



THE ACID TEST

PROJECT NINTENDO

Quantifying the Number of Marginal Subscribers in the Australian Mobile Market

August 2007

Vodafone

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1. EXECUTIVE SUMMARY

Most (47%) subscribers have owned a mobile phone for over 5 years

- Still a substantial proportion (18%) who are new to phone ownership in the past 12 months

On average, a subscriber has owned the current handset for 17 months and plan to keep their current phone for 31 months

- Significantly related to age with older subscribers owning their current phone for almost 2 years

The average subscriber will keep their current phone for 4 years

- 45+ year olds try to maximise length of ownership while younger subscribers (especially 25-34 year olds) hold on for 6 months less

86% of subscribers have only one mobile phone they use while another 13% have 2 mobile phones currently in use (3+ is 1%)

- Number of mobile phones held is strongly related to economic factors, particularly household income and employment status (more wealth leads to additional mobile phones in usage).

The majority of main and secondary phones are for 'mainly personal use' (81% and 71% respectively for main and secondary)

- While a skew to 'mainly business' usage exists for secondary phones, this represents less than 3% of total subscriber mobile phones (18% 'mainly business usage' multiplied by 14% base of secondary phones users)

Vodafone has a higher share of secondary phone users (15% for main and 19% for secondary)

- Still, as secondary phone usage is only 14% this is a marginal source of business for Vodafone

Most subscribers have a mobile phone for 'personal usage' (82%), use a mix of PAYG (41%) and contract (59%), personally pay the network (93%) and personally select the network (93%)

The average amount spent on a handset (including those who paid nothing) is \$147

- Significant difference by age. For example, 18-24 year olds spend an average of \$190 on a handset versus \$95 for a 55-65 year old

The average monthly network spend on the current handset is \$44

- This is significantly related to the amount spent on a mobile phone for contract subscribers. Age is also a significant predictor (\$62 per month for 18-24 versus \$29 per moth for 55-65). Household income also positive related.

\$590 is the average annual spend on the current mobile phone (includes call costs & handset cost)

- Strongly related to age with under 34 year olds spending just over \$700 per annum, 35-44 year olds spending \$616, 45-54 year olds spending \$524 and 55-65 spending \$377.

Business users spend almost twice as much (\$971) on their mobile per annum compared to a mainly personal user (\$535). Contract subscribers also spend more (\$668) compared to PAYG subscribers (\$476).

Age, gender, workforce participation and payer of network costs are significant predictors of annual spend

- In the younger years, gender differences play a key role in spend patterns
- In the middle years, who pays (the business or myself) is more important
- In later years, participation in the workforce determines spend

Most (91%) subscribers are interested in purchasing a replacement mobile phone if their phone is lost or damaged beyond repair

- Younger subscribers (under 35 years) are more likely to want to replace their handset. Also, interest is highest for subscribers who have spent between \$110 and \$799.99 on their current handset. Below and above this point, interest is significantly lower.

For the small number (9%) not interested in replacement, 31% say they don't need a mobile phone (presumably they can live without it) and 28% say they will use a spare phone.

The rate of subscribers unwilling to pay for a replacement mobile phone increases substantially beyond approximately AU\$100. About half of subscribers can absorb a price around AU\$129.99 to AU\$149.99 and one-third of subscribers AU\$199.99 to AU\$249.99.

- However, a number of factors such as age, gender, household income, business vs personal usage and the price of their current handset play a role in this. If replacement pricing around these factors is possible, then some further improvements can be made.

For the 14% of subscribers with more than one mobile phone, there is a lower stated interest in replacing (especially 'very interested'). This translates to AU\$20 less in terms of price they are willing to pay to replace these 2nd, 3rd and 4th handsets.

2. BACKGROUND

The Australian Competition and Consumer Commission has issued a draft decision lowering the mobile termination rate from 12cpm to 9cpm. The new rate applies from 1 July 2007 to 31 December 2008.

The draft decision does not contain any allowance for the benefit received by others arising from mobile subscription. Some European regulators allow a surcharge on cost called the 'network externality surcharge' (NES). The NES reflects the benefit to non-mobile subscribers of having marginal subscribers connected to a mobile network.

The level of the NES is dependent on the number of marginal subscribers. That is, subscribers who are unwilling to pay the full cost of a handset.

The UK regulator, Ofcom, conducted market research in September 2006 to find, among other things, the number of marginal subscribers in the UK market. Ofcom defined a marginal subscriber as someone who is unwilling to pay at least £70 (\$160).

This market research is based upon the Ofcom report. The Ofcom report can be found at:

- http://www.ofcom.org.uk/consult/condocs/mobile_call_term/

3. OBJECTIVES

Estimate the amount subscribers are willing to pay to replace their current mobile handsets.

AREAS OF INVESTIGATION

The key areas of investigation included:

- Current usage
 - Time owned any mobile phone
 - Average length of current handset ownership
 - Average duration before replacement
- Category investment
 - Amount paid for current handset
 - Average monthly spend
- Main & secondary phone usage
 - Type of usage (business or personal or mix of both)
 - Network provider
 - Prepaid or contract
 - Payer of monthly bill or recharge
 - Who chose the network
 - Who paid for handset
 - How much paid for handset
- Replacement attitudes
 - Interest in replacement if lost or damaged
 - If not interested, why not
 - Amount willing to spend
 - Gabor-Grainger price task (\$49.99/\$99.99/\$149.99/\$249.99/\$499.99)
- Demographics
 - Age
 - Income
 - Gender
 - State
 - Occupation
 - Living arrangements

4. APPROACH

An online interview approach was used for this study. Given the nature of this project and the applications to which it is to be used, it was considered vitally important that the sample achieved was capable of withstanding scrutiny. Hence, to ensure robustness and the ability to explore the results by carrier a sample size of 1,000 interviews was undertaken.

SAMPLE PROFILE

See appendix for sample profile.

QUOTAS & WEIGHTING

Quotas were set to ensure the sample is nationally representative in terms of:

- Age
- Gender
- State
- Socio-economic class
- Network
- Pre-pay vs post pay

These were non-interlocking quotas. The quotas were minimums rather than definitive quotas (to allow refinement by weighting, if required) to ensure the data is fully consistent with known (and trusted) statistics. The data was post weighted to age, gender, state, socio-economic class, network and pre-paid vs post paid to ensure a representative base sample for decision and forecasting purposes.

