CONTENTS

Acknowledgements

From The
Chairman

This is the second issue in the Statistical Briefs series published by the Malaysian Communications and Multimedia Commission (MCMC). Statistical Briefs present main findings of selected primary statistical surveys conducted by the MCMC which are of direct interest to a broad cross section of the Malaysian public.

This issue features the main findings of the Household Use of the Internet Survey 2005 (HUIS 2005).
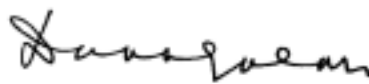
The survey was conducted from 1 May to 24 July 2005 from MCMC's CATI Centre and had a response rate of 76.5 %. In this connection, I would like to commend the Industry Development Division for a job well done.

Apart from the main findings of the HUIS 2005, this issue also presents updates from Hand Phone Users Survey 2004.

A write-up on MCMC's CATI Centre is also included.

I would like to put on record my special thanks to the **Persatuan Industri Komputer dan Multimedia Malaysia** (PIKOM) for supporting the survey. Thanks are also due to PIKOM members, **Intel Electronics (M) Sdn Bhd** and **Az-Technology Sdn Bhd** for generously sponsoring the grand prize and subsidiary prizes respectively in the contest that was organised to spur the response rate of the survey.

Last but not least my thanks also to those who responded and without whom this survey would not have been possible.

Dato' V. Danapalan

Introduction

The Household Use of the Internet Survey, 2005 is the first ever purpose-built survey conducted by the Malaysian Communications and Multimedia Commission. The overriding objective was to address user side data gaps on core attributes and current trends on the use of Internet in Malaysian homes.

In this report, proportions of the home subscriber base that fell into the various categorisation schemes of the key variables are presented and proper use of these estimated proportions in conjunction with population estimates at reference date will facilitate the derivation of various Internet penetration rates in private households.

This report presents:

Demographics and socio-economics of the home Internet user such as

- age
- gender
- marital status
- urban / rural distribution
- occupational status
- income

as well as other aspects of the user and the
household of which he is a member such as:

- the length of time in years that internet access had been available at home
- type of access
- mode of payment
- intention to migrate to broadband and when, or otherwise with reasons (for those with dialup only)
- average use per week
- usual time to log on to the Internet
- purpose for use of the Internet
- purchases through the Internet
- type of products or services purchased through the Internet and amount spent in the past 3 months

- number of Internet users at home
- number of PCs owned by members of household, including laptops and notebooks but excluding PDAs
- purchase of PC in the immediate past year to replace an old/obsolete one
- age of PC that was replaced
- concern about security on the Internet
- who in the household pays for access
- whether access to Internet is made elsewhere too and where

Reference Date

The reference date of the survey was set at 31 March 2005. To qualify for inclusion into the sample, a potential respondent must be able to answer "yes" to a screening question on whether he was a user at reference date.

Target population

The target population is the universe of Internet users regardless of age who accessed the Internet from a dialup or xDSL from their own homes at least once in the past month.

Users of wireless access are excluded from this survey.

Methodology

Sampling scheme

This is not a household survey in the conventional sense and the survey was not founded on any household frame.

Two stages were identified in the selection of a respondent.

In the first stage, unique randomly generated PSTN numbers were dialed to screen out non-active and business numbers. When a household is reached, it is screened to see if it is Internet equipped regardless of mode of access at reference date. If it is, then a user from that household is selected at random. This is done by asking to speak to the Internet user in that household who has the next birthday.

Sample size

With a predetermined a = 0.01 and d= 0.02 a sample of 4,925 Internet users in private households were drawn to provide national estimates.

At the same time, 2005 non-user households were also interviewed as to why they were do not have Internet access at home.

Stratification was not possible because of the absence of an ideal variate for stratification. Hence the survey opted for simple random sampling.

Data collection

The survey was conducted on a hybrid CATI / web platform.

CATI was used to contact sample members regardless of whether they have Internet access at home or not. Those contacted but had no Internet access at home at reference date fell into the non-user sample while those with Internet access at home at reference date fell into the user sample.

