \%$ of dual SIM owners have one active number and one hand phone. In the emerging dual SIM phone markets, it is not at all startling for users to purchase a dual SIM phone without two SIM cards. This is an indication that consumers are always looking for a wide array of hand phone offerings and if the offer intrigues them, they will grab it. $25.9 \%$ of dual SIM phone owners are utilising the device's basic feature in which they slot their two SIM cards in their dual SIM handset.

## ARE YOU OBSESSED WITH YOUR HAND PHONE?

Hand phone has always played an essential role in our daily communication. We were interested to study whether this technological revolution has changed Malaysians' hand phone behaviour. Are they obsessed with their own hand phone?


Figure 10 Check hand phone without notifications

This study found that about three quarter of users (71.4\%) constantly check their hand phones even when it does not ring.


Figure 11 Check hand phone without notifications by age category

Findings suggest that $60.9 \%$ of young adults aged 20 to 39 seem to be checking their hand phones without any notifications whilst pre-teens and teens amounting to $13.2 \%$.


Feature phone

Figure 12 Check hand phone without notifications by phone type

We observed that, of those who use smartphone, $79.7 \%$ constantly check their phones even when it doesn't ring and $62.3 \%$ are from feature phone users. This finding suggests that phone type is not a strong determinant in consumers' addictive behaviour towards hand phones.

## IS HAND PHONE IMPORTANT?

Further, the survey aims to track patterns in users' hand phone behavior. As such, we also explored the importance of hand phone in the daily life of Malaysians. Hand phones are very important in $44.8 \%$ of consumers' day-to-day lives. At an even greater rate, 51.5\% say that hand phones are important. Only a mere 3.7 percent said that their hand phones are not important in their daily life.


Figure 13 Importance of hand phone

Additionally, the study prompted to get response of users on turning back to get hand phones at home. About three quarter of users (76.3\%) were found to turn back to get their hand phones at home at a tolerable distance and $23.7 \%$ said no to turning back.

In a nutshell, users' behavior demonstrates that they have a strong attachment to their hand phone; especially the younger users. Accordingly, this will be a good indication for service providers, including content providers to leverage on the positive use of hand phones.

## CHILDREN'S USE OF HAND PHONES

It's a common sight that children instinctively clicking keypads or swiping their fingers across screens before they even learn to speak. Questions on children's use of hand phone are targeted at school going youngest child of the respondent. Caution is required in the use of this statistic as it is not representative of child population.

Based on the survey, $33.9 \%$ of school going youngest children of the respondent, own a hand phone. Mode age of first ownership is 13 to 15 . Most children will get their first hand phone at the age of 12. The survey found that the lowest age of first ownership of a respondent's child is 5 and the child also access the Internet using his smartphone.


Figure 14 Percentage distribution of age of first hand phone ownership
$57.6 \%$ of child hand phone owners have a smartphone. We further probed respondents to examine their children's mobile Internet behavior. $50.4 \%$ of all child hand phone users access the mobile Internet using their hand phones.


Figure 15 Children's use of mobile Internet

## PARENTAL CONCERNS

The survey also examined parents' concerns on hand phone usage among their children and how they respond to those concerns.

The question of allowing schoolchildren to bring hand phones to school never really subsided. It has perhaps faded from public debate but simmers in private households whenever junior asks dad for a hand phone because all his other friends already have one.

An overwhelming 85.6\% of parents referring to school-going youngest child are against the idea of bringing hand phone to school.

| Group | Hand phone in school |  |
| :---: | :---: | :---: |
|  | Yes | No |
| Users over 25 years old with school going children | $14.4 \%$ | $85.6 \%$ |

Table 11 Percentage of parent agreement on hand phones in school

Data reclassified by gender of user over 25 years old with school-going youngest child yielded the following tables:

| Group | Hand phone in school |  |
| :--- | :---: | :---: |
|  | Yes | No |
| Mums | $4.0 \%$ | $43.6 \%$ |
| Dads | $10.4 \%$ | $42.0 \%$ |

Table 12 Parent agreement on hand phone in school

The fathers are more likely to allow their school going youngest child to bring hand phone to school than the mother.

