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Telecommunications Today

Report 5: Consumer choice and preference in adopting services

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1. Introduction

ACMA's research highlights the changing trends in fixed-line, mobile and internet service take-up and use. To provide a deeper analysis of the reasons for these changing trends, ACMA has undertaken research that considers residential and business consumer attitudes to choice, preference and use of particular telecommunications services.

This report presents the findings of quantitative (consumer survey) and qualitative (focus groups) research into residential and business attitudes to telecommunication services in Australia. It aims to provide an understanding of why consumers choose certain services in preference to other services, and of their attitudes towards new and emerging services in the communications sector.

This report is the fifth in the *Telecommunications Today*[1] series and results from earlier reports in the series are cited throughout.

This study has four main objectives:

1. To identify residential and business consumers' preferences and choice of telecommunication services.
2. To consider consumer attitudes towards their choice of, and preferences for, services.
3. To ascertain the level of uptake and use of new and emerging services such as mobile email, VoIP and 3G.
4. To consider how location, income, family structure, age and profession affect consumer substitution of voice services and take-up of new and emerging services in the telecommunications industry.

This research was undertaken to meet ACMA's statutory reporting requirements under the *Australian Communications and Media Authority Act 2005*. This requires ACMA to report and advise on carriage services, including consumer satisfaction and benefits.

[1] All reports in the *Telecommunications Today* series are available at http://www.acma.gov.au/WEB/STANDARD/pc=PC_9058

2. Methodology

Research sources

Data within this report is drawn from three sources:

1. Woolcott Research

ACMA commissioned the consultancy Woolcott Research to conduct a series of qualitative focus groups and in-depth interviews, as well as a national quantitative survey.

The qualitative phase was made up of 12 focus group discussions in five locations, as well as eight in-depth interviews in remote areas. The focus group discussions were conducted among residential consumers aged 18 and over who were selected on the basis of age and a self-measure of technological literacy or confidence. Focus group respondents were recruited from a random sample, with each group containing between eight and 10 participants.

The quantitative phase consisted of a representative quantitative telephone survey of 1,600 respondents. The electronic WhitePages® was used as the sampling frame for Australian households and the interviews were undertaken using computer-assisted telephone interviewing (CATI). All respondents were aged 18 and over were screened to ensure they were the main or joint decision-maker in relation to at least one household telecommunications service.

2. Sensis® Business Survey

The quarterly Sensis® Business Index is an ongoing series of surveys tracking the confidence and behaviour of Australia's small and medium enterprises (SMEs). ACMA commissioned Sensis to conduct telephone interviews with 1,800 small and medium business proprietors between 24 April and 31 May 2007. Businesses interviewed were drawn from all metropolitan and major non-metropolitan regions within Australia (excluding the agricultural sector). [2]

To help ensure the sample reflected the actual small and medium business population distribution, survey results were weighted by selected Australian and New Zealand Standard Industrial Classification divisions within each state and territory. The Australian Bureau of Statistics (ABS) Business Register, as at June 1998, was used to help weight the sample to be representative of the total business population.

3. Roy Morgan Single Source Survey

Roy Morgan Single Source is a survey of residential consumers aged over 14 years drawn from a large base survey sample (25,000+ per year in Australia). Roy Morgan statistics cited in this report were derived from data collected between July 2006 and June 2007.

[2] For further methodological detail refer to Australian Communications and Media Authority (January 2008), *Telecommunications Today – Report 3: SME attitudes to take-up and use*, http://www.acma.gov.au/WEB/STANDARD/pc=PC_9058

Research considerations

Definitions

- **Telecommunications:** includes all voice (fixed-line telephone, mobile and VoIP) services and internet services (dial-up and broadband in all its forms such as ADSL, cable, satellite and wireless).
- **Consumers:** a number of different sources have been analysed and reported throughout this report. To help readers interpret the results, survey participants and focus group participants from all data sources are referred to as follows:
  - ‘household respondents’ or ‘household consumers’
  - ‘SME respondents’ or ‘SME consumers’ or ‘SME sector’.

  Refer to the methodology of each data source for exact definitions.

Sample size

While all results within this research are statistically significant, the sample size limits any further analysis by smaller sub-groups.

Rounding

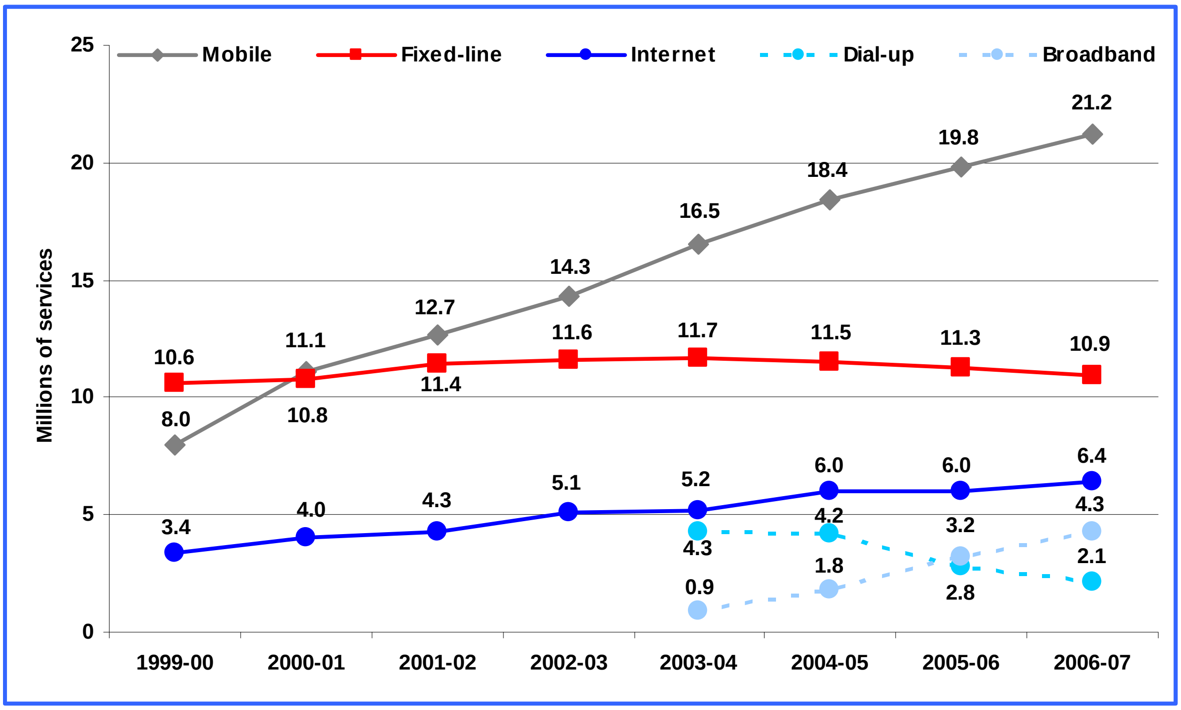
There may be discrepancies between the sums of the component items and totals due to the effects of rounding, as well as multiple responses by respondents.