MCMC CATI Centre Fieldwork is closely supervised

Non-users were interviewed immediately through a CATI module while users were given the option to log into a website to do a longer questionnaire or to 'do it now' in CATI.

In both cases, the purpose of the surveys were explained to respondents.

In order to garner a credible response rate in the user sample, the Association of the Computer and Multimedia Industry of Malaysia (PIKOM), which had many times in the past collaborated with the MCMC, sponsored a web based contest for those who participated in the user survey. The grand prize, courtesy of the Intel Electronic (Malaysia) Sdn Bhd was a PC while subsidiary prizes courtesy of Az-Technology Sdn Bhd were ADSL and dialup modems.

Happy, cheerful interviewers get better responses

Fieldwork started 1 May 2005 and ended on 24 July 2005

Response rate to the survey was 76.47 %.

Main
Findings

The survey found that of the total number of home users, 50.2 percent were males while 49.8 percent were females. As at reference date percentage of males in the Malaysian population was 51 and females 49. From this it can be inferred that in Malaysia, insofar as access to the Internet at home is concerned, there is no gender divide.

Age distribution

From the table below, it can be seen that the user base is characteristic by its youthfulness. The '15-19' age group has the highest number of users accounting for 18.6 percent of all Internet users in private households. Within this age group are those in the upper secondary schools. The second largest group of users is the '20 – 24' age group with 17.2 percent of all users. These 2 age groups, in combination with the 'Below 15' category are the youngest age groups and they already accounted for 42.3 percent of all users.

Age category	Percentage
Below 15	6.5 %
15 - 19	18.6 %
20 - 24	17.2%
25 - 29	12.5 %
30 - 34	12.2%
35 - 39	9.9 %
40 - 44	9.6 %
45 - 49	5.1 %
Above 50	8.4 %

42.3%

Single largest age group, 15 to 19 years has 18.6%

Education level of users

As many as 36.5 percent of home users are students at all levels with 63.8 percent already out of school/education system. Of those still in school, almost as many were in secondary school (46.8 percent) as in college/university (45.2 percent). 8 percent of users were in the primary schools.

Among those already out of the school/education system, 35.4 percent had a first degree or higher while 25.4 percent had diplomas and 37.7 percent had secondary education.

Marital Status

As many as 55.0 percent of Internet users are single while 44.3 percent are married with 0.7 percent divorced or widowed.

Urban-Rural

The distribution of users according to the urban-rural dichotomy is work in progress.

Employment Status

Most of the users are either employed (37.7 percent) or are students (36.5 percent). The remainder consists of Employers (5.0 percent), Self-employed (8.8 percent) and Unemployed (12.0 percent).

Age of Internet account

As many as 14.9 percent of the user base were new entries of less than a year ago. In contrast, 30.9 percent have been on the web from 1 to 3 years. 20.8 percent reported 3 – 5 years while 33.3 percent of users have been at it for at least 5 years.

Intensity of Usage

On a per week basis, 43.0 percent of users surf the Internet for less than 4 hours while 24.9 percent surf between 4 to 8 hours, 14.2 percent surf 8 to 15 hours, 5.7 percent between 15 to 22 hours, 3.5 percent 22 to 28 hours and 8.9 percent in excess of 28 hours.

On a weighted average basis, Malaysian surfers tend to surf 9 hours only per week.

Logon Time and Main Use of the Internet

70.2 percent of Malaysian users logon at night.

The five most popular activities while on the Net are e-mail (73.7 percent), education/research (46.8 percent), finding information about goods and services (40.5 percent), participation in chat rooms (25.9 percent) and reading online newspapers (20.2 percent).

Purchases through the Internet

Only 9.3 percent of Internet users purchased products or services through the Internet during the past 3 months.

Among those who did so, airline tickets were the most popular items (43.8 percent) followed by books (15.6 percent) and music (6.8 percent).

Amounts spent on these items were small with 57.7 percent spending less than RM500.00, 20.7 percent between RM500.00 to RM1,000.00 and 6.8 percent between RM1,000.00 and RM1,500.00.

Security Concerns

74.2 percent of internet users expressed varying degrees of concern about security while on the Net. This included concerns like identity thefts, spam, viruses, worms and trojans.