SUBSCRIBER DEFINITION

In this study, a "subscriber" is defined as:

...Someone who selected the mobile phone network AND purchased the mobile handset. It does not include users whose employer selected the network OR employer selected the mobile phone.

5. MOBILE OWNERSHIP

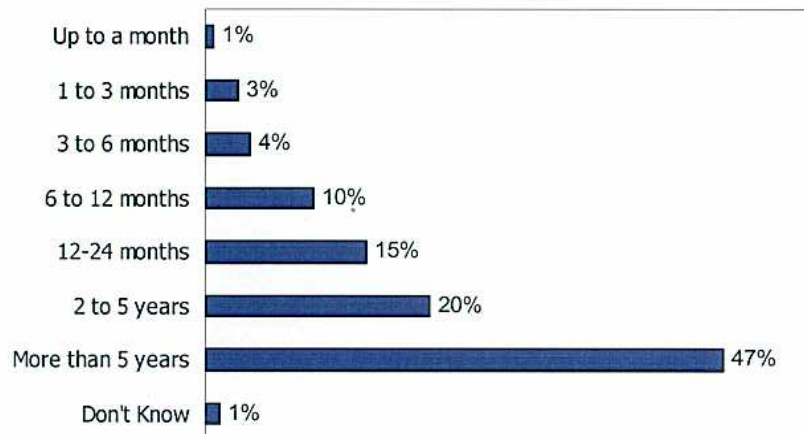
LENGTH OF CATEGORY PARTICIPATION

Subscribers were asked how long they have been a category participant:

Approximately how long have you had a mobile phone that you pay for?
Please note this can be for any mobile, not just your current handset.

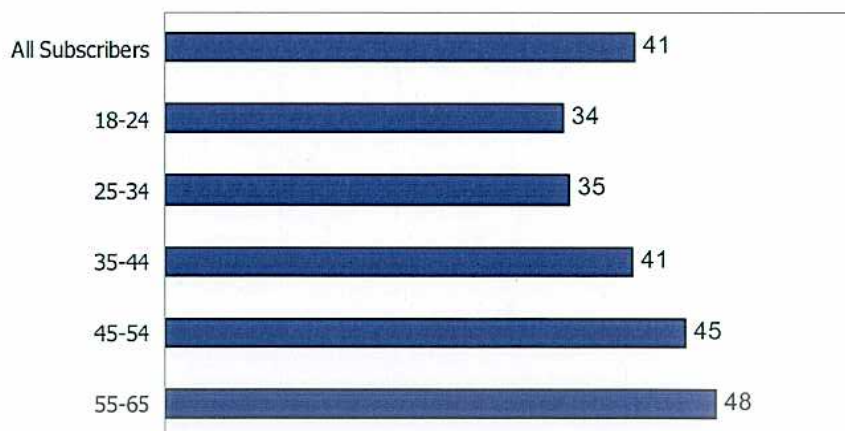
Almost half of subscribers have owned a mobile phone for over 5 years but a significant proportion (18%) has only held a mobile phone for less than 12 months.

Time Owning A Mobile Phone



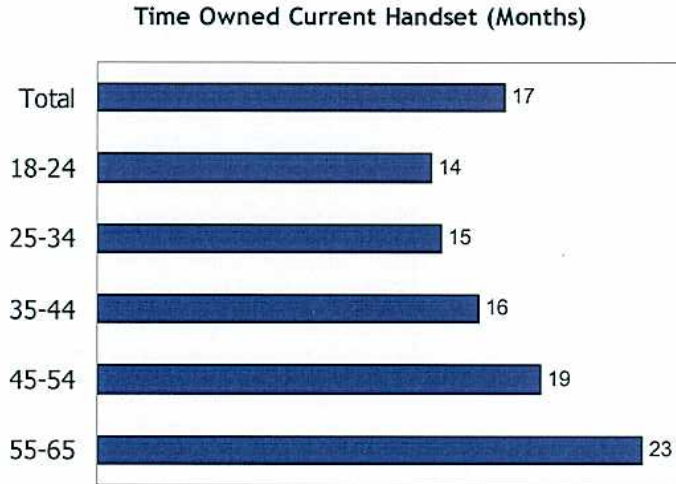
Average length of ownership (months) strongly positively correlated with age:

Average Time (Mths) Owning A Mobile Phone



LENGTH OF OWNERSHIP - CURRENT HANDSET

On average, subscribers have owned their current handset for 17 months. Length of ownership is strongly related to subscriber age.



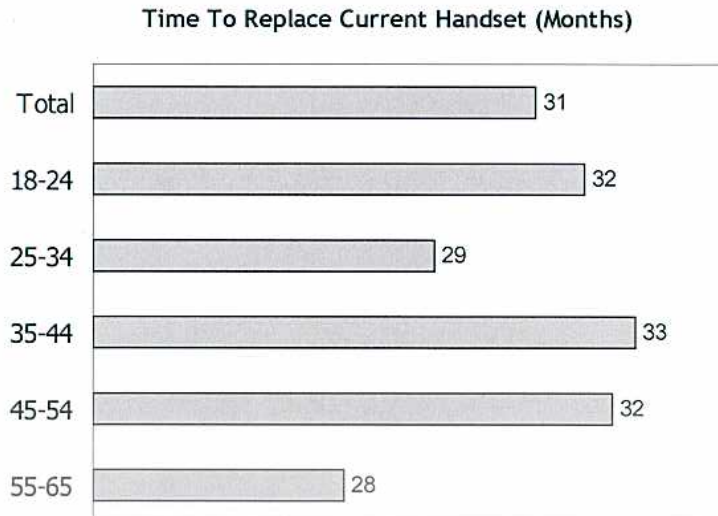
There are no other significant demographic or current usage factors related to time owned current handset.

TIME TO REPLACEMENT - CURRENT HANDSET

Subscribers were asked to estimate how long their current handset would be owned before replacement

On average, how long would you say you would own this handset before replacing it? Please include any replacements for lost or stolen handsets as a new handset.

On average, subscribers plan to own their current handset for 31 months (2 years, 7 months). Older subscribers plan to replace sooner due to the older age of their phone.