3. Results

3.1 Overview of consumer choice and preferences in adopting services

Service take-up trends have changed significantly over the past decade and indicate that consumers are changing the services to which they subscribe (see Figure 1). Research into consumer attitudes to take-up and use helps to explore why these trends are changing and provides some reasoning for consumer choice and preferences for adopting particular services.

Figure 1: Changing trends in voice and data provision



Source: ACMA industry data requests

Telecommunications Today research has shown that the majority of household and SME consumers use their fixed-line phone and mobile phone services interchangeably or as a complementary service—the fixed-line is used when at home and for longer calls, and the mobile phone is used when out of the home and for calls to other mobiles. In contrast, consumers see broadband internet access as a substitute or replacement service for dial-up internet access and recognise the benefits broadband can provide.

The terms ‘complementary’ and ‘substitution’ are used throughout the report. Complementary services refer to the interchangeable use of both the fixed-line and mobile phone—the consumer uses the fixed-line phone when at home and the mobile when out of the home. Substitution of services refers to instances where consumers have replaced a service for another service offering the same functionality; for example, a consumer has replaced their fixed-line phone for a mobile service or a dial-up internet service for a broadband service.

Focus group research presented in the first *Telecommunications Today* report[3] shows that there is no uniform household consumer profile of take-up and use of telecommunication services. Consumers can instead be segmented on the basis of their take-up levels, perceived need for services, attitudes towards service take-up and usage levels (see Table 1).

Consumer segmenting is useful way of measuring how different consumers behave in relation to take-up, service preference, choice and use of services. Segmentation can be used to predict consumer behaviour and to identify the demographics and socio-economic profile of consumers who may be disadvantaged in terms of service roll-out and use. The three segments outlined in Table 1 identify the profile of consumers who are not connected, as well as the behaviour of consumers leading service take-up. Identifying the behaviour of these consumers gives us some insight into potential take-up as well as providing reasons why particular consumers do not take up services.

Although the majority of consumers use their voice services as complementary services, a small proportion of consumers—‘techno non-adopters’—do not have a mobile phone and choose to rely solely on their fixed-line phone for voice communications. There is also an increasing proportion of consumers—‘enthusiastic embracers’—who have or intend to replace their fixed-line phone service with other forms of voice communications.

The ‘enthusiastic embracers’ are also more likely to adopt new and emerging services such as VoIP and 3G internet access. These services represent a convergence of voice and data services, and offer consumers:

- the ability to use one device for multiple functions
- the potential to make voice calls using the internet
- the ability to use the internet anywhere.

These services are also helping to drive voice substitution by providing alternatives to fixed-line phone services.

Despite the availability of these converged technologies, focus groups highlighted that most consumers identify specific uses for particular services. A phone is seen as the device to use for voice services and the computer for data services.

3 Australian Communications and Media Authority (September 2007), *Telecommunications Today – Report 1: Consumer attitudes to take-up and use*, http://www.acma.gov.au/WEB/STANDARD/pc=PC_9058

Table 1: Consumer behavioural profiles

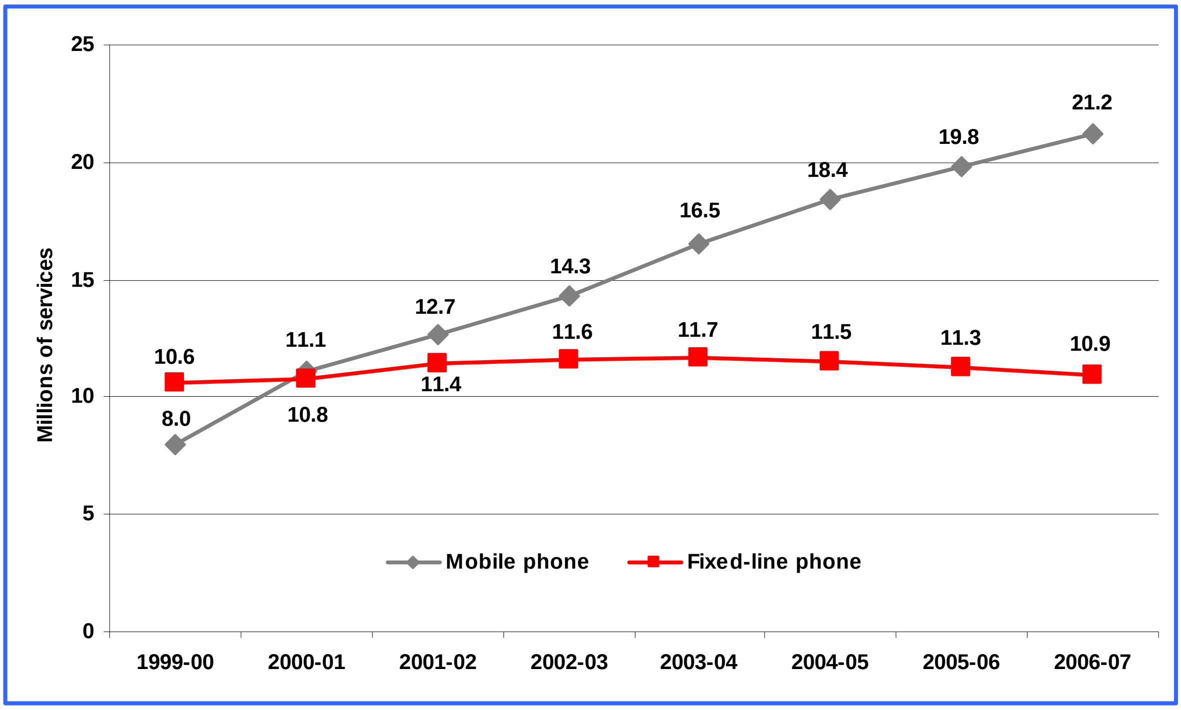
Enthusiastic Embracers	Mainstream Followers	Techno Non adopters
Enjoy knowing and using new services/technology.	Try to keep up with services on a required basis.	Need help or do not see a need to adopt new technology.
Tend to be knowledgeable about and aware of the latest technology.	Tend to follow the lead of the enthusiastic embracers. Do not want the hassle of seeking out information and understanding every new development. Do enough to simply enhance and aid their lifestyle.	Are unlikely to adopt new technology unless pushed or helped by someone else. Do not easily integrate the technology into their lives or simply do not see a need for it.
Are likely to do without the fixed-line telephone. Are likely to actively use their 3G mobile for internet services. Are heavier internet users who have traded up to faster speeds and/or wireless access. Tend to come from a younger age group (18–30).	Are likely to be users of both fixed-line telephones and mobiles. May have a 3G-capable mobile phone, but use it solely for communication. Are moderate internet users. Tend to be aged between 31 and 50.	Are likely to be users of fixed-line telephones. Some do use mobiles. Are less frequent users of the internet. Sometimes do not see the need for certain services. Tend to come from an older age group (50–60+).