Among parents of children with a hand phone, $58.8 \%$ limit their child's outgoing call counts and $46.8 \%$ of all parents surveyed set a limit on their child's conversation length. Over $70 \%$ of parents have concerns over what content their children are viewing through their hand phones. These days, the trend of kids being digitally grounded by forbidding the use of electronic devices, access to social networking sites and use of hand phones are becoming famous. This survey found that $44.8 \%$ of parents confiscate their children's hand phone as a form of punishment.


Figure 16 Percentage distribution of parental concern on hand phone usage among children

## SMARTPHONES

It seems like everyone that we know owns a smartphone now, even our parents and grandparents; including children. The use of smartphones continued to grow in 2014.

|  | 2010 | 2011 | 2012 | 2013 | 2014 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Smartphone | 14.0 | 12.0 | 26.0 | 37.4 | 53.4 |
| Feature phone | 86.0 | 87.3 | 74.0 | 61.8 | 46.4 |
| Don't Know | - | 0.7 | - | 0.8 | 0.2 |

Table 13 Percentage distribution of hand phone users by phone type
$53.4 \%$ of users who participated in the survey do use a smartphone. Statistically, 1 in 2 Malaysians are smartphone users now. This statistic is supported by TNS Malaysia Connected Consumer Study (2014) sponsored by Google. The research also found that smartphone is the most commonly used connected device in Malaysia.


Figure 17 Smartphones vs. feature phones share, 2010-2014

This chart indicates that smartphones ownership has constantly seen a steady growth almost every year. The percentage of smartphone ownership has seen a tremendous increment of almost four fold of that in 2010. The Government's Youth Communication Package (YCP) which provided adults aged 21-30 with a minimum income of RM3,000 and below with a rebate of RM200 to purchase a smartphone boosted the growth of smartphone users since January 2013. These increments could also be associated with the penetration of Chinese smartphone brands, resulted in their respective proportion reaching more than 10 percent of the total market spending in Malaysia.

## SMARTPHONE DEMOGRAPHICS

As in the overall user base, smartphone demographics count more males than females.


Figure 18 Percentage of smartphone users by gender

We observed that the gender gap in smartphone ownership has narrowed of late. Based on Hand Phone Users Survey 2013 the result found a split of $56.4 \%$ male and $43.6 \%$ female. Whilst, the gap in ownership was wider in 2012 at $59.4 \%$ male and $40.6 \%$ female.


Figure 19 Percentage of smartphone users by age category

Smartphone users are more likely to be younger with an average age of 29.7 while non-smartphone user's average age was 38.3.


Figure 20 Percentage of smartphone users by income group
$37.1 \%$ of smartphone users earn an income of RM1,000-RM3,000. Unsurprisingly, about one third of dependents makes up the smartphone user pool. Cheaper smartphones with equally good specification is a clear reasoning of smartphone affordability by these income groups. Besides, only $20.2 \%$ of smartphone users reported having an income of at least RM3,000 compared to $15.3 \%$ of the total respondent sample.

## INTERNET ON HAND PHONE

In 2014, about two-third (63.3\%) of users interviewed say that they access the Internet through their hand phones. This percentage is a strong indicator that users use their hand phone for good connectivity.


## 63.3\% access Internet via phone

$90.1 \%$ of users who participated in this survey access the Internet via the smartphone that they used to respond.


Figure 21 Percentage distribution of Internet access using hand phones

The chart above depicts the share of hand phone users who access the Internet has seen an extreme hike up in the recent years. According to MCMC Internet Users Survey 2014, smartphone is the most widely-used device to access the Internet at $74.3 \%$. As the numbers indicate, users fully embrace the concept of getting connected everywhere at any time. Thus, industries with the easiest-to-access content will be a clear winner. Internet banking, e-commerce, e-government and hand phone-optimised websites should utilise consumer's hand phone behaviour for governance and profitability.

## CHANGING YOUR HAND PHONE?

And now: How often do you change your hand phone? The replacement cycle plays a big role in hand phone market than any other realm of consumer good. In our survey, as of reference date, $38.8 \%$ of users have changed their hand phone in the past 12 months.


Figure 22 Replacement of hand phone

Users of this survey rated their experience when changing to a new hand phone. When asked why they changed their phone, $53.3 \%$ of users claimed that they had damaged or defective device. $28.8 \%$ of users wanted a phone with Internet access. $22.4 \%$ said that the new phone is trendier and another $18.8 \%$ claimed that they were attracted to the design of the new phone.


