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INTRODUCTION

- The Consumer Awareness and Satisfaction Survey ("CASS 07") aims to measure consumers' awareness and usage of, and satisfaction with selected telecom services in Singapore. Consumers were asked for their satisfaction with the quality of telecom services they have used in terms of reliability and availability, variety of services available given the range of products and services currently offered in the market, price competitiveness of the various service offerings by service providers and customer service offered by the service operators.
- The CASS is a biennial survey, and the CASS 07 is the third one that IDA has conducted since full liberalisation of the Singapore telecommunication market in year 2000. Comparisons with the previous survey findings in 2005 are provided in this report where available and appropriate.
- The scope of telecom services surveyed includes: (a) Fixed Line Telephone Service; (b) Mobile Telephone Service (including International Roaming, 3G and Premium Rate services); (c) Broadband Internet Service (including Voice over Internet Protocol service); (d) Bundled Services; (e) Payphone Service; (f) Service 100 Directory Enquiry Service; and (g) Printed Directories Service.

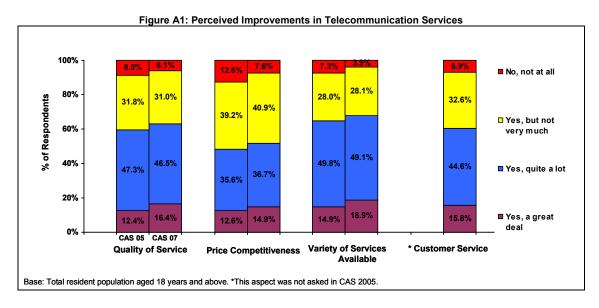
SURVEY METHODOLOGY

- In total, 1,500 individuals were interviewed between 3 December 2007 and 11 March 2008. The selection of the 1,500 individuals was conducted using a two-stage stratified design: (a) A sample of 1,500 households was selected from the Household Sampling Frame maintained by the Department of Statistics; and (b) From these sampled households, an individual was randomly selected for the survey.
- To be eligible for the survey, the individual must be a Singapore Citizen or Singapore PR aged 18 years and above.

SURVEY FINDINGS

A PERCEIVED IMPROVEMENTS IN TELECOMMUNICATION SERVICES

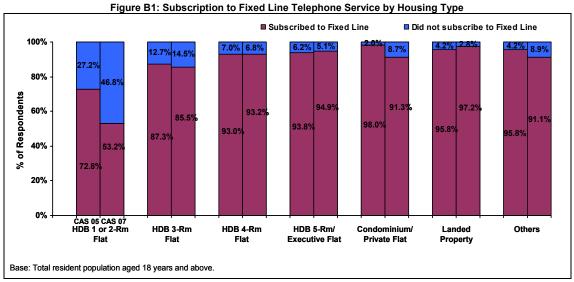
Compared to 2005, there was a general improvement in consumers' perception of telecom services, across all the aspects measured, since full liberalisation of the Singapore telecommunication market in year 2000 (**Figure A1**).



B FIXED LINE TELEPHONE SERVICE

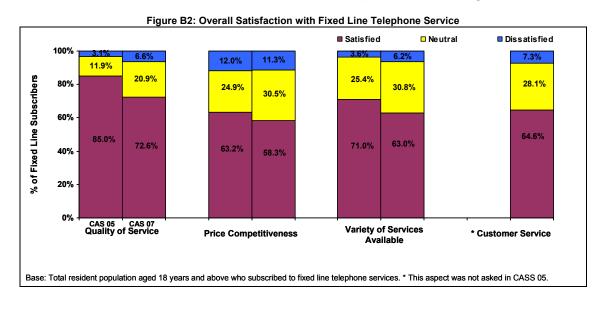
Subscription to Fixed Line Telephone Service

In general, there was a decrease in the subscription to fixed line telephone service across most housing types since 2005. However, this was most apparent among those who stayed in HDB 1 or 2-Rm Flats. **Figure B1** shows the breakdown of the subscription by housing type.



Satisfaction with Fixed Line Telephone Service

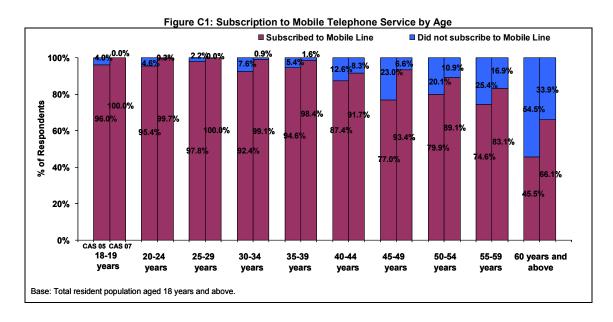
Respondents whose households subscribed to fixed line telephone service remained generally satisfied with the quality of service, variety of services, price competitiveness and quality of customer service experienced; however, satisfaction levels have decreased slightly since 2005. The breakdown of overall satisfaction across the four measured aspects is shown in **Figure B2**.