25.7 percent expressed no concern at all.

Access from other places

More than half of home Internet users also access the Internet away from home. Among these, more than half, reportedly access the Internet from work while a third access the Internet from libraries and cybercafés and a quarter from schools/universities.

Profiling the user

From the findings of the survey the average Internet users in private households in Malaysia may be profiled as follows:

The average Malaysian Internet user who logs on at home is young and just as likely to be male or female.

He is likely single and has at least some secondary schooling and maybe even a diploma under his belt. He typically comes from a family of 5, is employed and makes anything from RM1,000 to RM3,000 per month.

On his own account, he logs on to the Internet mainly via dialup which he shares with at least another family member. He spends on average up to 9 hours per week on the Internet at home, usually at night.

His main reason for going on the net is to check for e-mails although he does engage in some educational and research work as well as finding information about goods and services. If at all he purchased anything online, it would be air tickets and an occasional book. He is not a big spender and spends less than RM500.00 most of the time.

He is generally concerned about security on the Internet.

Tables

Caution is required in the use of the estimates tabulated below.

Whilst 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 percent or less are considered reliable for general use. Estimates with RSEs greater than 25% but less than or equal to 50 percent are denoted with an asterisk in these tables and should be used with caution while those with RSEs greater than 50 percent 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 percent 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 100.0 percent because of rounding.

Table 1
Distribution of household users of the Internet by gender

	Percent
Male	50.2
Female	49.8

Table 2

Distribution of household users of the Internet by age category

	Percent
Below 15	6.5
15 - 19	18.6
20 - 24	17.2
25 - 29	12.5
30 - 34	12.2
35 - 39	9.9
40 - 44	9.6
45 - 49	5.1
Above 50	8.4

Table 3

Distribution of household users of the Internet by schooling status⬥

	Percent
Primary school	8.0
Secondary school	46.8
College/University	45.2

⬥Among those still schooling.

Table 4

Distribution of household users of the Internet by educational attainment⬥

	Percent
None	*0.1
Primary	1.4
Secondary	37.7
Diploma	25.4
Degree and higher	35.4

⬥Among those no longer schooling

Table 5

Distribution of household users of the Internet by size of household

	Percent
1	1.4
2	5.5
3	11.8
4	20.0
5	25.5
6	17.1
7	8.8
8	5.8
9	1.8
10	1.2
More than 10	1.1

Table 6

Distribution of household users of the Internet by marital status

	Percent
Single	55.0
Married	44.3
Divorced/ widowed	0.7

Table 7

Distribution of household users of the Internet by employment status

	Percent
Employer	5.0
Employed	37.7
Self Employed	8.8
Unemployed	12.0
Student	36.5

Table 8

Distribution of household users of the Internet by number of years of Internet use

	Percent
Less than 1 year	14.9
1 year but less than 3 years	30.9
3 years but less than 5 years	20.8
5 years and above	33.3

Table 9

Distribution of household users of the Internet by intention to migrate to Broadband

	Percent
Yes	18.6
No	81.4

Table 10

Distribution of household users of the Internet by timeline for migration to Broadband❖

	Percent
In 3 months times	31.5
In 6 months times	14.3
In 9 months times	4.0
In 12 months times and above	50.2

❖*Among those wanting to migrate to broadband*

Table 11

Distribution of household users of the Internet by reason for not wanting to migrate to Broadband❖

	Percent
Cost too high	14.1
Not aware of broadband	23.0
No broadband coverage	6.2
Do not see the need for broadband/satisfy with dial-up	56.5
Others	*0.2

❖*Among those not wanting to migrate to broadband*

Table 12

Distribution of household users of the Internet by average hours of use a week

	Percent
Less than 4 hours	43.0
4 but less than 8 hours	24.9
8 but less than 15 hours	14.2
15 but less than 22 hours	5.7
22 but less than 28 hours	3.5
28 hours/week and above	8.9

Table 13

Distribution of household users of the Internet by log on time

	Percent
Morning (8.00am – 11.59am)	7.5
Afternoon (12.00pm – 7.59pm)	14.2
Night (8.00pm – 11.59pm)	70.2
Midnight and beyond (12.00am – 7.59am)	8.0