Figure 23 Reasons users change hand phones
$11.2 \%$ associated loss of phone with the purchase of a new one. Other reasons cited for changing to a new phone include hand phone donation, user-friendly phone, cheaper price of phones, etc.

## LOYALTY TO SERVICE PROVIDERS

Given the increase in user awareness and competitive mobile market, hand phone user loyalty has become a crucial issue. Based on our survey, as many as $90.0 \%$ of users have stayed with their service providers in the first year.

Low rates of replacing telecommunication service providers are observed. Of the 10.0\% users who have switched to another telecom service provider, $60.7 \%$ of users said that they have no qualms in changing if others were to offer cheaper rates or packages.


Figure 24 Reasons users change service providers

Poor network or coverage of service providers is the second highest reason at $48.1 \%$ for Malaysians to stop their subscription. This is an indication that user's preferences are to obtain value for money subscription plans and high speed connectivity. Service providers need to deliver on that services to gain users' long term loyalty. In addition, the on-net prices which tend to be substantially lower has encouraged $25.9 \%$ of users to subscribe to the same service provider. Bundled package plan has attracted $14.6 \%$ of the users to change service provider. Making up the rest are factors such as loss and defect of SIM cards, cherished numbers, dissatisfied with service providers, etc.

## HAND PHONE NUMBER PORTABILITY

Of the $10.0 \%$ of users who have changed their service provider in the past 12 months, $40.2 \%$ have done it through Mobile Number Portability (MNP).


Figure 25 Change of service provider through MNP

## PURCHASE OF SIM CARD

The survey also catered the request from service providers on the preference of users to purchase a SIM card via online services. It is found that, $82.5 \%$ of users are not in favour of the idea of purchasing a SIM card through online services.


Figure 26 Purchase of online SIM card

Out of $17.5 \%$ of users who are at ease to purchase SIM cards online, $73.7 \%$ chose to receive it via courier. The users were also asked if they feel secured to receive their SIM card via ordinary mail, quite a high number (57.8\%) responded that they will choose ordinary mail.


Figure 27 Purchase of online SIM card by postal and courier

Simply put, courier service scored better confidence than ordinary mail among users who favoured purchase of a SIM card via online.

## TABLES

Caution is required in the use of the estimates tabulated below.
While the MCMC takes every care to minimise non-sampling errors, which cannot be quantified, the estimates presented are also subject to sampling error, which is a measure of the chance variation that occurs because a sample, and not the entire population is canvassed. The sampling error of an estimate is usually expressed as a percentage of that estimate to give the relative sampling error (RSE) of that estimate.

In general, estimates that are small are subject to high RSEs. As a guide, only estimates with RSEs of $25 \%$ or less are considered reliable for general use. Estimates with RSEs greater than $25 \%$ but less than or equal to $50 \%$ are denoted with asterisk in these tables and should be used with caution; while estimates with RSEs greater than $50 \%$ are denoted by two asterisks and are considered too unreliable for general use. However, these estimates may be aggregated with others until an RSE of less than $25 \%$ is obtained.

Confidence intervals for very small estimates should be based on the binomial distribution rather than the normal approximation to the binomial. As an alternative, the method of Korn and Graubard, 1998 may also be used.

Percentages may not add up to 100 because of rounding.


| $\begin{aligned} & \stackrel{\rightharpoonup}{\mu} \\ & \underset{\sim}{\infty} \end{aligned}$ | Nationality | Percent | RSE |
| :---: | :---: | :---: | :---: |
|  | Malaysian | 87.9 | 0.8 |
|  | Non-Malaysian | 12.1 | 5.5 |



| $m$ Ethnicity | Percent | RSE |
| :---: | :---: | :---: |
| 岗 Malay | 65.2 | 1.6 |
| Chinese | 17.3 | 4.8 |
| Bumiputera Sabah/Sarawak | 8.9 | 7.0 |
| Indian | 8.1 | 7.4 |
| Orang asli | 0.3* | 40.8 |
| Others | 0.2* | 50.0 |


| - Age | Percent | RSE |
| :---: | :---: | :---: |
| 岗 Below 15 | 1.8 | 14.9 |
| 15-19 | 10.7 | 5.9 |
| 20-24 | 18.8 | 4.2 |
| 25-29 | 16.3 | 4.6 |
| 30-34 | 12.7 | 5.4 |
| 35-39 | 10.0 | 6.1 |
| 40-44 | 8.3 | 6.8 |
| 45-49 | 7.2 | 7.3 |
| 50-54 | 4.6 | 9.3 |
| 55-59 | 4.8 | 9.1 |
| 60-64 | 2.8 | 12.0 |
| 65 and above | 2.3 | 13.5 |