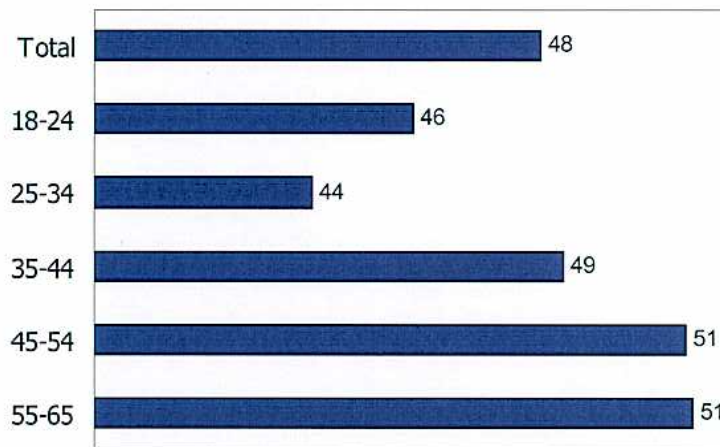
TOTAL TIME OWNED - CURRENT HANDSET

Based on length of time owned and estimated time to replacement, the total ownership time of the current handset can be calculated.

$$\text{Total Time Owned} = \text{Length of Ownership (Current Handset)} + \text{Time to Replacement (Current Handset)}$$

Most subscribers estimate they will own their handset for 4 years (48 months). Older subscribers (45+) will own their phone for 5 months longer than 18-24 year olds and 7 months longer than 25-34 year olds.

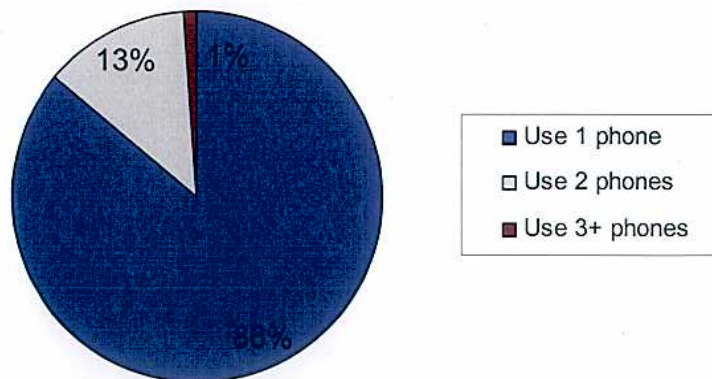
Total Time Owned Current Handset (Months)



NUMBER OF MOBILE PHONES

The vast majority of subscribers "personally use" one mobile phone (86%) though a sizeable group (13%) also have an additional mobile phone. Only a small proportion (1%) has three or more.

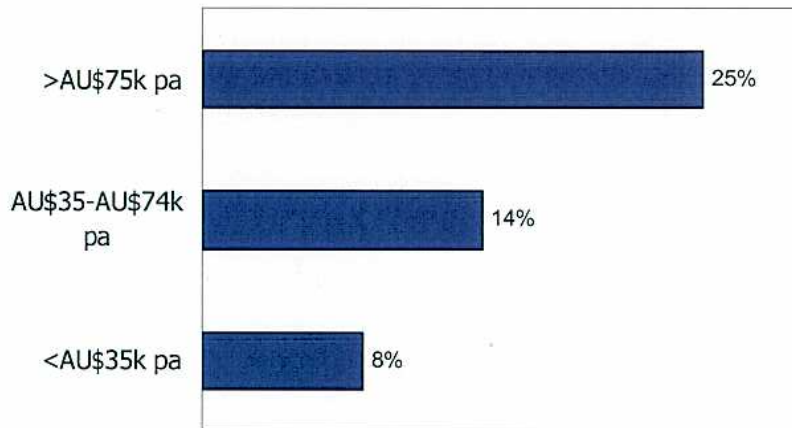
Number Of Phones Personally Used



Number of Mobile Phones Related To Economic Factors

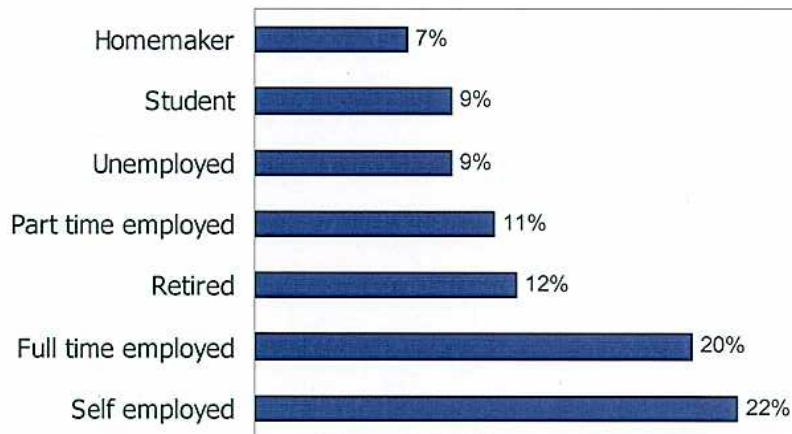
Number of mobile phones used is strongly correlated to economic factors, namely household income and employment status. When household income crosses the AU\$75k threshold, subscribers are almost twice as likely to use more than one mobile phone.

% Using More Than One Mobile Phone



The full time employed and self employed are also significantly more likely to be using more than one mobile phone.

% Using More Than One Mobile Phone



Age and gender are not as significantly related to number of phones and where the limited relationship exists, this can be explained by the two factors above.

6. CURRENT MOBILE PHONE USAGE

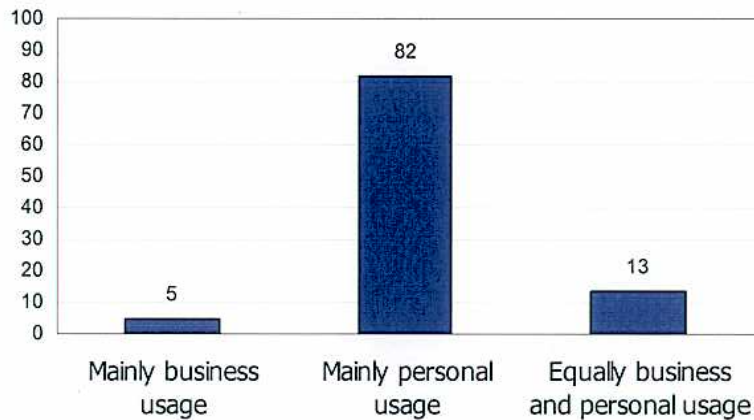
Current phone = the main phone used by the subscriber where they selected the mobile phone network AND purchased the mobile handset.

It does not include phones where the employer selected the network OR the employer selected the mobile phone.

TYPE OF USAGE

Most usage is of a personal nature.