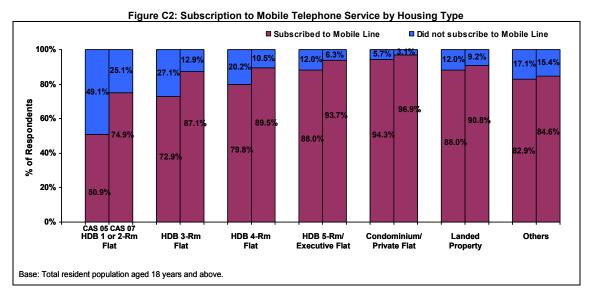


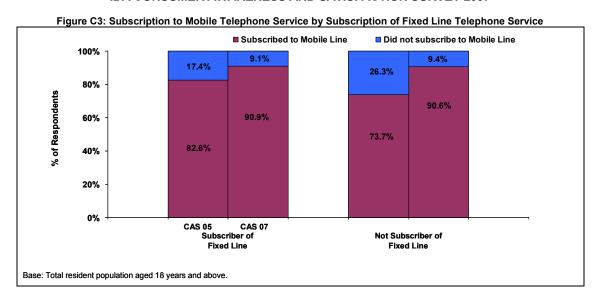
C MOBILE TELEPHONE SERVICE

Subscription to Mobile Telephone Service

Subscription to mobile telephone service has generally increased since 2005. **Figure C1** and **Figure C2** provides a breakdown by age and housing type of mobile phone subscribers respectively, while **Figure C3** shows the breakdown by fixed telephone service subscription. As illustrated by **Figure C3**, there was a larger increase in mobile telephone subscription amongst non-fixed line subscribers than fixed line subscribers.

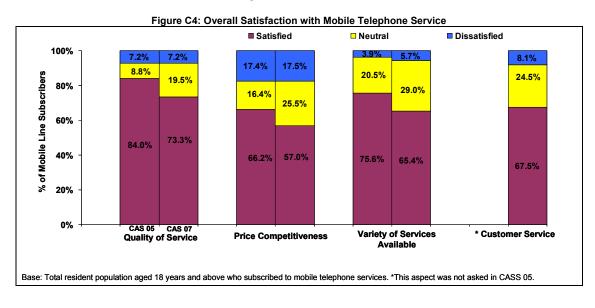






Satisfaction with Mobile Telephone Service

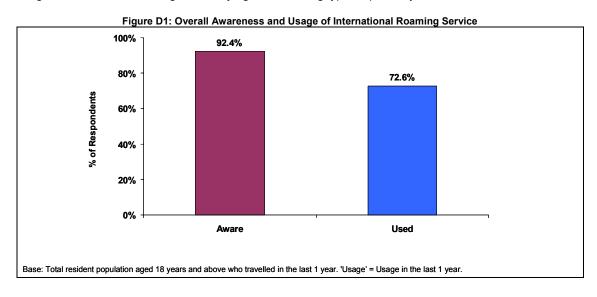
Subscribers of mobile telephone service were generally satisfied with the quality of service, variety of services available, price competitiveness and quality of customer service, although slight decreases in satisfaction level from 2005 were seen (**Figure C4**).

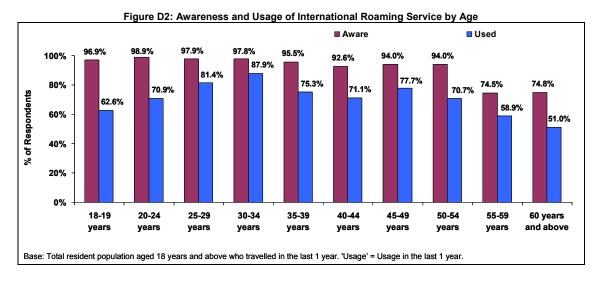


D INTERNATIONAL ROAMING SERVICE

Awareness and Usage of International Roaming Service

Awareness and usage of international roaming service were relatively high among those who traveled overseas within the past year, as shown in **Figure D1**. **Figure D2** and **Figure D3** provide the breakdown of usage of international roaming service by age and housing type respectively.



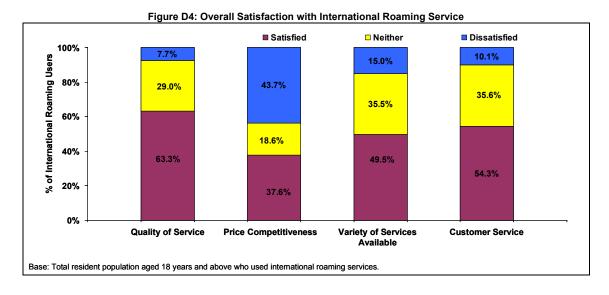


Used Aware 100.0% 100.0% 96.2% 100% 94.2% 89.5% 87.6% 86.5% 77.4% 78.0% 80% 72.0% % of Respondents 65.8% 63.7% 60% 45.3% 40% 20% 0% HDB 1-2-Rm Flat HDB 3-Rm Flat HDB 4-Rm Flat HDB 5-Rm or Condominiums or Landed Property Others **Executive Flat** Private Flat Base: Total resident population aged 18 years and above who travelled in the last 1 year. 'Usage' = Usage in the last 1 year.

Figure D3: Awareness and Usage of International Roaming Service by Housing Type

Satisfaction with International Roaming Service

Generally, users were satisfied across the four measured aspects in relation to international roaming service (**Figure D4**).



Awareness of International Roaming Charges by Overseas Telecom Service Providers

More than 80% of those who used international roaming service in the last year were aware of the ability to select their overseas telecom service providers for international roaming; of these, slightly more than half were aware of the international roaming charges offered by different overseas telecom service providers (**Figure D5**).