Source: Woolcott Research. Consumer behavioural segments were based on focus group participants' answers to behavioural and attitudinal statements relating to telecommunications services.

3.2 Voice services

Household consumers are becoming increasingly dependent on their communications services, particularly mobile phones. The use of mobile phones has increased significantly—in 2006–07 there were 21.2 million mobile phone subscribers in Australia, an increase of 165 per cent since 1999–00 (see Figure 2). In contrast, fixed-line phone subscriptions increased slowly until 2003–04 and have since decreased at an average of two per cent each year, with 10.9 million services in operation in 2006–07.

Figure 2: Take-up of voice services



Source: ACMA industry data requests

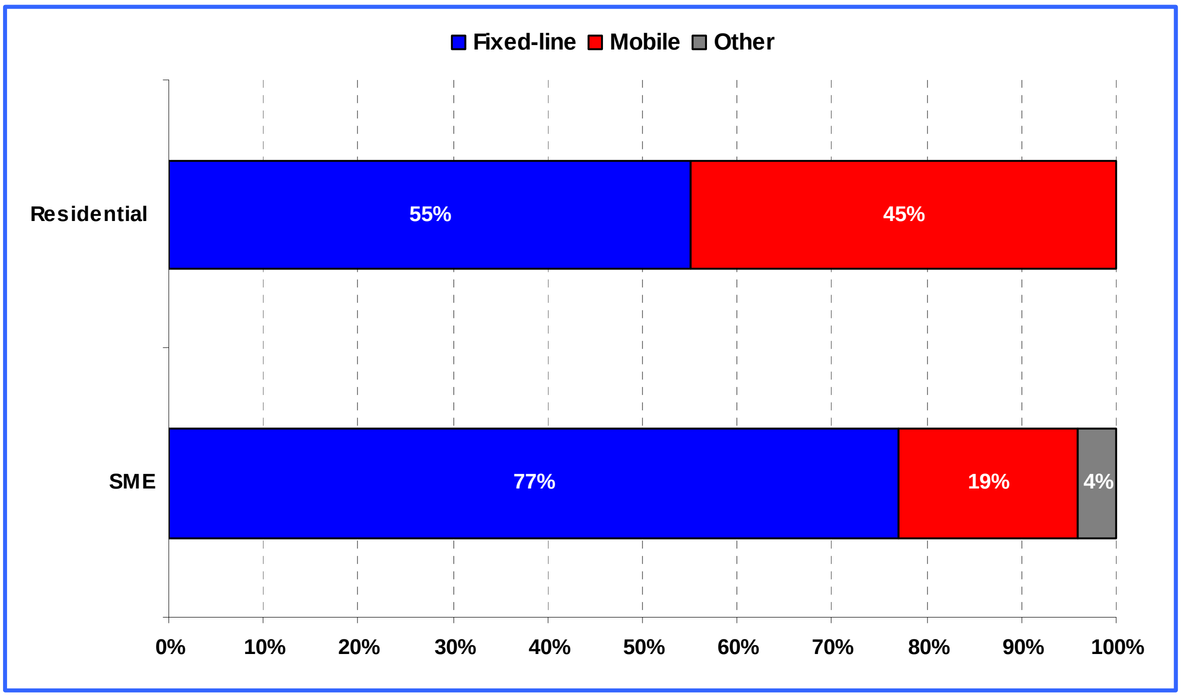
3.2.1 Complementary use of voice services

The majority of household consumers surveyed choose to use their both fixed-line and mobile phones as complementary services. Nearly 90 per cent of respondents have both a fixed-line and mobile phone in the household, and 87 per cent use both services.

Focus group participants highlighted that the main benefits of a mobile phone are its portability outside the home and its suitability for quick conversations or texting short messages. Other benefits are convenience and constant communication. In comparison, the fixed-line phone is still preferred for longer phone conversations or long-distance calls and is perceived as being more reliable. Consumers feel both forms of telephony have security benefits and are a way of keeping in touch with friends and relatives.

Although the majority of consumers use their mobiles and fixed-line phones as complementary services, the degree to which the services complement each other differs according to user profiles. Just over half of these respondents consider their fixed-line phone to be their main form of communication and just under half consider mobiles to be their main form of communication (see Figure 3).

Figure 3: Main use of the fixed-line and mobile phone



Source: Woolcott Research, April 2007, all those that use a mobile phone (n=1,334) & Sensis e-business survey, August 2007

Respondents who view their fixed-line phone as their main form of communication can be categorised as 'techno non-adopters' or 'mainstream followers'. These consumers tend to comprise the older age group (86 per cent of those over 61 years and 91 per cent of retirees). They also tend to live in non-metropolitan areas (65 per cent) and to be female (63 per cent).