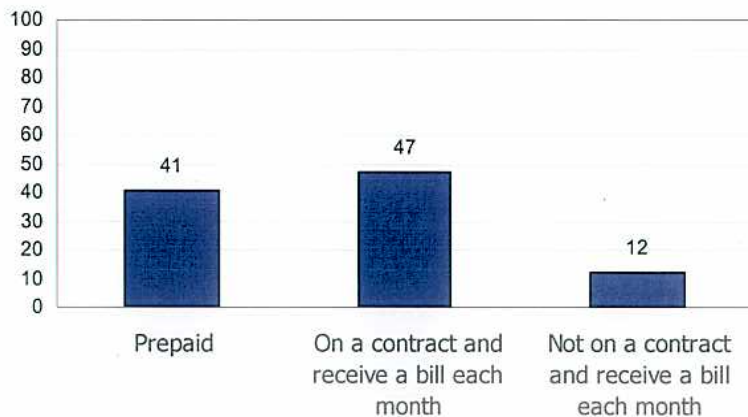
Current Mobile - Main Usage



PAYMENT METHOD

Prepaid bill payment represents 41% of current mobile payments while contract is the remaining 59%.

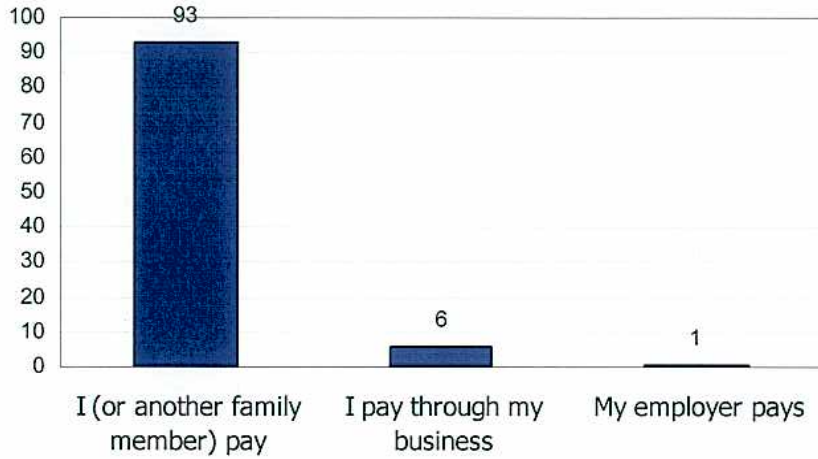
Current Mobile - Payment Method



NETWORK PAYER

Personal payment represents the majority of current mobile phones.

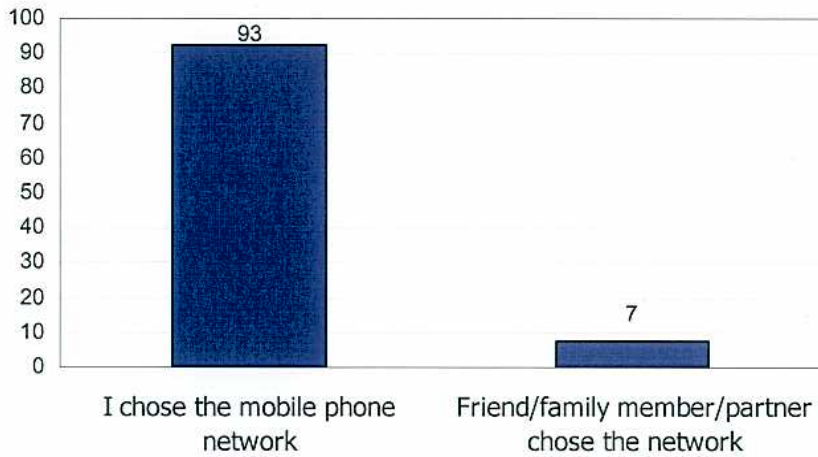
Current Mobile - Network Payer



NETWORK SELECTOR

In most cases, the user chooses the network.

Current Mobile - Network Selector

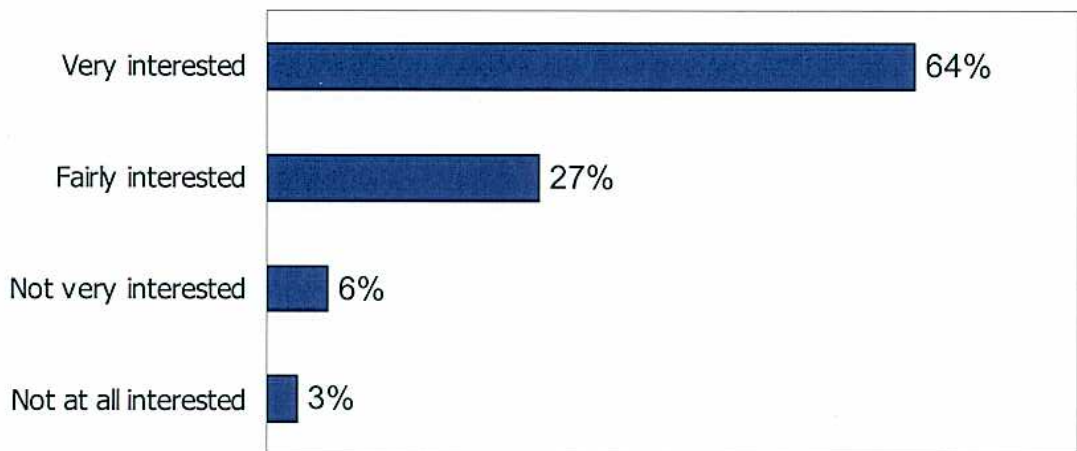


7. MOBILE HANDSET REPLACEMENT

PURCHASE REPLACEMENT INTEREST - MAIN PHONE

Subscribers were asked about their intention to replace their current main handset if they were to lose or damage it so that you could no longer use it (and were not entitled to a free replacement). Almost all expressed an interest in purchasing a new handset.