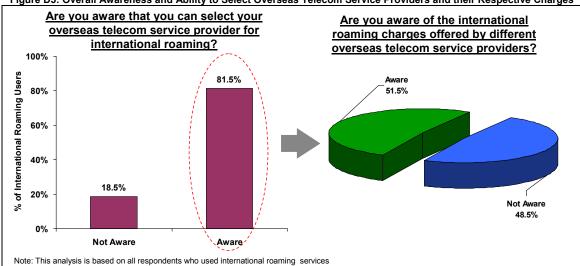
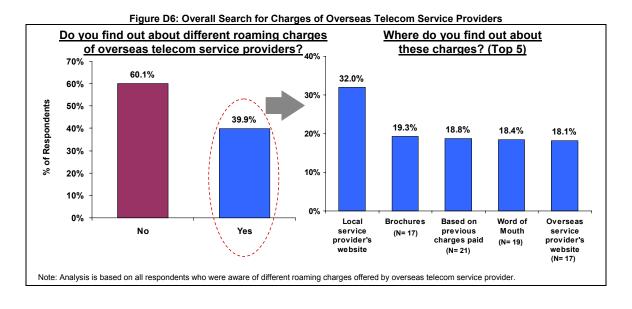


Figure D5: Overall Awareness and Ability to Select Overseas Telecom Service Providers and their Respective Charges

Among those who were aware of the charges offered by different overseas telecom service providers, close to 40% found out about charges before they travel; of this group, most obtained their information from the local service providers' websites (**Figure D6**).

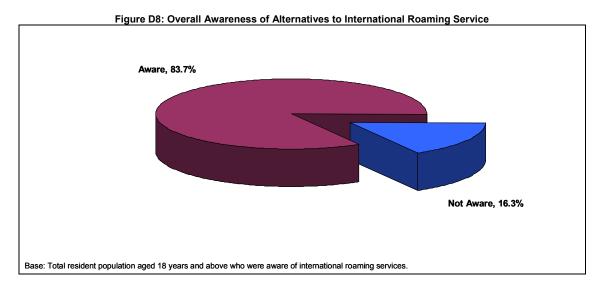


More than 80% of respondents who were aware of the different roaming charges felt that it was easy to find out about the charges (**Figure D7**).

Figure D7: Ease of Finding Out About the Charges of Overseas Telecom Service Providers 60% Easy = 82.9% 50.4% 50% % of Respondents 40% 32.5% 30% Not easy = 5.4% 20% 11.6% 10% 4.2% 1.2% 0% Not easy at all Not easy Neither Easy Very Easy Base: Total resident population aged 18 years and above who were aware of different roaming charges offered by overseas telecom service provider.

Awareness of Alternatives to International Roaming Service

Among those who were aware of international roaming service, more than 8 in 10 respondents knew about other ways to make calls back to Singapore using their mobile phones (**Figure D8**).



Among the alternatives to international roaming service, overseas pre-paid SIM card and international calling card were the highest in converting awareness to usage - for every 2 persons who were aware, 1 had used before (Figure D9).

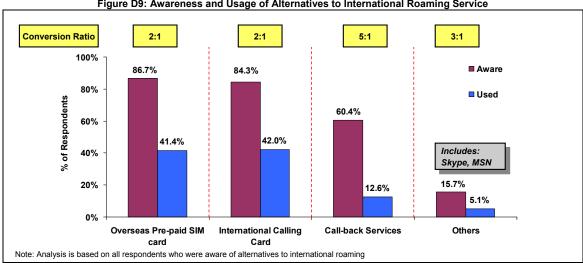
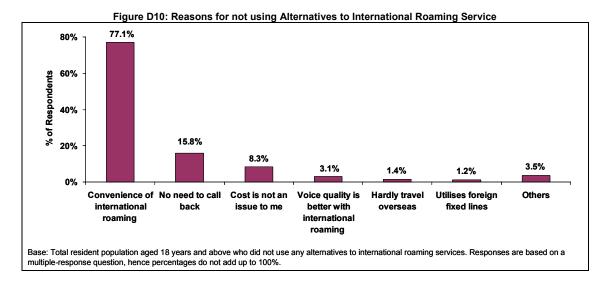


Figure D9: Awareness and Usage of Alternatives to International Roaming Service

Reasons for Not Using Alternatives to International Roaming Service

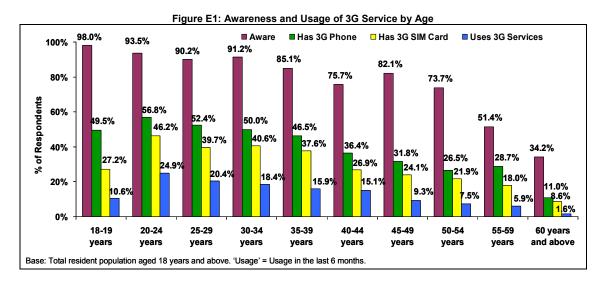
The convenience of using international roaming was cited as the main factor for not using the alternatives (Figure D10).

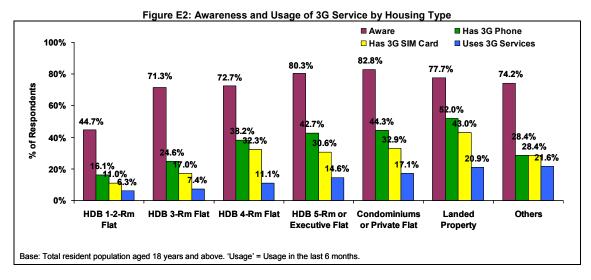


E 3G SERVICE

Awareness and Usage of 3G Service

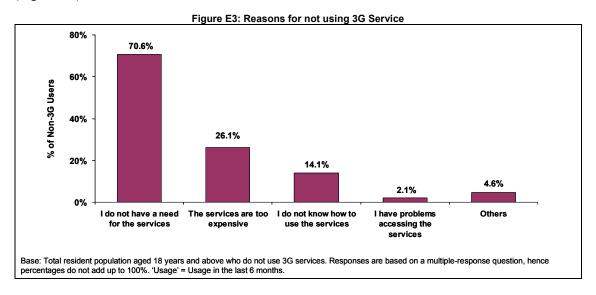
In general, the majority of respondents were aware of 3G service although much fewer had used 3G service within the past 6 months. Breakdown of the awareness and usage of 3G service by age and housing type are shown in **Figure E1** and **Figure E2** respectively.