Table 14

Distribution of household users of the Internet by activity on the Internet❖

	Percent
E-mail	73.7
Chat rooms	25.9
Finding information about goods and services	40.5
Getting information from/interacting with government	12.7
Reading/downloading online newspapers /news/ magazines	20.2
Playing/downloading games, music, software	19.9
Other entertainment/pleasure	7.0
Online banking/financial activities	12.2
Purchasing/ordering goods or services	2.4
Educations/research activities	46.8
Others	1.3

❖Multiple response

Table 15

Distribution of household users of the Internet by incidence of purchase via Internet

	Percent
Yes	9.3
No	90.7

Table 16

Distribution of household users of the Internet by type of products or services purchased via Internet❖

	Percent
Airline tickets	43.8
Apparel	*1.1
Accessories	4.3
Books	15.6
Electronics	6.8
Jewelry	**0.6
Music	6.8
Stationery	*1.1
Telecommunications	6.3
Toys/games	*2.6
Tour packages	*3.7
Others	32.7

❖Multiple response

Table 17

Distribution of household users of the Internet by value of purchases via Internet

	Percent
Less than RM500	57.7
RM500 but less than RM1,000	20.7
RM1,000 but less than RM1,500	6.8
RM1,500 but less than RM2,000	4.5
RM2,000 but less than RM2,500	*2.3
RM2,500 but less than RM3,000	*2.0
Rm3,000 but less than RM3,500	*2.0
RM3,500 but less than RM4,000	**0.6
RM4,000 but less than RM4,500	**0.6
RM4,500 but less than RM5,000	**0.6
RM5,000 and above	*2.3

Table 18

Distribution of household users of the Internet by number of users in household

	Percent
1	24.2
2	34.2
3	22.8
4	11.4
5	4.5
6	1.7
7	0.7
More than 7	0.3

Table 19

Distribution of household users of the Internet by number of personal computers in the household

	Percent
1	62.8
2	26.0
3	7.8
4	2.3
5	0.5
More than 5	0.6

Table 20

Distribution of household users of the Internet by age of personal computers replaced

	Percent
1 year	10.6
2 years	11.1
3 years	21.3
4 years	14.0
5 years	11.9
More than 5 years	31.1

Table 21
Distribution of household users of the Internet by security concern

	Percent
Not at all concerned	25.7
A little concerned	24.5
Somewhat concerned	20.4
Very concerned	29.3

Table 22
Distribution of household users of the Internet by payer for Internet access

	Percent
Self	45.2
Spouse	11.3
Parents	35.9
Children	1.6
Sister/Brother	3.2
Others	2.8

Table 23
Distribution of household users of the Internet by access at other places❖

	Percent
Work	51.5
School/University	25.4
Public (library, cybercafe, etc)	33.0
Others	3.1

❖Multiple response

Table 24
Distribution of household users of the Internet by monthly income category

	Percent
No income	43.9
Less than RM1,000	7.9
RM1,000 but less than RM3,000	30.5
RM3,000 but less than RM5,000	11.1
RM5,000 and above	6.6

RSE

Tables

Table 1
Distribution of household users of the Internet by gender

	RSE
Male	1.6
Female	1.6

Table 2
Distribution of household users of the Internet by age category

	RSE
Below 15	6.2
15 - 19	3.4
20 - 24	3.6
25 - 29	4.3
30 - 34	4.4
35 - 39	4.9
40 - 44	5.0
45 - 49	7.0
Above 50	5.4

Table 3
Distribution of household users of the Internet by schooling status❖

	RSE
Primary school	9.2
Secondary school	2.9
College/University	3.0

❖*Among those still schooling*

Table 4

Distribution of household users of the Internet by educational attainment◆

	RSE
None	57.7
Primary	17.0
Secondary	2.6
Diploma	3.5
Degree and higher	2.8

◆*Among those no longer schooling*

Table 5

Distribution of household users of the Internet by size of household

	RSE
1	13.8
2	6.8
3	4.5
4	3.3
5	2.8
6	3.6
7	5.2
8	6.5
9	12.2
10	14.7
More than 10	15.2