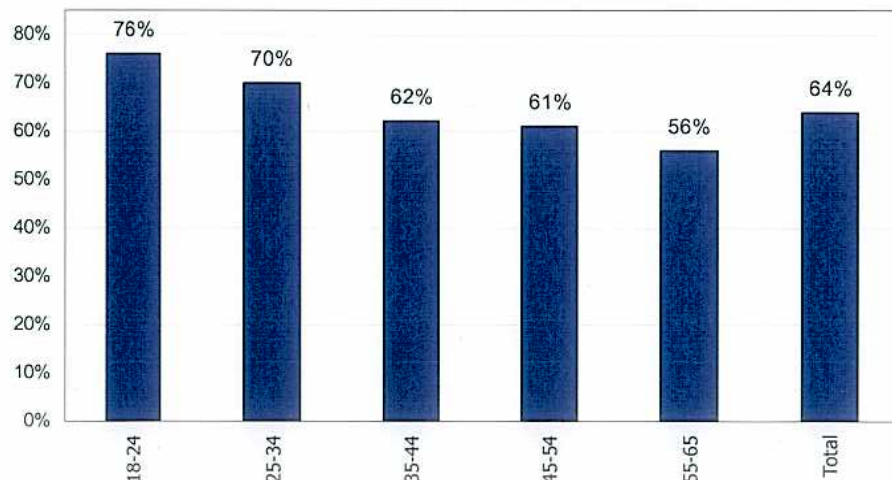
Interest In Replacing If Current Handset Damaged Or Lost (Beyond Repair & Now Free Replacement)



BASE: All Subscribers (N=100)

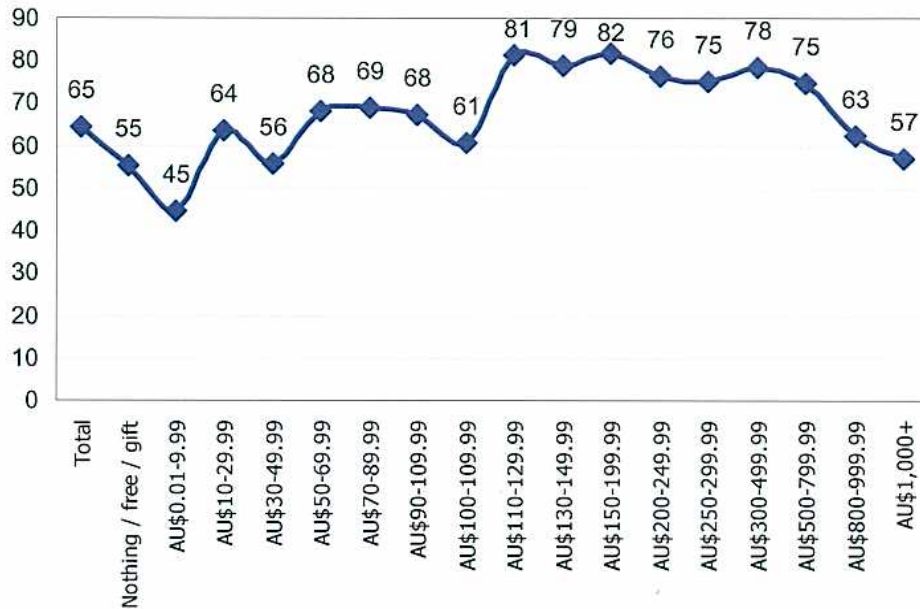
Younger subscribers expressed a higher interest in purchasing a replacement handset than older subscribers.

Very Interested In Replacing Existing Main Handset If Lost Or Damaged By Age



Interest in replacing current handset also strongly related to the price of the subscribers existing handset. If the subscriber's current handset cost them between \$0.01 & \$109.99, their "very interested" score averages 65%. Between \$110.00 & \$799.99, this average increases to 78% and beyond \$800 declines back to 60%.

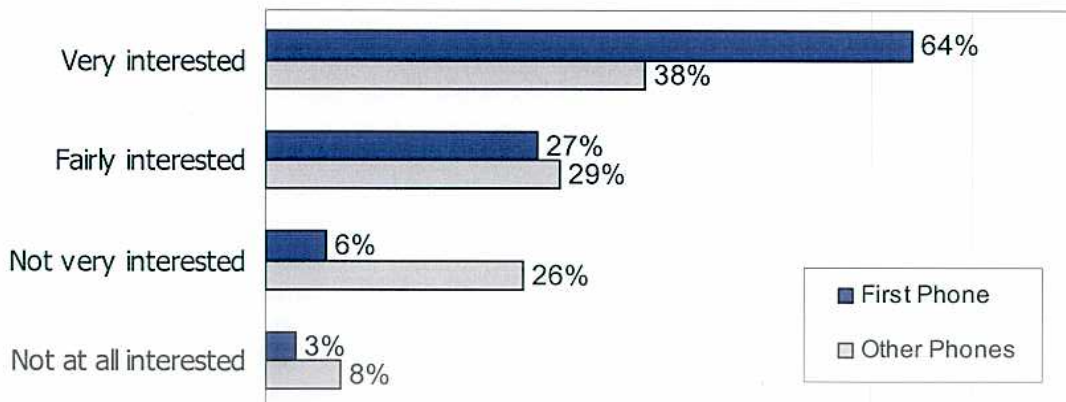
Very Interested In Replacing Existing Main Handset If Lost Or Damaged By Price Of Current Main Handset



Purchase Replacement Interest - 2nd, 3rd & 4th Phones

As mentioned previously, 13% of subscribers have a 2nd phone and 1% of subscribers have a 3rd or 4th phone. These subscribers do have lower overall interest in replacing their non-main phones, mostly due to having a spare phone as a back up.

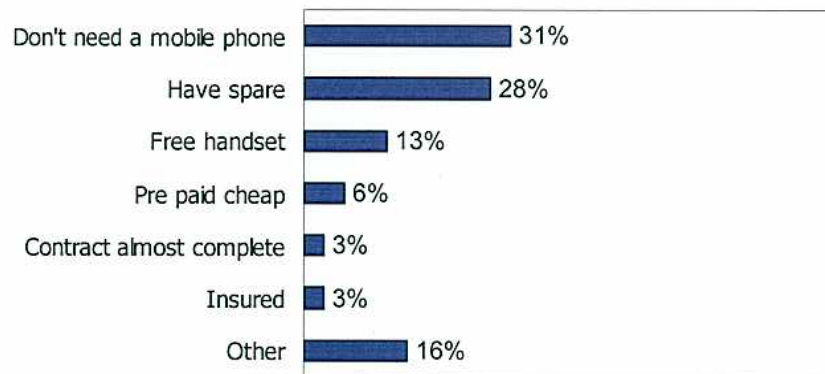
Interest In Replacing If 2nd, 3rd or 4th Handset Damaged Or Lost (Beyond Repair & Now Free Replacement)



REASONS FOR NON-INTEREST IN REPLACEMENT

Subscribers not interested in a replacement phone were asked why. For many, mobile phone usage is not a necessity. For others, they have a spare or have insurance for a free handset if the existing handset goes missing.