|  | Age bands | Percent | RSE |
| :---: | :---: | :---: | :---: |
|  | Pre-teens \& teens | 12.5 | 5.4 |
|  | Adults | 73.1 | 1.2 |
|  | Seniors | 14.4 | 5.0 |
|  | Income | Percent | RSE |
|  | Dependents | 30.7 | 3.1 |
|  | Less than RM 1,000 | 17.4 | 4.5 |
|  | RM 1,000 - RM 3,000 | 36.6 | 2.7 |
|  | RM 3,000 - RM 5,000 | 10.1 | 6.2 |
|  | RM 5,000 or more | 5.2 | 8.8 |



| $\infty$ Educational Level | Percent | RSE |
| :---: | :---: | :---: |
| None | 0.9 | 21.7 |
| Primary school | 12.6 | 5.4 |
| Secondary school | 12.2 | 5.5 |
| PMR'/'UEC-Junior Middle Three | 8.7 | 6.6 |
| SPM'/'SPVM | 33.0 | 2.9 |
| STPM'/'STAM'/'Certificate'/'UEC-Senior Middle Three | 7.4 | 7.2 |
| Sijil 4 Thanawi '/'SMA | 0.2* | 40.8 |
| Others | 0.2* | 50.0 |


| の Schooling Status | Percent | RSE |
| :---: | :---: | :---: |
| - Primary school | 2.6* | 31.2 |
| Secondary school | 40.0 | 6.3 |
| College/University | 55.8 | 4.6 |
| Others | 1.6* | 40.5 |


| State of residence | Percent | RSE |
| :--- | ---: | ---: |
| Johor | 12.7 | 5.3 |
|  | 5.7 | 8.3 |
|  | 4.6 | 9.3 |
| Melaka | 3.2 | 11.3 |
| Negeri Sembilan | 3.8 | 10.2 |
| Pahang | 5.5 | 8.5 |
| Perak | 8.5 | 6.7 |
| Perlis | $0.6^{*}$ | 26.6 |
| Pulau Pinang | 5.5 | 8.5 |
| Selangor | 20.9 | 4.0 |
| Terengganu | 4.1 | 9.9 |
| Sabah | 8.6 | 6.6 |
| Sarawak | 6.8 | 7.6 |
| WP Kuala Lumpur | 8.9 | 6.5 |
| WP Labuan | $0.4^{*}$ | 33.3 |
| WP Putrajaya | $0.4^{*}$ | 33.3 |


|  | Area | Percent | RSE |
| :---: | :---: | :---: | :---: |
| 岗 | Rural | 37.7 | 2.7 |
| ¢ | Urban | 62.3 | 1.6 |


| $\begin{aligned} & \underset{\sim}{\underset{1}{4}} \\ & \underset{\sim}{\underset{\alpha}{2}} \end{aligned}$ | Number of active SIM cards | Percent | RSE |
| :---: | :---: | :---: | :---: |
|  | 1 | 62.3 | 1.6 |
|  | 2 | 31.1 | 3.0 |
|  | 3 | 5.1 | 8.8 |
|  | 4 | 0.8 | 22.9 |
|  | 5 | 0.5* | 28.8 |
|  | More than 5 | 0.2* | 50.0 |


|  | Active SIM card from same operator | Percent | RSE |
| :---: | :---: | :---: | :---: |
| 岕 | Yes | 30.0 | 5.1 |
| \& | No | 70.0 | 2.2 |