The focus groups also revealed that 'techno non-adaptors' are highly reliant on fixed-line phone services and many use mobile phones solely for emergency purposes. These respondents do not see new technologies as essential or beneficial, and are often pushed or helped by someone else. In many instances, these focus group participants indicated that their phone had been given to them by partners or family members.

Those who consider mobile phones to be their main form of voice communication tend to be 'enthusiastic embracers' or technologically advanced 'mainstream followers'. These respondents enjoy using new services and technologies, tend to comprise the younger age group (70 per cent of those aged between 18 and 31 years), and use services such as broadband, 3G and VoIP.

Interestingly, SME consumers also use their fixed-line and mobile phones as complementary services, with 93 per cent having both a fixed-line and mobile phone. However, SME consumer reliance on fixed-line phones is more prominent, with 77 per cent using their fixed-line phone as their main form of communication. Only 19 per cent consider a mobile phone to be their main form of communication. Businesses in the finance and insurance industries, and health and community services are more likely to use fixed-line phones as their main form of communication (96 per cent and 90 per cent respectively), while those working in the building and construction industry are more likely to use mobiles as their main form of communication (53 per cent).

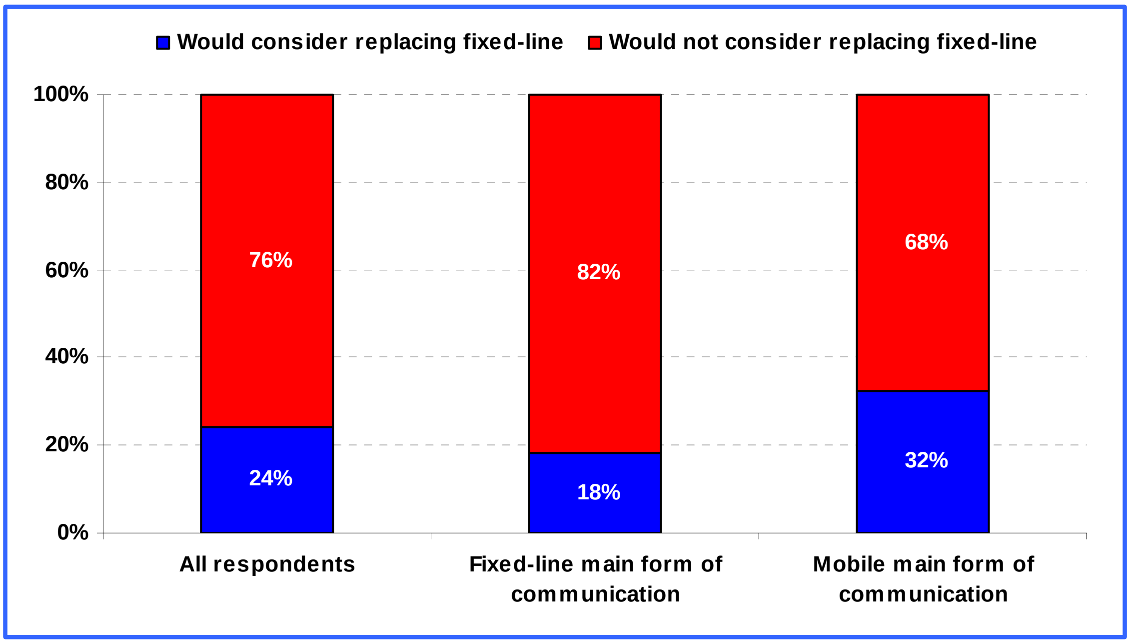
3.2.2 Substitution of voice services

Although the Woolcott survey of household consumers did not include consumers who have already substituted their fixed-line phone service with other forms of communication, it did ask about consumer attitudes towards substitution or intention to substitute a fixed-line phone service with another form of voice communication in the future.

Nearly a quarter of consumers who have both a fixed-line and mobile phone would consider substituting their fixed-line phone with another form of communication. These respondents are more likely to use mobiles as their main form of communication (see Figure 4). They are also more likely to be a manager or professional, male, aged between 25 and 34, and to earn more than $100,000. These consumers are also more likely to have a broadband connection, use VoIP and have a 3G-capable mobile handset.

Consumers who would not consider substituting their fixed-line phone service are more likely to use this service as their main form of voice communication and tend to be home-based (that is, engaged in home duties), retired or unemployed, female and aged over 61 years.

Figure 4: Residential consumer consideration of replacing fixed-line services with other form of voice communications



Source: Woolcott Research, April 2007, all those with a mobile phone in household (n=1,426)

Consumers who would consider substituting their fixed-line phone in the future would do so if certain conditions were met. For example, just over a third of respondents would substitute their fixed-line phone if mobile calls were cheaper, if they did not need it for an internet connection or if mobile coverage was better (Table 2). Other reasons consumers provided for considering substituting their fixed-line phones included cost savings, as they perceive line rental to be expensive, and satisfaction with their mobile service and cost.

For those who would not consider substituting their fixed-line phone, cost was again a deciding factor—half of the respondents would not replace their fixed-line phone service because it offers cheaper calls. Consumers also believe that fixed-line phones are more reliable, offer better quality of service, are easier to use and have better coverage. A proportion also indicated they needed a fixed-line for their internet connection.

Table 2: Residential consumer reasons provided for considering replacing/not replacing a fixed-line service

Reasons for considering replacing a fixed-line phone service	Percentage	Reasons for not considering replacing a fixed-line phone service	Percentage
If mobile calls were cheaper	37%	Fixed-lines offer cheaper calls	49%
To save costs/line rental is expensive	21%	Fixed-lines are more reliable/better quality	19%
Happy with mobile service and cost	17%	Problems with mobile use and coverage	17%
Both not necessary, like one phone/one bill	9%	I need fixed-line for internet/fax connection	15%
Do not use fixed-line much anymore	9%	Fixed-lines are always there—suit my needs	10%
If did not need fixed-line for internet	8%	Legacy service—it is what I am used to	7%
Technology is moving that way	7%	Need a fixed-line for business use	2%
If mobile coverage was better	3%	Other	8%
Other	7%		

Source: Woolcott Research, April 2007, all those with a mobile phone in household (n=1,426); multiple-choice question

The ease of mobile phone use and call costs are a big driver for consumers considering substituting their fixed-line phone service with another form of communication. Two distinct consumer views on the cost of mobile phones have emerged from the focus groups. Half of the participants, particularly the 'techno non-adopters', feel that mobile phone costs are prohibitive. This group believes that mobile plans are too complex and difficult to compare. On the other hand, the 'enthusiastic embracers' feel that mobiles offer good value for money, especially the capped plans. This group accepts the cost of mobiles as a part of life or considers them a 'utility' cost. As a consequence, fixed-line rental costs are perceived as expensive because they are not considered a necessary service.