Table 6

Distribution of household users of the Internet by marital status

	RSE
Single	1.5
Married	1.8

Table 7

Distribution of household users of the Internet by employment status

	RSE
Employer	6.9
Employed	2.0
Self Employed	5.2
Unemployed	4.4
Student	2.2

Table 8

Distribution of household users of the Internet by number of years of Internet use

	RSE
Less than 1 year	3.9
1 year but less than 3 years	2.4
3 years but less than 5 years	3.2
5 years and above	2.3

Table 9

Distribution of household users of the Internet by intention to migrate to Broadband

	RSE
Yes	4.0
No	0.9

Table 10

Distribution of household users of the Internet by timeline for migration to Broadband❖

	RSE
In 3 months times	6.6
In 6 months times	10.9
In 9 months times	21.9
In 12 months times and above	4.4

❖Among those wanting to migrate to broadband

Table 11

Distribution of household users of the Internet by reason for not wanting to migrate to Broadband✧

	RSE
Cost too high	5.3
Not aware of broadband	3.9
No broadband coverage	8.3
Do not see the need for broadband/satisfy with dial-up	1.9
Others	50.0

✧Among those not wanting to migrate to broadband

Table 12

Distribution of household users of the Internet by average hours of use a week

	RSE
Less than 4 hours	1.9
4 but less than 8 hours	2.8
8 but less than 15 hours	4.0
15 but less than 22 hours	6.7
22 but less than 28 hours	8.6
28 hours/week and above	5.2

Table 13

Distribution of household users of the Internet by log on time.

	RSE
Morning (8.00am – 11.59am)	5.7
Afternoon (12.00pm – 7.59pm)	4.0
Night (8.00pm – 11.59pm)	1.1
Midnight and beyond (12.00am – 7.59am)	5.5

Table 14

Distribution of household users of the Internet by activity on the Internet⬥

	RSE
E-mail	1.0
Chat rooms	2.8
Finding information about goods and services	2.0
Getting information from/interacting with government	4.3
Reading/downloading online newspapers / news/ magazines	3.2
Playing/downloading games, music, software	3.3
Other entertainment/pleasure	6.0
Online banking/financial activities	4.4
Purchasing/ordering goods or services	10.4
Educations/research activities	1.7
Others	14.2

⬥*Multiple response*

Table 15

Distribution of household users of the Internet by incidence of purchase via Internet

	RSE
Yes	5.1
No	0.5

Table 16

Distribution of household users of the Internet by type of products or services purchased via Internet⬥

	RSE
Airline tickets	6.0
Apparel	49.7
Accessories	24.4
Books	12.4
Electronics	19.7
Jewelry	70.5
Music	19.7
Stationery	49.7
Telecommunications	20.2
Toys/games	32.9
Tour packages	27.2
Others	7.7

⬥*Multiple response*

Table 17

Distribution of household users of the Internet by value of purchases via Internet

	RSE
Less than RM500	4.6
RM500 but less than RM1,000	10.4
RM1,000 but less than RM1,500	19.7
RM1,500 but less than RM2,000	24.4
RM2,000 but less than RM2,500	35.0
RM2,500 but less than RM3,000	37.4
Rm3,000 but less than RM3,500	37.4
RM3,500 but less than RM4,000	70.5
RM4,000 but less than RM4,500	70.5
RM4,500 but less than RM5,000	70.5
RM5,000 and above	35.0

Table 18

Distribution of household users of the Internet by number of users in household.

	RSE
1	2.9
2	2.3
3	3.0
4	4.5
5	7.4
6	12.3
7	18.5
More than 7	28.8

Table 19

Distribution of household users of the Internet by number of personal computers in the household

	RSE
1	1.3
2	2.7
3	5.6
4	10.6
5	24.2
More than 5	20.3

Table 20
Distribution of household users of the Internet by age of personal computers replaced

	RSE
1 year	10.9
2 years	10.7
3 years	7.2
4 years	9.3
5 years	10.2
More than 5 years	5.6

Table 21
Distribution of household users of the Internet by security concern

	RSE
Not at all concerned	2.8
A little concerned	2.9
Somewhat concerned	3.2
Very concerned	2.5