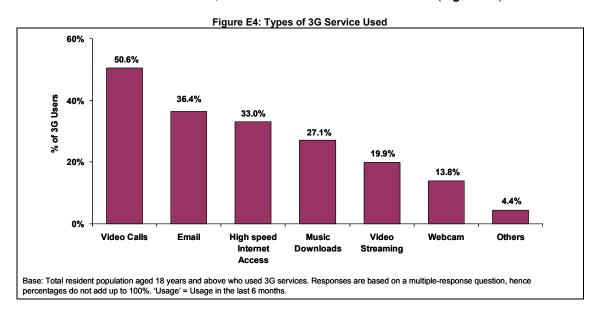
Reasons for Not Using 3G Service

The main reason cited by respondents for not using 3G service was lack of need for the service (Figure E3).



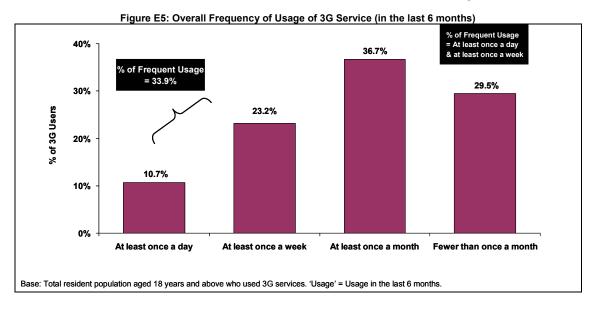
Types of 3G Service Used

For those who had used 3G service, most used it for video calls and emails (Figure E4).



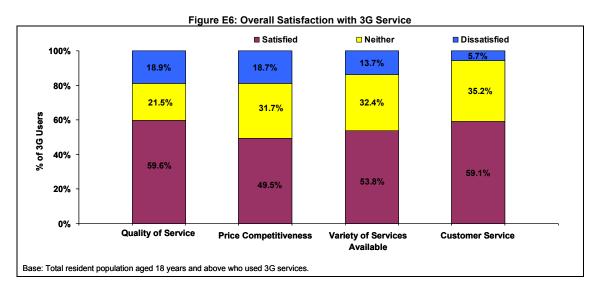
Frequency of Usage of 3G Service

For those who had used 3G service, more than a third used it at least once a week (Figure E5).



Satisfaction with 3G Service

Generally, users were satisfied across the four measured aspects in relation to 3G service (Figure E6).

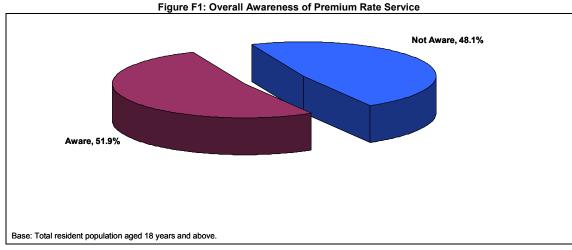


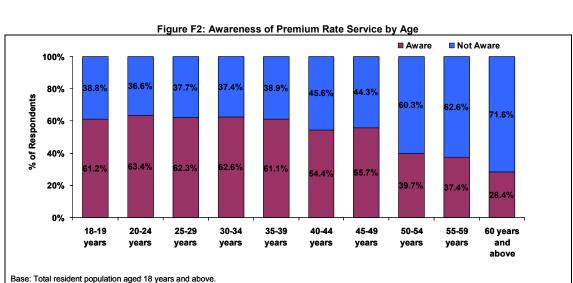
F PREMIUM RATE SERVICE¹

Awareness and Usage of Premium Rate Service

More than half of the respondents were aware of premium rate service (Figure F1). Breakdown of the awareness of premium rate service by age and housing type are shown in Figure F2 and Figure F3 respectively.

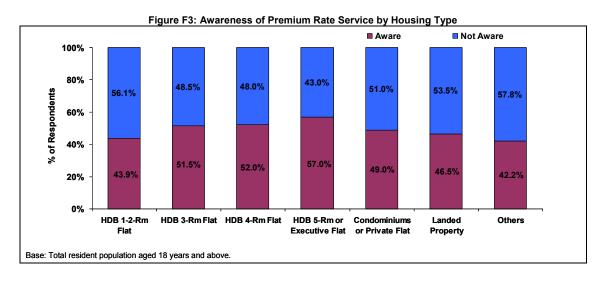
However, only less than 20% of respondents had used premium rate service (**Figure F4**). Breakdown of usage by age and housing type can be found in **Figure F5** and **Figure F6**.

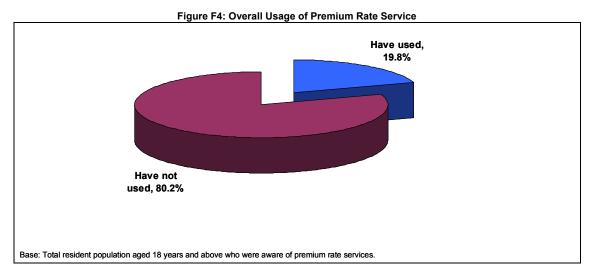


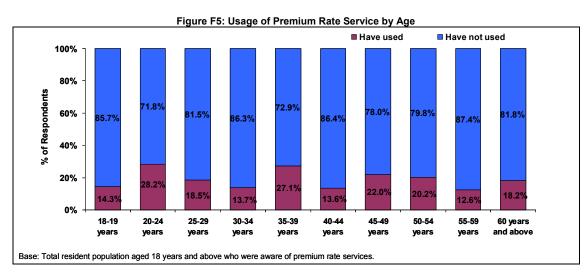


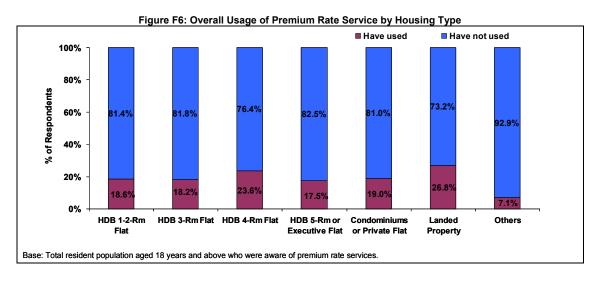
¹ Premium Rate Service refers to a value-added service that allows the mobile subscriber to download wallpapers, ring tones, logos, games, news etc through his/her mobile phone. It also includes chatlines, contest participation, charitable fundraising and votelines.