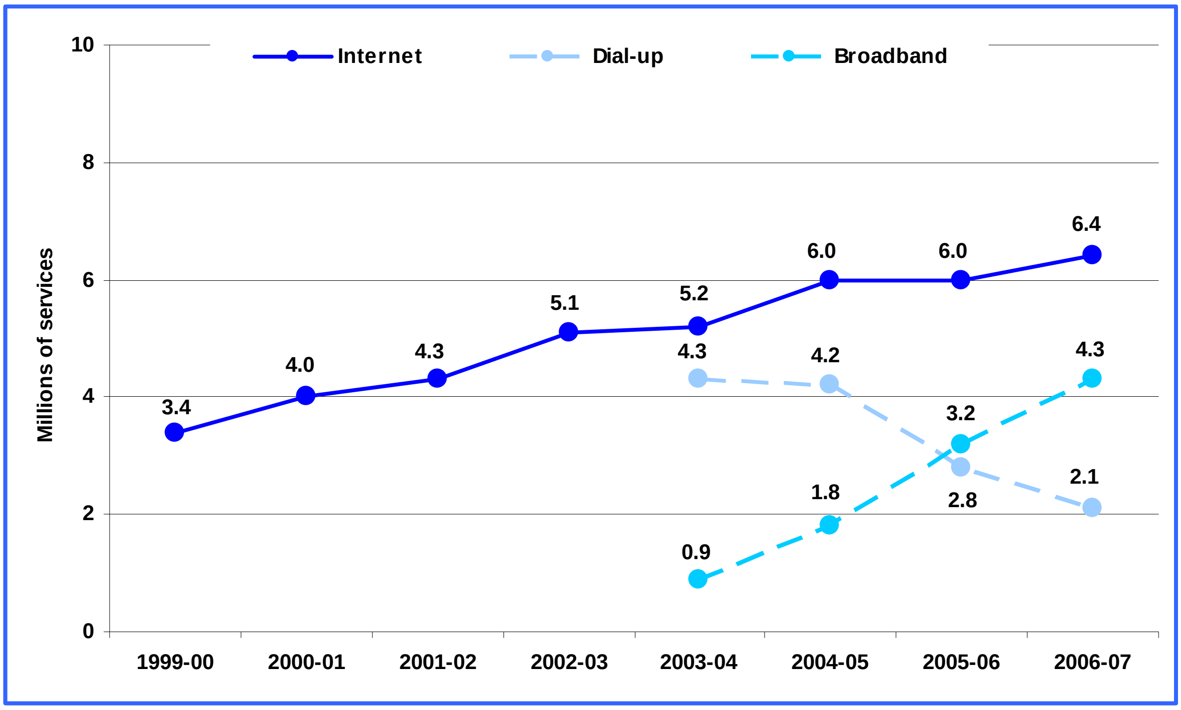
Another factor for consumers considering substituting their fixed-line phone service for a mobile is the use of the fixed-line for an internet connection (10 per cent of respondents stated that this was their main use of the fixed-line). This was supported by focus group participants, particularly 'enthusiastic embracers', who only require a fixed-line for an internet connection and resent having to pay line rental for a fixed-line phone. Ten per cent of respondents also see no benefit in using a fixed-line phone. These respondents are more likely to use the mobile as their main form of communication and to be 'enthusiastic embracers', aged between 24 and 31 and male. Of those who see no benefit in using a fixed-line phone, 44 per cent would consider replacing the service.

SME consumers are not as likely as household consumers to substitute their fixed-line phone service with other forms of communications. In-depth interviews with SMEs indicated that businesses require a fixed-line for an internet connection and customer calls, due to the perception that customers prefer to deal with a business using a fixed-line phone. SMEs generally regard the fixed-line phone as a more reliable service, although expensive in terms of line rental. Although SMEs emphasise the importance of fixed-line phones for business functions, mobiles are still widely used by all segments.

3.3 Internet services

Household consumers do not consider dial-up and broadband internet access to be complementary services. Consumers believe that the benefits of broadband make it a superior service. The majority of broadband consumers (82 per cent) previously had a dial-up connection and the most common reason for upgrading to broadband was the desire for more speed (77 per cent). Sixteen per cent upgraded because broadband does not tie up the phone line. In 2006–07, there were 6.4 million internet subscribers in Australia and Figure 5 shows that the rate of internet take-up in Australia is slowly increasing. This is driven by the dramatic increase in broadband connections, which grew 37 per cent in the past year. In contrast, dial-up connections have decreased dramatically.