| $\pm$ Reasons for more than one active number | Percent | RSE |
| :---: | :---: | :---: |
| 岕 Separate for data usage and normal voice／SMS | 57.6 | 2.9 |
| $\stackrel{\leftarrow}{\gtrless}$ Privacy | 55.1 | 3.0 |
| Back up | 44.1 | 3.7 |
| Advantage of different rates | 42.3 | 3.9 |
| Network coverage at all times | 40.6 | 4.0 |
| Travel purposes | 24.7 | 5.8 |
| Given by someone | 9.7 | 10.1 |
| Others | 1．3＊ | 28.7 |
| Multiple responses |  |  |
| －Type of phones | Percent | RSE |
| 岕 Feature phone | 46.4 | 2.2 |
| $\uparrow$ Smartphone | 53.4 | 1.9 |
| Don＇t know | 0．2＊ | 37.7 |
|  |  |  |
| －Number of hand phone that is currently in use | Percent | RSE |
| 岗 1 | 66.8 | 1.4 |
| § 2 | 28.9 | 3.2 |
| 3 | 3.4 | 10.9 |
| 4 | 0．5＊ | 30.1 |
| 5 | 0．3＊ | 35.3 |
| 6 | 0．0＊＊ | 100.0 |
|  |  |  |
| A Awareness of dual SIM phone | Percent | RSE |
| 岗 Yes | 86.3 | 0.8 |
| $\stackrel{\text { ® }}{ }{ }^{\text {¢ }}$ | 13.7 | 5.1 |
|  |  |  |
| ）Usage of dual SIM phone | Percent | RSE |
| 岗 Yes | 31.1 | 3.3 |
| $\gtrless$ No | 68.9 | 1.5 |
|  |  |  |
| ）Change to new hand phone in the past 12 months | Percent | RSE |
| 岕 Yes | 38.8 | 2.6 |
| $\stackrel{\text { No }}{ }$ | 61.2 | 1.6 |


| O | Reason for change of new hand phone in the past 12 months | Percent | RSE |
| :---: | :---: | :---: | :---: |
|  | Old phone damaged | 53.3 | 3.1 |
|  | Internet access | 28.8 | 5.2 |
|  | Trendy | 22.4 | 6.1 |
|  | Design | 18.8 | 6.8 |
|  | Attractive promotions | 13.6 | 8.2 |
|  | Old phone lost | 11.2 | 9.2 |
|  | Old phone stolen | 4.4 | 15.3 |
|  | Upgrade | 1.8 | 24.0 |
|  | Better features | 1.4* | 27.5 |
|  | Gift | 1.4* | 27.5 |
|  | More functions | 1.1* | 31.5 |
|  | Dual SIM | 1.0* | 33.2 |
|  | Others | 4.6 | 14.9 |

Multiple responses

| I Change of service provider in the past 12 months | Percent | RSE |
| :---: | :---: | :---: |
| 岗 Yes | 10.0 | 6.1 |
| No | 90.0 | 0.7 |


| N | Change of service provider through MNP | Percent | RSE |
| :---: | :---: | :---: | :---: |
|  | Yes | 40.2 | 7.9 |
|  | No | 59.8 | 5.3 |


| $\begin{aligned} & \text { N } \\ & \underset{\sim}{\mathbf{N}} \end{aligned}$ | Reason for change of service provider in the past 12 months | Percent | RSE |
| :---: | :---: | :---: | :---: |
|  | Cheap rate/package | 60.7 | 5.2 |
|  | Better network/coverage | 48.1 | 6.7 |
|  | Same service provider as family members | 25.9 | 10.9 |
|  | Bundle plan | 14.6 | 15.6 |
|  | Others | 13.0 | 16.8 |

Multiple responses

| 年 | Buy SIM card online | Percent | RSE |
| :---: | :---: | :---: | :---: |
|  | Yes | 17.5 | 4.4 |
|  | No | 82.5 | 0.9 |


| $\sim$ Receive SIM card via ordinary mail | Percent | RSE |
| :---: | :---: | :---: |
| 岕 Yes | 57.8 | 4.2 |
| $\stackrel{\text { No }}{ }$ | 42.2 | 5.7 |


|  | Receive SIM card via courier | Percent | RSE |
| :---: | :---: | :---: | :---: |
| 岗 | Yes | 73.7 | 2.9 |
| $\stackrel{1}{2}$ | No | 26.3 | 8.2 |


| A Accessing the Internet using hand phone | Percent | RSE |  |
| :--- | ---: | ---: | ---: |
| $\underset{\sim}{u}$ | Yes | 63.3 | 1.6 |
| $\stackrel{y}{\mid}$ No | 36.7 | 2.7 |  |


| $\stackrel{\infty}{\infty}$ Check hand phone even when it does not ring | Percent | RSE |
| :---: | :---: | :---: |
| 岗 Yes | 71.4 | 1.3 |
| \＆No | 28.6 | 3.2 |