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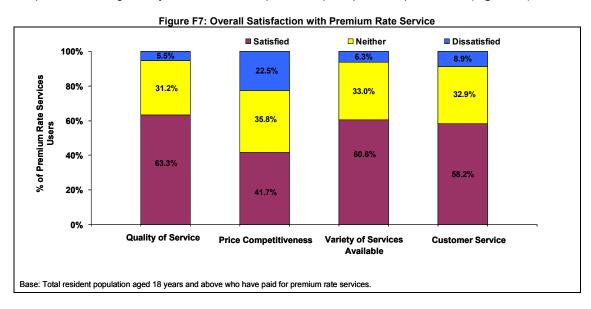






Satisfaction with Premium Rate Service

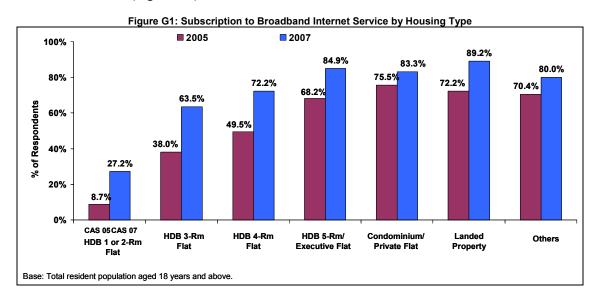
Respondents were generally satisfied with all aspects except for price competitiveness (Figure F7).



G BROADBAND INTERNET SERVICE

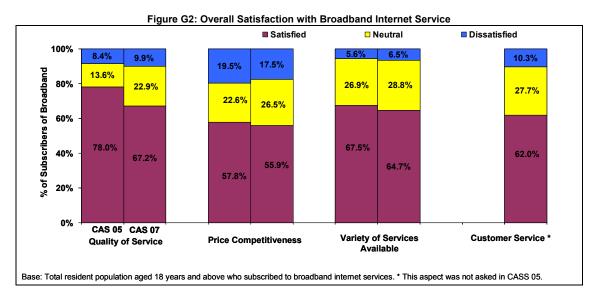
Subscription to Broadband Internet Service

Generally, there was an increase in the number of subscriptions to Broadband Internet service since 2005 across all housing types. The increase was most evident for respondents who stayed in HDB 4-Rm Flats and below (**Figure G1**).



Satisfaction with Broadband Internet Service

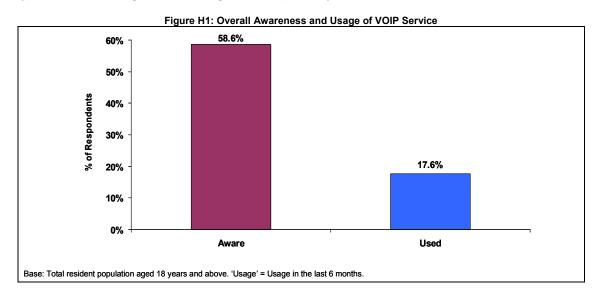
Subscribers of Broadband Internet service were generally satisfied with the quality of service, variety of services available, price competitiveness and quality of customer service, although satisfaction levels were generally lower than in 2005 (**Figure G2**).

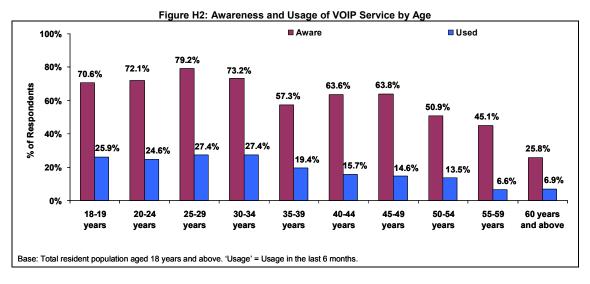


H VOICE OVER INTERNET PROTOCOL (VOIP)²

Awareness and Usage of VOIP Service

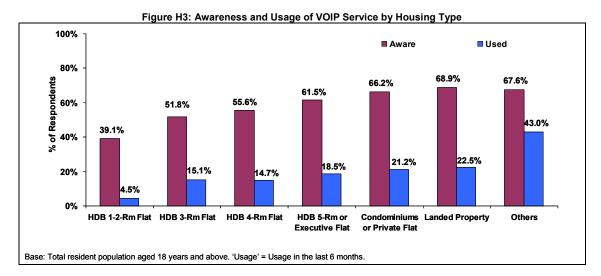
Only slightly more than half of respondents were aware of VOIP service. Usage in the last 6 months stood at only close to 20% (**Figure H1**). Breakdown of awareness and usage by age and housing type are shown in **Figure H2** and **Figure H3** respectively.