Figure 5: Take up of internet services



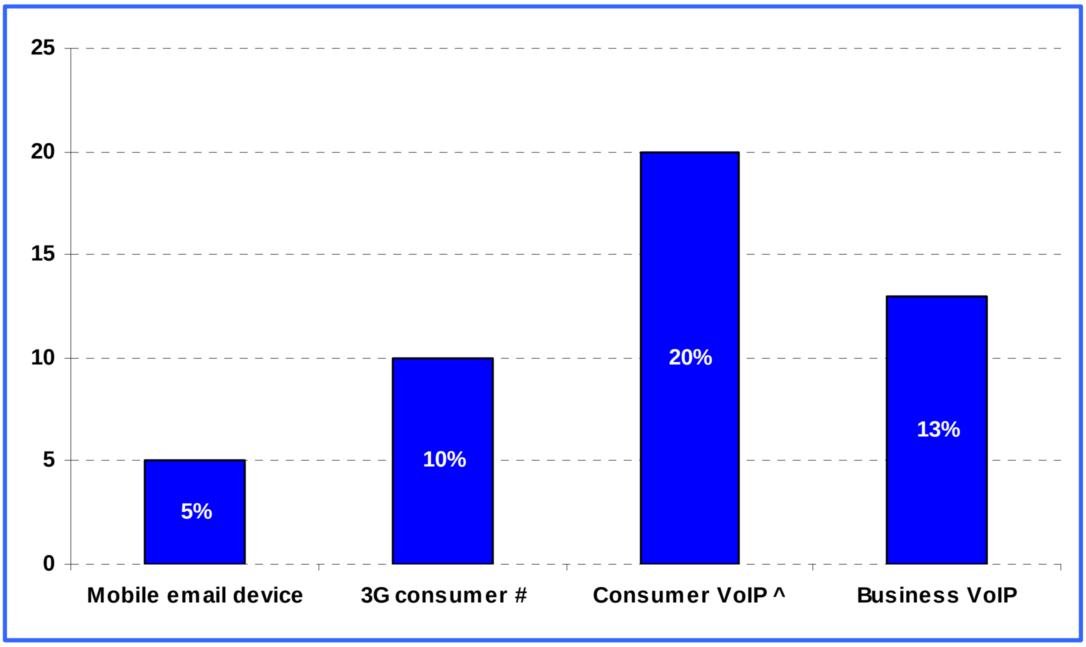
Source: ACMA industry requests

Although consumers do not consider dial-up and broadband to be complementary services, many have access to the internet at a number of locations and on a number of devices. A small proportion of consumers (two per cent) have both a dial-up and a broadband connection. However, it is likely that the broadband connection is the primary connection in the household and the dial-up is a prepaid connection that is rarely, if ever, used. A small proportion of consumers have also used a 3G connection in addition to their home internet connection, a third of consumers have access to the internet at work and 18 per cent have access elsewhere.

3.4 New and emerging services

The majority of household consumers surveyed view their voice services as complementary; that is, they continue to use both the fixed-line and mobile phone services to meet different communication needs. However, consumers are slowing starting to substitute their fixed-line phone with other forms of communication. Despite the availability of converged technologies such as 3G, and applications such as VoIP and mobile email, which offer voice and data services on one device, most service substitution currently relates to fixed-line and mobile phone voice services. The ‘enthusiastic embracers’ are an exception to this trend and these consumers have increased their use of services such as VoIP, 3G and mobile email devices. Take-up levels of these services are still low (see Figure 6), but are increasing as consumers start to become aware of and understand the benefits of each service.

Figure 6: Take-up of new and emerging services



Source: Sensis Consumer Report, May 2007, all respondents; Woolcott Research, all those with a mobile phone (n=1,385) and all those with an internet connection (n=1,226); Sensis® Business Index, May 2007, all respondents (n=253)
Note: Percentage of all respondents except where indicated – # all those with a mobile phone, ^ all those with an internet connection

3.4.1 Mobile email devices

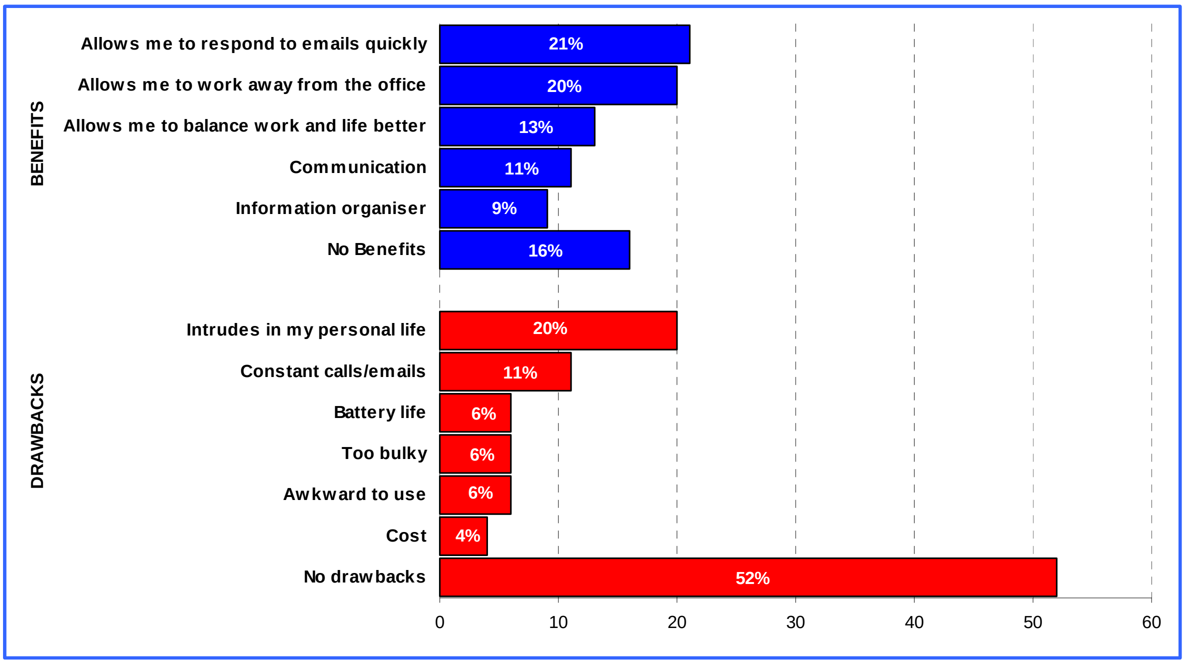
A mobile email device (for example, a Blackberry) is a mobile phone with personal digital assistant (PDA) applications (address book, calendar, and to-do lists) that is able to send and receive email wherever a wireless network can be accessed. Sensis research results show that five per cent of respondents use a mobile email device, with usage marginally higher among males and respondents aged between 20 and 39 years.

Unlike general mobile use, consumers rely more on mobile email devices for business purposes and focus groups indicated that many respondents' mobile email devices are provided to them by their employer. Thirty-eight per cent of respondents use mobile email devices mainly for business, 26 per cent for both business and personal use, and 36 per cent mainly for personal use. In comparison, only 16 per cent of standard mobile phones are used mainly for business purposes.

Consumers with mobile email devices report high usage, with consequent positives and negatives. Nearly half of users never turn their mobile email devices off so they are always contactable, while two-thirds leave theirs on over the weekend. Almost 40 per cent respond to work-related emails received outside office hours always or most of the time. The main benefits of mobile email devices are that users can respond to emails more quickly and work away from the office (see Figure 7).