Reason For Non-Interest In New Handset



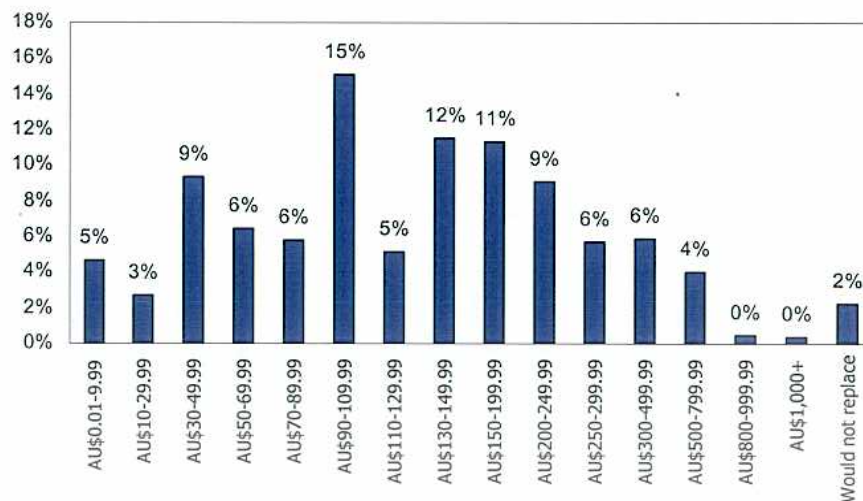
PURCHASE REPLACEMENT PRICE EXPECTATIONS

Subscribers were asked about the price they would be willing to pay to replace a lost or damaged handset.

If you were to lose or damage your current phone so that you could no longer use it, and were not entitled to a free replacement, how much would you be prepared to pay for a new handset, not including any call credit or airtime?

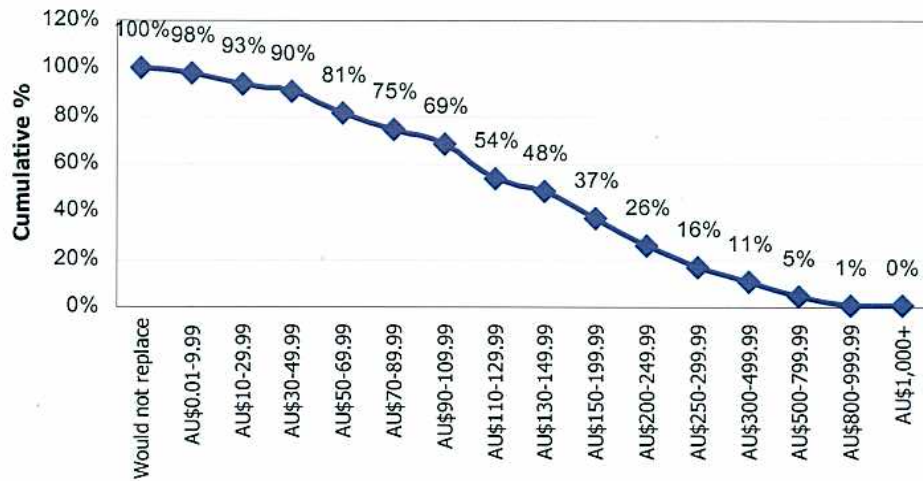
For those interested in buying a replacement, the most appealing prices appear in the \$90.00 to \$199.99 price range (\$90.00-\$109.99 being the popular pricing range).

\$\$\$ To Spend On Main Phone Replacement



Looking at the cumulative percentage drop out over the prices reveals that beyond \$90.00 to \$109.99, the number of subscribers declines significantly.

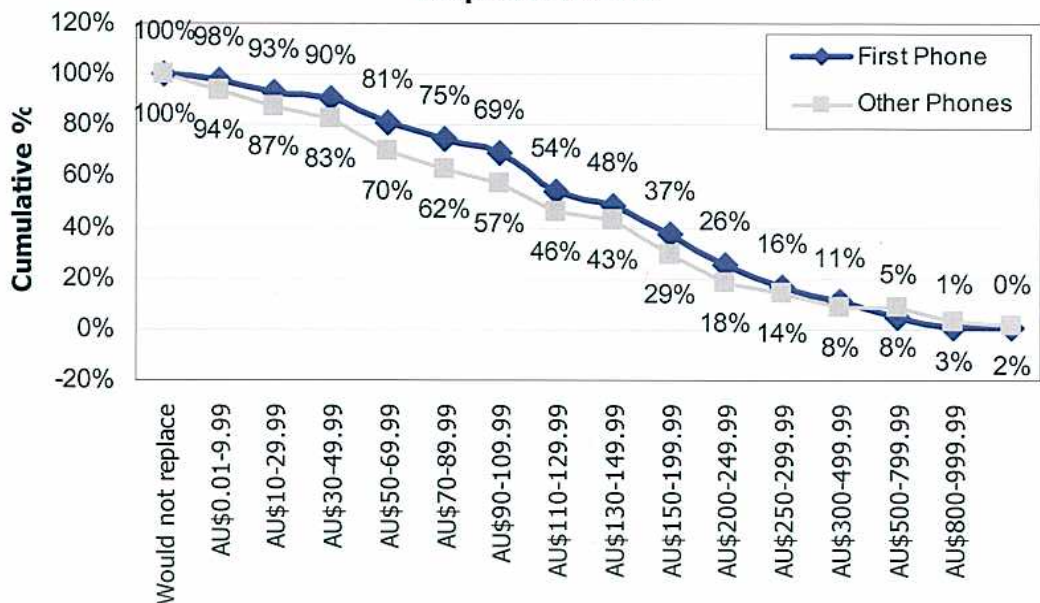
\$\$\$ To Spend On Main Phone Replacement



Purchase Replacement Price Expectations - 2nd, 3rd & 4th Phones

The 14% of subscribers who have more than one handset were asked for each subsequent phone how much they would be willing to spend to replace. The shape of price response is generally similar except it is AU\$20 lower than for first phone.