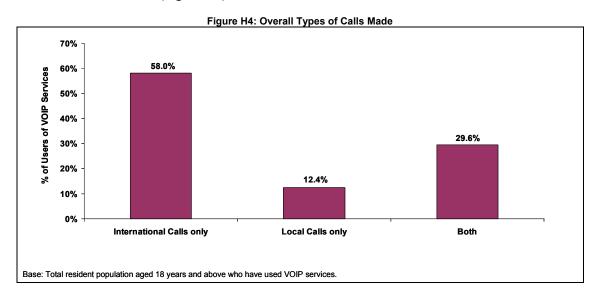
² For this survey, VOIP refers to a service that allows the user to make free or cheaper calls through the Internet on a personal computer. Some examples are Skype, MSN Messenger and Google Talk.

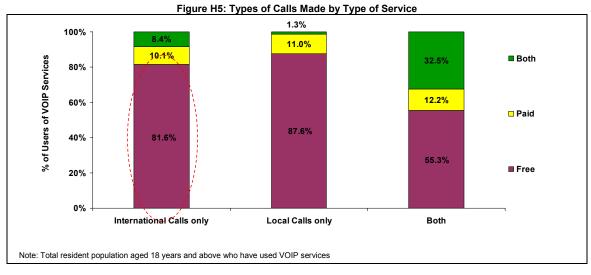
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Types of Calls Made

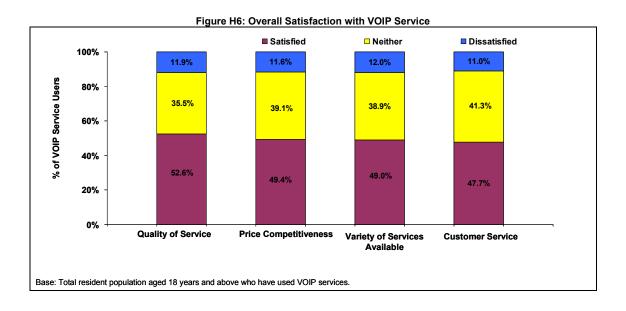
Among users of VOIP service, about 6 in 10 used it to make international calls. Near to one third used it for both local and international calls (**Figure H4**). The majority of those who made international calls used a free VOIP service (**Figure H5**).





Satisfaction with VOIP Service

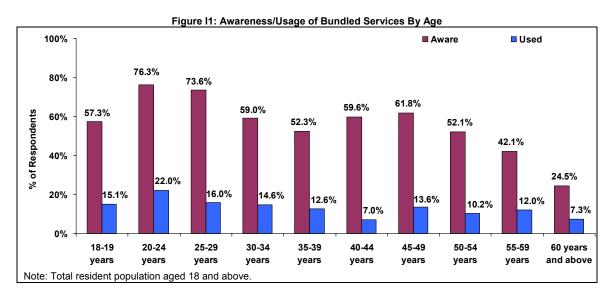
Respondents were generally satisfied with their usage of VOIP service (Figure H6).

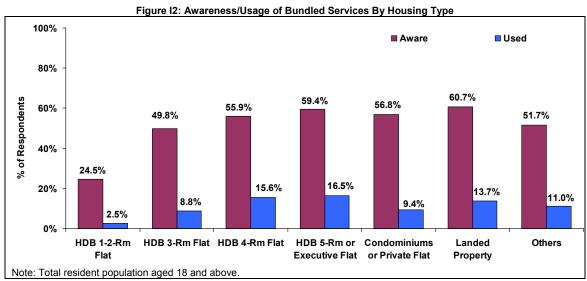


I BUNDLED SERVICES³

Awareness and Usage of Bundled Services

Slightly more than half of respondents were aware of bundled services but fewer have used it. Breakdown of awareness and usage by age and housing type are shown in **Figure I1** and **Figure I2** respectively.

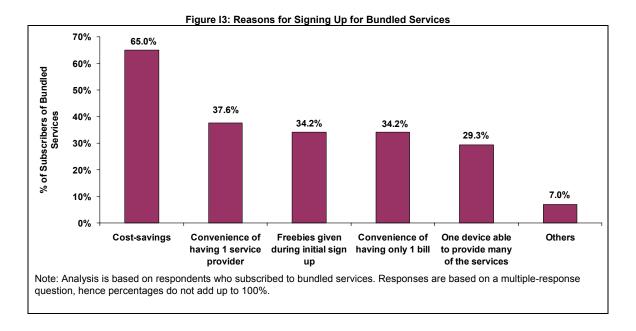




³ For this survey, Bundled Services refer to a package of <u>three or more</u> services provided by one single service provider.

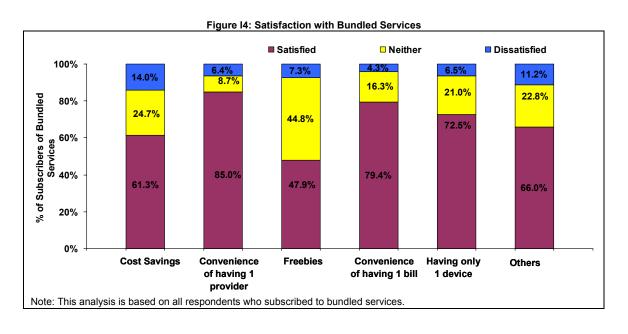
Reasons for Signing Up for Bundled Services

Cost savings was cited as the main reason for subscribing to bundled services (Figure 13).



Satisfaction with Bundled Services

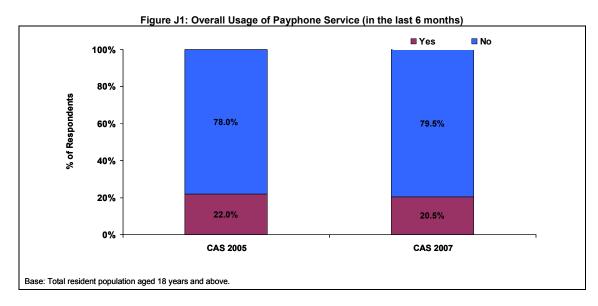
Respondents were generally satisfied with Bundled Services on each of the following aspects (**Figure 14**).