| T Importance of hand phone in daily life | Percent | RSE |
| :---: | :---: | :---: |
| 山 Not important | 3.7 | 10.5 |
| 区 Important | 51.5 | 2.0 |
| Very important | 44.8 | 2.3 |


| 잉 Turn back to get hand phone | Percent | RSE |
| :---: | :---: | :---: |
| 岕 Yes | 76.3 | 1.2 |
| $\stackrel{\leftarrow}{\mathbb{L}}$ | 23.7 | 3.7 |


| $\bar{m}$ Parent | Percent | RSE |
| :---: | :---: | :---: |
| 岗 Yes | 52.1 | 2.0 |
| $\stackrel{\text { No }}{ }$ | 47.9 | 2.1 |


| ～Parent with any school going children | Percent | RSE |
| :---: | :---: | :---: |
| 岗 Yes | 59.0 | 2.4 |
| $\stackrel{\text { No }}{ }$ | 41.0 | 3.4 |


|  | Own | Percent | RSE |
| :---: | :---: | :---: | :---: |
| \％ | Yes | 33.9 | 5.1 |
| d | No | 66.1 | 2.6 |


|  | Age at which child received the first hand phone | Percent | RSE |
| :---: | :---: | :---: | :---: |
|  | $\leq 6$ | 3.2* | 34.8 |
|  | 7-9 | 16.5 | 14.3 |
|  | 10-12 | 33.3 | 9.0 |
|  | 13-15 | 38.6 | 8.0 |
|  | 16-18 | 8.4 | 20.9 |


| $\begin{aligned} & \text { n } \\ & \underset{\sim}{u} \\ & \underset{\sim}{⿷} \end{aligned}$ | Type of hand phone of children | Percent | RSE |
| :---: | :---: | :---: | :---: |
|  | Feature phone | 42.0 | 7.4 |
|  | Smartphone | 57.6 | 5.4 |
|  | Don't know | 0.4** | 99.8 |



| $\begin{aligned} & \stackrel{n}{n} \\ & \underset{\sim}{\infty} \\ & \stackrel{\circledR}{6} \end{aligned}$ | Allow | Percent | RSE |
| :---: | :---: | :---: | :---: |
|  | Yes | 14.4 | 15.4 |
|  | No | 85.6 | 2.6 |


|  | Limi | Percent | RSE |
| :---: | :---: | :---: | :---: |
| $\stackrel{\text { un }}{\sim}$ | Yes | 58.8 | 5.3 |
| 1 | No | 41.2 | 7.6 |


| g Limit the length of child's conversation on the hand phone | Percent | RSE |
| :--- | ---: | ---: | ---: |
| 宸 Yes | 46.8 | 6.7 |
| No | 53.2 | 5.9 |


| ¢ | Take away child's hand phone as a punishment | Percent | RSE |
| :---: | :---: | :---: | :---: |
|  | Yes | 44.8 | 7.0 |
|  | No | 55.2 | 5.7 |


| $\underset{\sim}{-}$ Checking the contents of child's hand phone | Percent | RSE |
| :--- | :--- | ---: | ---: |
| $\underset{\sim}{\sim}$ Yes | 73.2 | 3.8 |
| No | 26.8 | 10.5 |

## MCMC STATISTICAL PUBLICATIONS

POCKET BOOK OF STATISTICS

## STATISTICAL BRIEF

The MCMC publishes the following pocket books:

1. Communications \& Multimedia: Pocket Book of Statistics (ISSN: 2180-4656), a quarterly statistical bulletin of the Communications \& Multimedia industry.
2. Postal \& Courier Services: Pocket Book of Statistics (ISSN: 2231-9913), a half yearly statistical bulletin of the Postal \& Courier industry.

The Statistical Brief series (ISSN: 1823-2523) is issued by the MCMC to disseminate survey findings. These reports are aimed at the general to intermediate user audience.

Please contact the MCMC Statistics Department if you have any queries regarding statistics published by MCMC by emailing statistics@cmc.gov.my


Suruhanjaya Komunikasi dan Multimedia Malaysia Malaysian Communications and Multimedia Commission

MCMC Tower 1, Jalan Impact, Gyber 6, 63000 Cyberiaya, Selangor Darul Ehsan, Malaysia T•+60386888000 F•+60386881000 E•scd@cmc.gov.my W•www.mcmc.gov.my