Although usage is high, more than half of respondents see no drawbacks to using a mobile email device. However, 20 per cent feel the technology intrudes into their personal life and 11 per cent view the constant calls and emails as problematic.

Figure 7: Benefits and drawbacks of Blackberry use



Source: Sensis e-business survey, August 2007

3.4.2 3G services

3G is a mobile service that combines a mobile phone with internet capability, this potentially allows consumers to access VoIP services over the mobile. Mobile VoIP services have been launched in Australia by Hutchison 3 and Skype, which sells a VoIP phone offering free calls and SMS between Skype users.

At 30 June 2007, there were approximately 4.56 million 3G mobile services in Australia. This was an increase of 192 per cent from 1.56 million at 30 June 2006[4]. Nearly a third of household respondents own a 3G-capable phone, with age a significant driver of take-up—43 per cent of respondents aged between 18 and 24 own a 3G-enabled phone, compared with only 12 per cent of those aged over 61.

The most common uses of 3G phones are mobile internet, video calling, and music streaming and downloads (see Table 3). Focus group respondents supported this and indicated they mainly used their 3G enabled phones to check sports results, find out what movies were on and a few were occasionally accessing emails.

Over two-thirds of household respondents who own a 3G phone did not use the 3G services available on their phones. Half of these had no interest in the 3G services. Other reasons for lack of use included high cost and lack of knowledge on how to access services.

[4] ACMA industry data requests

Table 3: Residential consumer use of 3G mobile services

Use of 3G services	Percentage
Do not use 3G services	68%
Mobile internet	18%
Video calling	14%
Music streaming/downloads	7%
Mobile TV	3%
Interactive gaming	3%
Sports/news/weather updates	1%
Other 3G services	3%

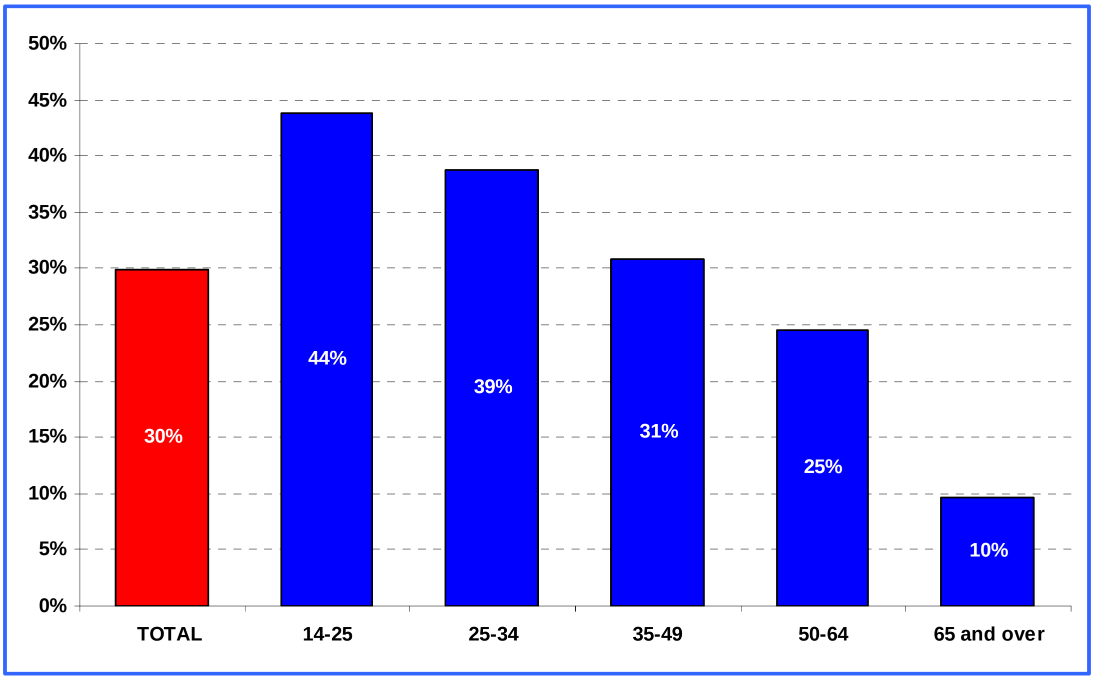
Reason for not using 3G services	Percentage
Service is not of interest to me	49%
It costs too much	30%
Do not know how to access services	17%
Do not know what services are available	5%
Do not have the time	4%
Phone provided as part of plan	4%
Service not available in area	3%
Other	3%

Source: Woolcott Research, April 2007, all those with a 3G-capable phone (n=415)

Despite many respondents having a 3G phone with internet capabilities, information from focus groups indicated consumers are not fully aware of the range of usage possibilities and therefore do not use the phone for anything other than voice calls. In general, using a mobile for internet access is negatively perceived and respondents, particularly those who are older, feel 3G would be expensive and hard to use.

However, a quarter of survey respondents who do not currently have a 3G phone would seriously consider buying a 3G service in the future. Age has an impact on the intention to purchase a 3G service (see Figure 8).

Figure 8: Residential consumer intention to take up 3G mobile service



Source: Roy Morgan Single Source, April-June 2007, all respondents (n=5,590)

More than one-third of SMEs have a 3G phone; this number is similar to consumer take-up figures. The majority also have a standard mobile phone (68 per cent). Businesses with more than 100 employees are more likely to have 3G phones, as are those who express confidence in future business prospects rather than being worried about the future (46 per cent compared with 25 per cent).

3.4.3 VoIP services

Voice over internet protocol (VoIP) technology allows telephone calls to be made over an internet connection. The emergence of new services such as naked DSL may encourage the growth of VoIP by enabling consumers to access the internet without the need for a fixed-line phone service.

When prompted with brand names such as Skype, more than 80 per cent of households with internet access were aware of VoIP services; 20 per cent actually used the services (see Figure 10). However, focus groups research has shown that while a large proportion of households are aware of VoIP and its reputation for cheap international calls, many misunderstand what the service entails and the hardware required. For example, some focus group respondents confused VoIP services with web-cam communication services.