Table 22
Distribution of household users of the Internet by payer for Internet access

	RSE
Self	1.8
Spouse	4.6
Parents	2.2
Children	12.6
Sister/Brother	9.0
Others	9.5

Table 23

Distribution of household users of the Internet by access at other places❖

	RSE
Work	2.1
School/University	3.8
Public (library, cybercafe, etc)	3.2
Others	12.4

❖*Multiple response*

Table 24

Distribution of household users of the Internet by monthly income category

	RSE
No income	1.9
Less than RM1,000	5.6
RM1,000 but less than RM3,000	2.5
RM3,000 but less than RM5,000	4.6
RM5,000 and above	6.2

Glossary

|	
Age	Age referred to age as at last birthday.
Broadband	For the purpose of this survey, broadband is defined as access by xDSL only.
Educational attainment	Except in the case of diplomas and degrees, foreign qualifications were classified according to number of years of schooling received. The operational equivalents are as follows: • 6 years or less – primary • 7 to 13 years – secondary
Home Internet user	Defined as a person of any age who access the Internet at least once in the last month from home.
Household	A household is a group of persons sharing common eating and living arrangements and may or may not be related. E.g. If a live-in maid eats together with the household, she is considered a member of your household.
Personal computer	Including notebook/laptop computers, but not including electronic organizers and PDAs.

Updates From The
Hand Phone Users Survey 2004

Percentage distribution of Hand Phone subscribers by urban-rural sector

The survey showed that the urban sector accounted for 81.9 percent of the total subscriber base while the rural sector accounted for the remaining 18.1 percent.

Percentage distribution of Hand Phone subscribers by urban-rural sector

Rural,
18.1%

Urban,
81.9%
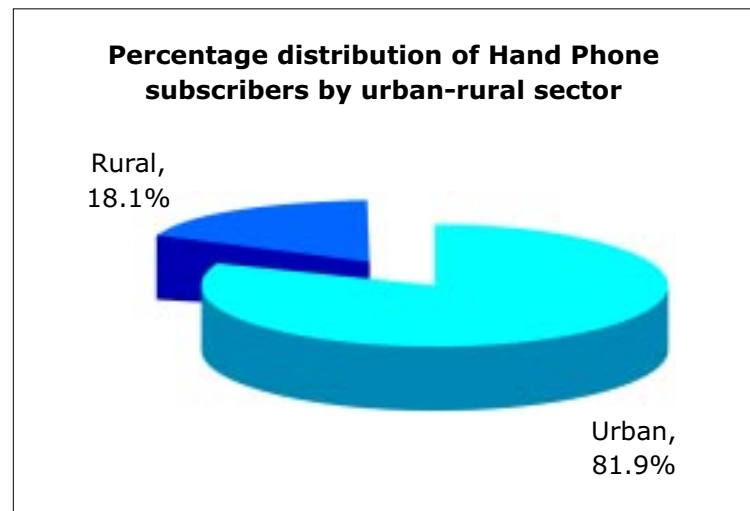
Percentage distribution of Hand Phone subscribers by employment status

The survey also showed that 65.6 percent of users were those in the employed category, while those who were self employed took up 13.2 percent. Meanwhile, students accounted for 9.9 percent whereas the out-of-school unemployed took up 11.3 percent of the total subscriber base.

	Percent
Employed	65.6
Self Employed	13.2
Unemployed	11.3
Student	9.9

The
MCMC CATI Centre

Introduction

At the heart of any statistical survey is the data collection stage. This stage is the most critical stage in any survey as no amount of statistical technique can make good the lack of quality in data. The MCMC takes every reasonable step to ensure that only quality data enters its statistical system.

There are a number of ways of getting the data that is required in any survey.

First, there is the observation method where the data collector observes the occurrence or non-occurrence of an event. Examples include traffic, shopper behaviour etc where the subject is observed from afar.