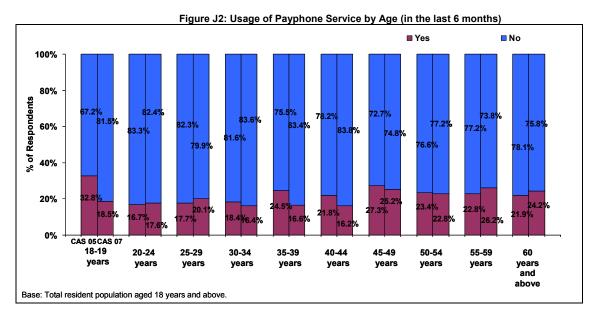


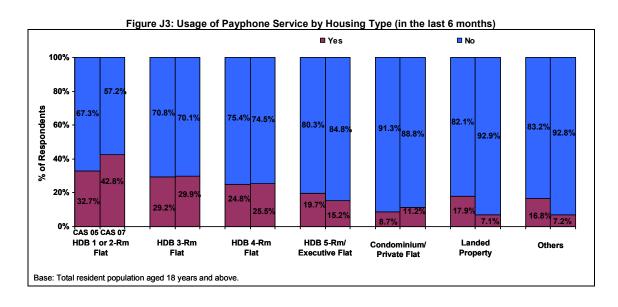
J PAYPHONE SERVICE

Usage of Payphone Service

Usage rate for payphone service decreased further from 2005 - eight out of ten respondents indicated that they did not use a payphone in the last six months (**Figure J1**). Usage by age and housing type can be seen in **Figure J2** and **Figure J3** respectively.

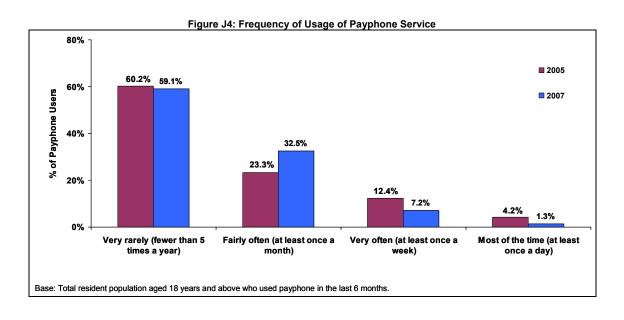


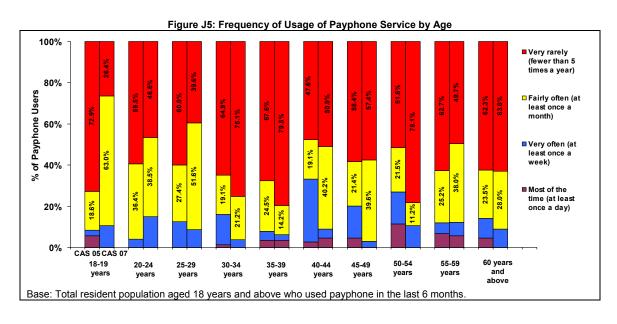


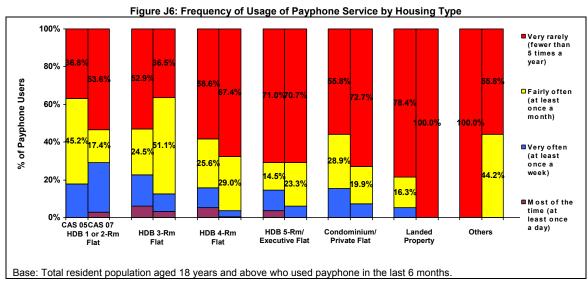


Frequency of Usage of Payphone Service

Frequency of payphone usage was generally low. The percentage of users who use payphone at least once a week has decreased since 2005 (**Figure J4**). Frequency of usage by age and housing type can be seen in **Figure J5** and **Figure J6** respectively.



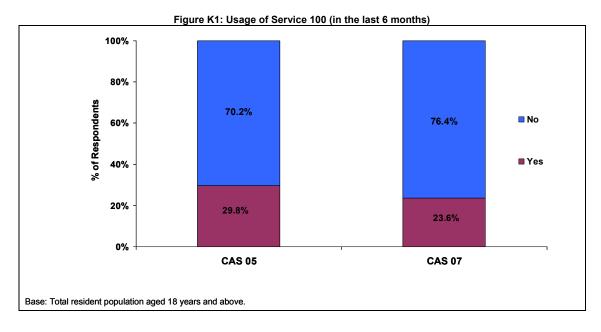


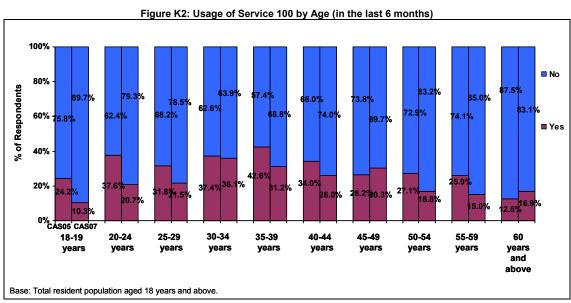


K SERVICE 100⁴ (Directory Enquiry Service)

Usage of Service 100

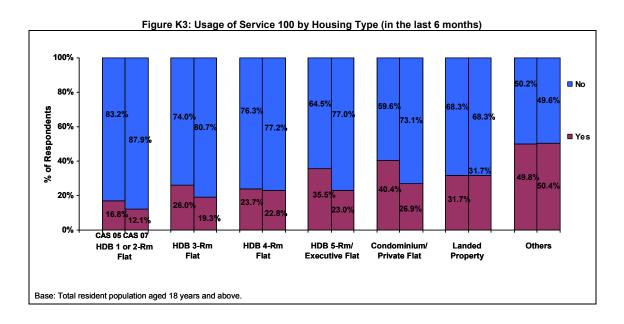
There was an overall decrease in the usage of Service 100 since 2005 (**Figure K1**). **Figure K2** and **Figure K3** show the usage by age and housing type respectively.