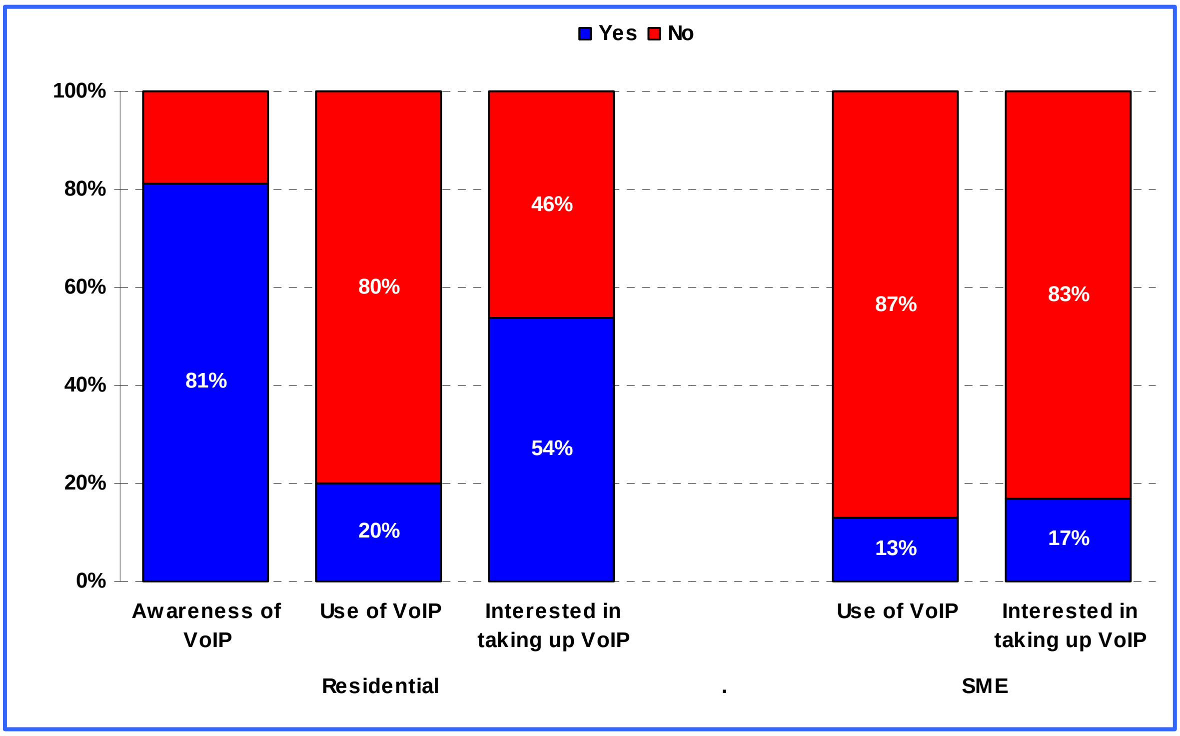
Unsurprisingly, given the bandwidth requirements of VoIP, the majority of users have a broadband connection (98 per cent). VoIP usage is also higher among younger age groups, with 26 per cent of respondents aged between 18 and 24 using VoIP, compared with only four per cent of respondents over 61. Those whose main form of communication is a mobile and who indicated they would replace their fixed-line phone are also more likely to use VoIP.

Respondents expressed a relatively high interest in VoIP. Fifty-four per cent of internet households that do not use VoIP are interested in accessing the service in the future (see Figure 9). Reflecting the VoIP usage profiles, a higher proportion of broadband users (60 per cent) are interested in using VoIP compared with non-broadband users (41 per cent), as are the younger age groups and those on higher incomes.

Focus groups results supported this and, once awareness of VoIP was raised through discussions, interest in take-up was high. Consumers are interested in the cost-saving benefits; however, there is a general perception that there is little advertising of VoIP and that it is too hard to find information. This prevents consumers from trialing the service.

Respondents not interested in taking up VoIP in the future have a lower awareness of the service, and tend to be older people who earn less than $100,000 a year.

Figure 9: Awareness of, use of and interest in VoIP services in Australian households



Source: Woolcott Research, April 2007, internet households (n=1226)& Sensis e-business survey, August 2007

Thirteen per cent of SMEs have used a VoIP service, which is comparable to residential households. SMEs in the communication services, manufacturing and wholesale industries are more likely to use VoIP. Medium-sized businesses (22 per cent) are also more likely than small businesses (13 per cent) to be VoIP users.

An additional 17 per cent of SMEs intend to adopt VoIP. These are more likely to be medium-sized businesses and to be in the transport industry. More than 70 per cent of these businesses are planning to take up VoIP within 12 months.

4. Conclusions

The *Telecommunications Today* series of research reports highlight that the majority of consumers use their fixed-line and mobile as complementary services. The fixed-line phone is used at home and for longer calls, and mobiles are used outside the home and for calls to other mobiles. However, a small proportion of consumer 'techno non-adopters' do not have a mobile and rely solely on their fixed-line phone for voice communications. Conversely, an increasing proportion of consumers are 'enthusiastic embracers' who intend to or have already substituted their fixed-line phone with a mobile phone.

In contrast, internet consumers see broadband as a substitute or replacement service for dial-up and recognise the benefits broadband can provide. The majority of broadband consumers upgraded from a dial-up connection because they wanted more speed and recognised that broadband does not tie up their telephone line.

Although consumers currently consider their voice services to be complementary, they are slowing substituting the fixed-line phone with other forms of communication. Most of this involves substituting the fixed-line phone with a mobile, but consumers are increasingly using new and emerging services such as VoIP, 3G and mobile email devices. Take-up levels of these services are still low but are increasing as consumers start to become aware of and understand the benefits of each service.

Cost is the biggest driver of consumer substitution of voice services. A quarter of consumers will consider substituting their fixed-line phone with another form of communication and many will do so if the price of mobile calls is reduced. In contrast, half of those who indicated they will not substitute give the reason that fixed-line phone calls are cheaper then mobile calls.

Since consumer take-up and use of voice services is predominantly driven by cost, new and future services to the market such as naked DSL and mobile VoIP, which help to reduce consumer costs, could facilitate more rapid adoption and substitution of voice services. However, these services will in turn present new issues for consumers such as new pricing models, a trade-off of reliability and quality for cost, security concerns and availability.