Second, some surveys attempt to fathom non-observable characteristics such as opinions, preferences, educational attainment, monthly income etc. Such surveys require interaction with the subject. Typically the selected subject is approached and his or her cooperation sought to give the required data. This may be done in a number of ways among them, face-to-face, telephone, mail, e-mail and web. Each of these has their weaknesses and strengths. Subjects are often more cooperative if assurances of confidentiality are given.

Before the use of computers gained popularity, telephone interviews were conducted by an interviewer calling a selected number and asking questions from a printed questionnaire and recording the results in the questionnaire itself. This necessitated a data capture phase before the results could be cleaned and analysed.

The MCMC CATI Centre

Modern technology has birthed the Computer Assisted Telephone Interviewing system a.k.a. CATI system. It is a system that pulls together the telephone network and a computer network through a software solution that enables the computer to mediate interviews.

Thus random telephone numbers may be generated by the system or alternatively, telephone numbers may be randomly selected and then pumped into the system. The system then distributes these numbers at random to interviewers who sit at booths which are equipped with a PC and a telephone each. **The MCMC has 20 of these booths housed in an installation called the MCMC CATI Centre.**

How It Works

Numbers may be rung by the system or by the interviewers manually. When a contact agrees to an interview, the interviewer asks the questions reading from an on-screen questionnaire and clicks in the precoded answers. Open questions can also be typed into answer boxes in the questionnaire. The answers are then collected back by the CATI system to be stored in a database for subsequent download and analysis. This obviates the need for a data-capture stage.

In order for the interviewing system to work correctly, the survey questionnaire has to be programmed (called "scripting") according to specifications. When correctly scripted, the questionnaire can perform skips, branches and loops based on the answers given by the respondent.

Over and above that, good CATI systems can control fieldwork such as start up surveys and terminate them, generate statistics about the survey itself such as response rates, sample quotas and interviewer performances. It should also be capable of automatic appointment handling as well as allowing supervisors to follow live interviews to ensure data quality.

A schematic of a typical CATI system appears below:

*Courtesy
NIPO Software*
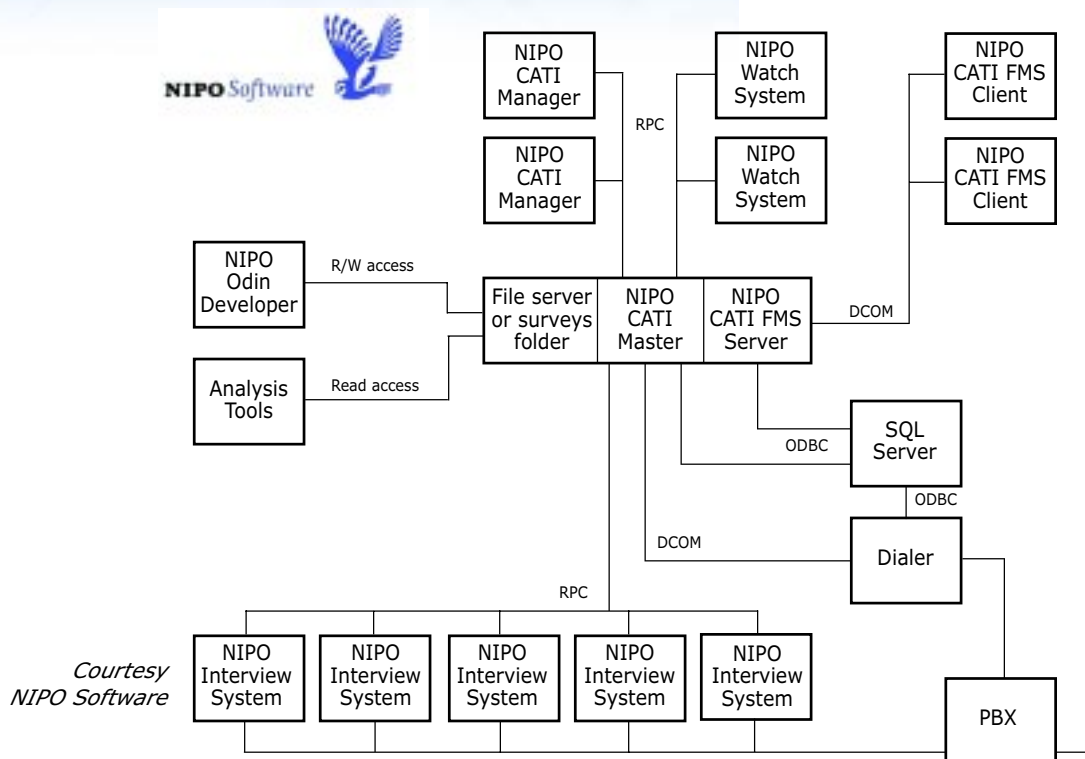
Our Interviewers