\$\$\$ To Spend On 2nd, 3rd or 4th Phone Replacement



GABOR-GRAINGER PRICING TASK

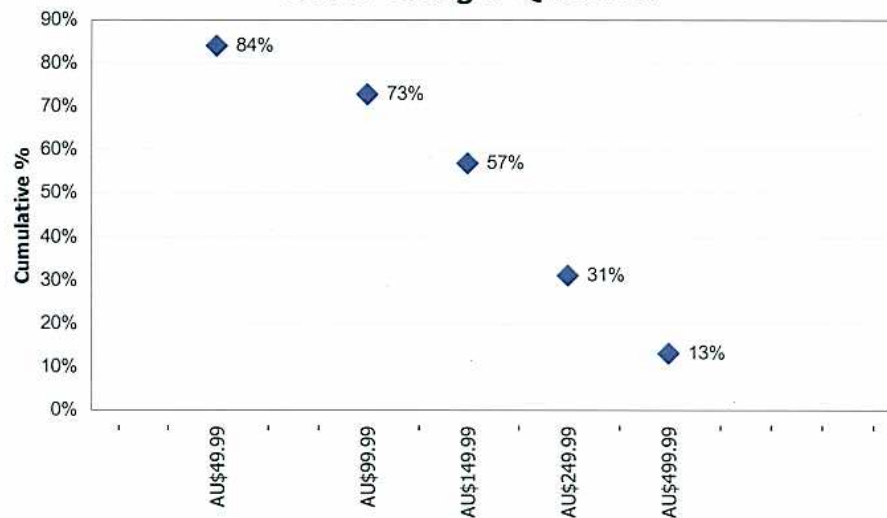
The results of Gabor-Granger pricing reveal a similar picture. In the task, they were shown five different price points in random order (randomized order for each respondent) and asked:

If you were to lose or damage your handset so that you could no longer use it, and were not entitled to a free replacement, would you be prepared to pay [PRICE POINT] for a new handset, not including any call credit or airtime?

Five price points were tested:
 AU\$49.99 / AU\$99.99 / AU\$149.99 / AU\$249.99 / AU\$499.99

Beyond \$99.99, willingness to buy a replacement declines dramatically.

\$\$\$ To Spend On Main Phone Replacement - Gabor Granger Question



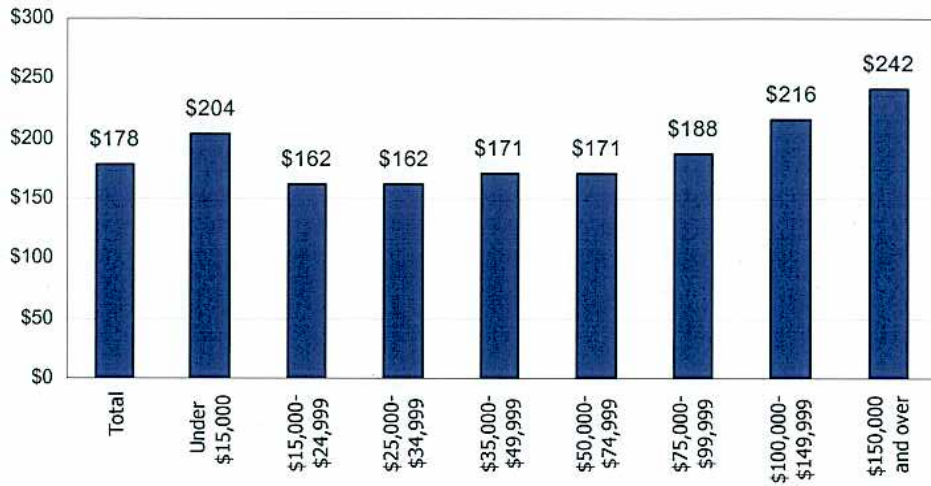
Consistent with previous results, younger subscribers are willing to pay more for a replacement handset. For example, 18-24 year olds are willing to spend almost twice as much as 55-65 year olds on a replacement mobile handset.

Maximum Price Willing To Pay For Replacement - Age & Gender



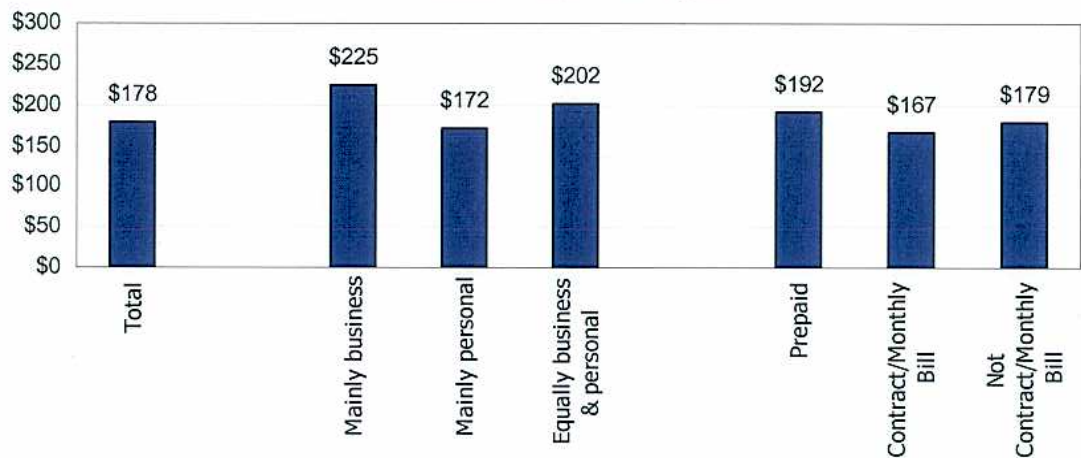
Income is also a significant correlate of price willing to pay for a replacement handset.