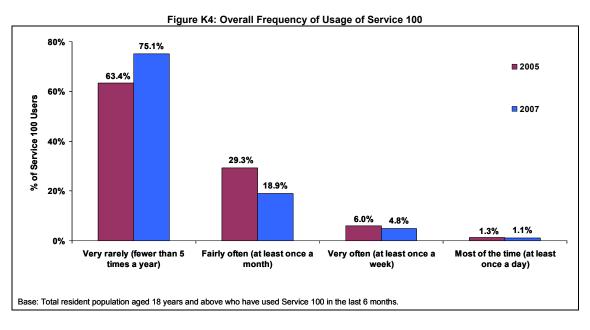
⁴ Service 100 refers to the operator-assistance service that provides callers with directory information, such as names, addresses and telephone numbers of subscribers to fixed line telephone services.

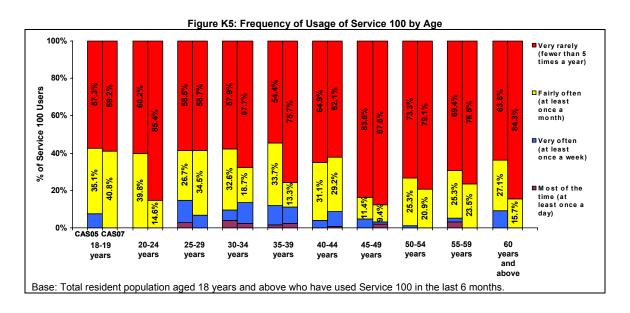
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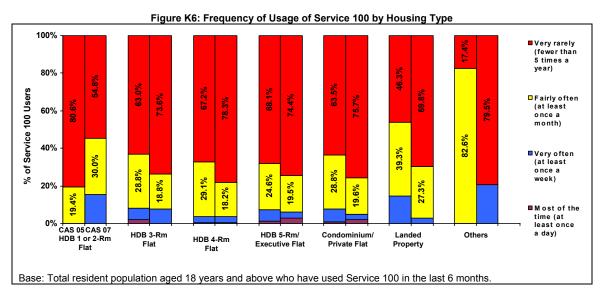


Frequency of Usage of Service 100

The frequency of Service 100 usage was also low. Frequency decreased from 2005, with more than three-quarters using Service 100 less than 5 times a year (**Figure K4**). **Figure K5** and **Figure K6** show the frequency of usage by age and housing type respectively.



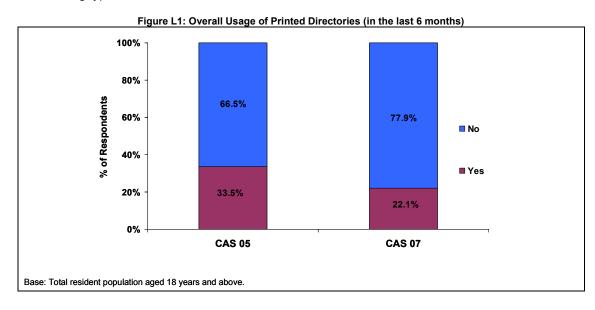


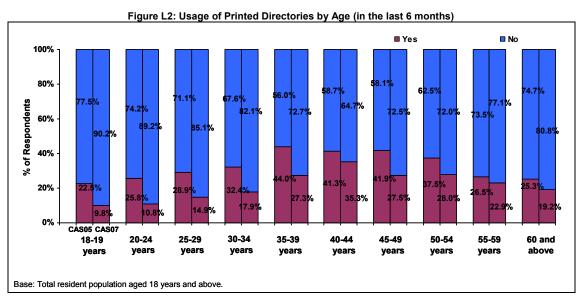


L PRINTED DIRECTORIES SERVICE⁵

Usage of Printed Directories

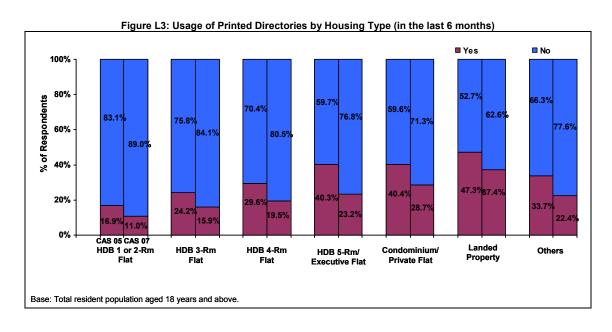
A decrease in usage of printed directories was observed. More than three-quarters had not used printed directories in the last 6 months (**Figure L1**). **Figure L2** and **Figure L3** show the usage by age and housing type.





⁵ Printed Directories refers to the Singapore Phone Book, comprising White Pages Business and Residential Listings, Chinese Yellow Pages and Yellow Pages Buying and Commercial/Industrial Guides. These books provide phone listing with directory information, e.g. names, addresses and telephone numbers of subscribers to fixed line services.

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Frequency of Usage of Printed Directories

Frequency of usage had decreased from 2005, with about 7 in 10 using printed directories less than 5 times a year (**Figure L4**). Frequency of usage by age and housing type can be seen in **Figure L5** and **Figure L6** respectively.