Interviewers at MCMC's CATI Centre are handpicked. Most of them have at least the SPM but mature candidates without the SPM are also given an opportunity. Given the nature of the job, the candidate must first come across well on the phone. That is why all candidates for the job are required to enquire by phone. An initial assessment is made. Qualities looked for at this stage include a pleasant voice, good diction, self-confidence and politeness.

Interviewers at MCMC's CATI Centre are properly trained. Prior to the commencement of each survey, the interviewers are provided intensive training on the organisation, subject matter, questionnaire and telephony skills.

• The organisation

The interviewers are briefed on the functions of the MCMC so that they may be able to answer simple

queries from respondents wishing to know more about the organisation. More difficult queries are referred to their supervisors who are statisticians with the MCMC.

- The subject matter

   Interviewers are trained on the subject matter of the survey. For example in the case of a survey on hand phone users, interviewers will be given a roundup of the industry including some basic facts and figures.

- The questionnaire

   The interviewers are taken question by question through the questionnaire and each term used is explained to them so that they can in turn explain to respondents if required.   Our trainers assume zero knowledge in all surveys, even a hand phone users survey although practically all of our interviewers are hand phone users themselves; and should be able to understand the common terms used.

   Skips and branches in the questionnaire and the logic behind these are also explained. Interviewers are expected to familiarize themselves with all questions in particular those that need careful probing and those that needed cross-checking with answers given to earlier questions.

- Telephony skills

   The MCMC uses an in-house training manual for telephone interviewing skills. This manual teaches the do's and don'ts of telephone interviewing including conversational skills and telephone etiquette. It also imparts skills on handling difficult respondents.

Once training in all four areas has been completed, mock runs are conducted to enable the interviewers to familiarize themselves with the CATI system. The performance of the interviewers are reviewed. Those that do not meet MCMC's stringent standards are dropped while those who do are invited to become part time interviewers.

The MCMC maintains a database of all good interviewers and draws from this pool when it launches a survey. Interviewers taken on in this manner may be required to undergo a refresher course to reacquaint themselves with the required basic skills.

FOR MORE STATISTICS

WEBSITE	The MCMC website contains more statistics pertaining to the Communications and Multimedia industry. This is updated every calendar quarter. www.mcmc.gov.my
STATISTICAL BULLETIN	The MCMC publishes *Communications and Multimedia: Selected Facts and Figures,* a quarterly statistical bulletin (ISSN:1675-6223). Contact the MCMC for more details.
STATISTICAL BRIEF	The Statistical Brief (ISSN:1823-2523) and updates are issued by the MCMC to disseminate survey findings. These briefs are aimed at the general to intermediate user audience.

Titles in this series so far:

Statistical Brief Number One
    Hand Phone Users Survey 2004
Statistical Brief Number Two
    Household Use of the Internet Survey 2005 |

THE STATISTICAL TEAM

HEAD STATISTICIANS	Koay Hock Eng
Azilawati Masri
Malini Ramalingam
Ng Wai Mun

CONTACTS

For further information about these and related statistics, contact the following officers:
Koay Hock Eng   : +603 8688 8234
hekoay@cmc.gov.my
Azilawati Masri   : +603 8688 8235
azilawati@cmc.gov.my

ABOUT MCMC

The primary role of the Malaysian Communications and Multimedia Commission is to implement and promote the Government's national policy objectives for the Communications and Multimedia sector set out in the Communications and Multimedia Act 1998 (CMA). The MCMC is also charged with overseeing the new regulatory framework for the converging industries of the telecommunications, broadcasting and online activities, as well as postal services and digital certifications.