**Maximum Price Willing To Pay For Replacement
- Household Income**



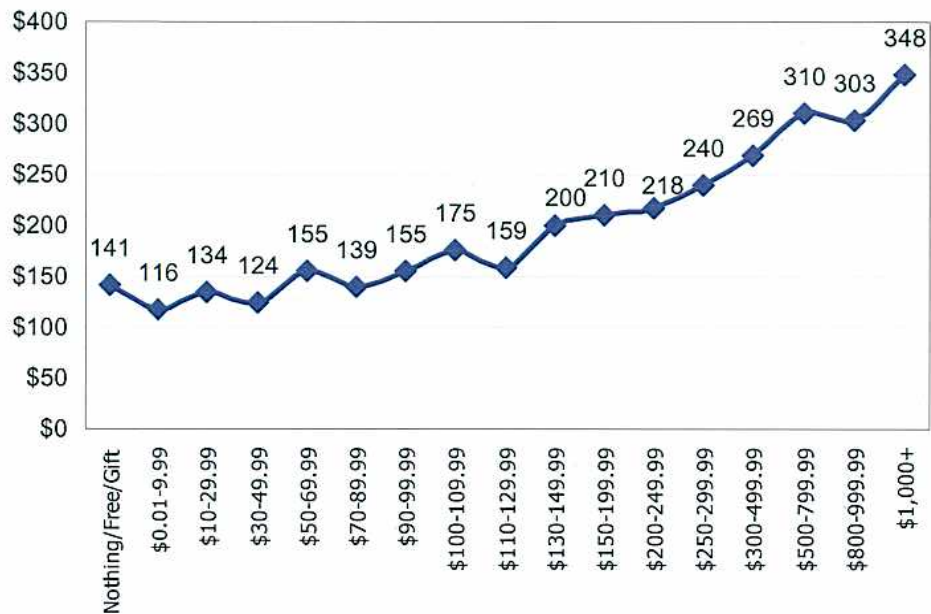
Type of usage (business vs personal) and PAYG vs contract are also significant predictors of replacement price expectations, albeit less discriminating compared to the factors mentioned above.

**Maximum Price Willing To Pay For Replacement
- Usage & Payment Type**



Finally, the maximum price willing to pay for replacement is strongly related to the cost paid for the current mobile handset.

**Maximum Price Willing To Pay For Replacement
- Price Paid For Current Handset**



Gabor - Grainger Pricing Task - 2nd, 3rd & 4th Phones

Again, the 14% of subscribers who have more than one handset were asked the Gabor – Grainger pricing task for each subsequent. The results are consistent with those seen for purchase replacement price expectations. The shape of response is generally similar but subscribers are looking to spend AU\$20 less to replace.

**\$\$\$ To Spend On 2nd, 3rd or 4th Phone
Replacement - Gabor Granger Question**



8. APPENDIX - SAMPLE PROFILE

ALL SUBSCRIBERS	N=1,000
AGE	
18-24	15
25-34	23
35-44	24
45-54	22
55-65	17
HOUSEHOLD INCOME	
Under \$15,000	7
\$15,000-\$24,999	11
\$25,000-\$34,999	13
\$35,000-\$49,999	18
\$50,000-\$74,999	19
\$75,000-\$99,999	14
\$100,000-\$149,999	9
\$150,000 and over	3
Prefer not to answer	4
STATE	
ACT	2
NSW	33
NT	1
QLD	19
SA	8
TAS	2
VIC	25
WA	10
LIVING ARRANGEMENTS	
Live with parent(s)	9
Live alone	15
Live in a shared household	8
Currently boarding only	1
Live with spouse/partner and children	25
Live with children	32
Live with other relative	7
Live with other relative	3
EMPLOYMENT STATUS	
Employed full time	32
Employed part time	18
Self-employed	9
Not employed, but looking for work	4
Not employed and not looking for work	2
Retired	16
Student	5
Homemaker	12
Prefer not to answer	1

ALL SUBSCRIBERS	N=1,000
TIME IN CATEGORY	
Up to a month	1
Longer than 1 month up to 3 months	3
Longer than 3 months up to 6 months	4
Longer than 6 months up to a year	10
Longer than a year up to 2 years	15
Longer than 2 years up to 5 years	20
Longer than 5 years	47
DON'T KNOW	1
MOBILE PHONES PERSONALLY USED	
One	86
Two	13
Three	1
Four or more	0
MAIN USE OF CURRENT MOBILE	
Mainly business usage	5
Mainly personal usage	82
Equally business and personal usage	13
PAYMENT OF CURRENT MOBILE	
Prepaid	41
On a contract and receive a bill each month	47
Not on a contract and receive a bill each month	12
Don't know	0
PAYER OF CURRENT MOBILE	
I (or another family member) pay	93
I pay through my business	6
My employer pays	1
NETWORK SELECTOR	
I chose the mobile phone network	93
Friend/family member/partner chose the network	7
My employer chose the mobile phone network	0
Can't remember	0

ALL SUBSCRIBERS	N=1,000
AMOUNT PAID FOR CURRENT HANDSET	
Nothing / it was free / a gift	37
My employer gave it to me	0
\$0.01-9.99	4
\$10-29.99	2
\$30-49.99	4
\$50-69.99	5
\$70-89.99	4
\$90-99.99	4
\$100-109.99	3
\$110-129.99	3
\$130-149.99	3
\$150-199.99	7
\$200-249.99	5
\$250-299.99	3
\$300-499.99	6
\$500-799.99	6
\$800-999.99	2
\$1,000+	1
Don't know	0
INTEREST IN REPLACEMENT PHONE	
Very interested	64
Fairly interested	27
Not very interested	6
Not at all interested	3
GABOR-GRAINGER: Price willing to pay	178
AMOUNT TO SPEND ON REPLACEMENT	
\$0.01-9.99	5
\$10-29.99	3
\$30-49.99	9
\$50-69.99	6
\$70-89.99	6
\$90-109.99	15
\$110-129.99	5
\$130-149.99	12
\$150-199.99	11
\$200-249.99	9
\$250-299.99	6
\$300-499.99	6
\$500-799.99	4
\$800-999.99	0
\$1,000+	0
Would not replace at any price	2

ALL SUBSCRIBERS	N=1,000
TIME WITH CURRENT HANDSET	
Up to a month	3
Longer than 1 month up to 3 months	9
Longer than 3 months up to 6 months	11
Longer than 6 months up to a year	24
Longer than a year up to 2 years	33
Longer than 2 years up to 5 years	16
Longer than 5 years	3
DON'T KNOW	0
HOW LONG TO REPLACE	
Up to a month	1
Longer than 1 month up to 3 months	1
Longer than 3 months up to 6 months	3
Longer than 6 months up to 9 months	4
Longer than 9 months up to 11 months	2
12 months	11
Longer than 12 months up to 17 months	5
18 months	7
Longer than 19 months up to 24 months	19
Longer than 2 years up to 3 years	19
Longer than 3 years up to 5 years	10
Over 5 years	6
As soon as a year is up	0
As soon as my contract is up	4
Have never replaced my handset	7
ANNUAL SPEND SEGMENTS	
Younger Males	14
Younger Females	15
Mid Age Payers	50
Mid Aged Business Pays	5
Older Active Workforce	5
Older Non-Workforce	12
Monthly network spend	44
Mobile handset cost	147
Category investment	590