Supplementary Material

to

The Efficiency of Market-Assisted Choice: An Experimental Analysis of Mobile Phone Connection Service Recommendations

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The paper's Supplementary Material is divided into three sections. In section 1 we explain the format of the plans that the innovative provider TPG originally claimed to be 'neither prepaid nor postpaid' but which it had to reclassify as 'prepaid' to conform to a new regulatory code. We also note how TPG's offers were in large part imitated by two other providers whose plans were especially popular with subjects in our experiment's online treatment. In section 2, we continue describing the evolution of the mobile phone connection service market but focus on the changes in the cheapest 50 prepaid plans available for servicing our experiment's usage remit between late 2010, when we archived the plans from which the offline subjects had to choose, and the third quarter of 2013, when we ran the online subjects' sessions. Potentially, the fact that the offline and online subjects faced different choice sets might affect the robustness of our findings for H1—H5. However, we show that to the extent there is any bias in the results it is likely to be in the direction of under-estimating the beneficial impact of being able to make market-assisted choices instead

of having to make self-reliant choices in this context. Finally, section 3 presents the task instructions that were given to our subjects at the start of each session.

1 TPG's plans and the 'prepaid' versus 'postpaid' distinction

When we compiled our offline archive of providers' websites at the end of 2010, one innovative provider, TPG, was offering plans that it characterized as 'neither prepaid nor postpaid'. However, by the third quarter of 2013, when we ran the sessions for the online treatment of our experiment, TPG was characterizing its plans as 'prepaid'. In the interim, TPG plans had been refreshed in term of their unit prices and inclusions but had retained their distinctive format. Their change in characterization was the result of the introduction of a new regulator code during 2012, in terms of which TPG's plans were classified as 'prepaid'. The regulatory code required plans to be presented to consumers according to how the code classified them, so TPG had to change its categorization to comply with this. We had decided to use the providers' own plan categorizations to determine whether our subjects had chosen a plan consistent with the task remit's requirement that the recommended plan was a 'prepaid' plan. Therefore, if subjects in the offline treatment recommended a TPG plan (as 4/21 did), we penalized them for having made a choice at odds with the task remit, whereas if subjects in the online treatment recommended a TPG plan (as 2/20 did), we recorded them as having made a choice consistent with the task remit.

It is not hard to see why TPG had originally characterized its plans as 'neither prepaid nor postpaid'. As with a prepaid plan, and as with a postpaid plan that involves a two-tier pricing system, TPG plans require customers to make an advance purchase of a block of credit against which service usage is debited. Where TPG plans differ from conventional prepaid and postpaid plans is in what happens when the credit is exhausted. In a prepaid plan, the user has a choice: either allow access to the service to be suspended as far as outward services and Internet access are concerned, or buy a new block of credit. With postpaid plans,

by contrast, the user simply incurs additional charges after credit has expired, with these charges continuing until the next billing date, at which point the user is required to pay for the overage charges and a new block of credit (often specified as 'included value' at a multiple of the amount actually spent').[1] TPG's innovation was to offer plans in which the user's access to its service continues (like a postpaid service) if a credit block is used up, but without the customer having to choose to make a 'recharge' in the manner of a prepaid service.

TPG achieved this via an arrangement rather more complex than the automated 'recharge' from one's credit card that many prepaid providers offered as options for their customers. Instead, TPG required its customers to make an initial purchase of an additional credit buffer and to agree to have their credit cards used to restore the buffer to an agreed value (minimum $20) if the remaining buffer credit fell below a trigger amount ($5 for the archived plans, $10 for plans available to subjects in the online treatment). A customer who has a TPG plan in which a regular block of credit expires after a month may run out of credit before the end of the month. If so, there is no opportunity simply to buy another block of credit of the same kind (or to purchase credit for one of the provider's other prepaid offers). Rather, continued use of the service will be charged against the buffer block of credit, with that buffer being automatically topped up if the trigger buffer balance is reached. This process will continue until the expiry date of the regular block of credit, whereupon the customer's credit card will be automatically billed for a fresh block of regular credit. The customer's access to TPG's service is only severed if the customer's credit card provider declines automated top-up charges.

[1] For an explanation of how Australian mobile phone plan formats differ and how the various types evolved, see Earl (2017).

TPG's plans thus prevented customers from having, say, an irregular recharge pattern of 26 regular credit purchases over 24 months in the way that they could with a traditional prepaid plan. Moreover, the way that TPG's plans function appears rather like a postpaid service in which the user always pays the bill via a direct debit against a bank account or credit card. For TPG, the system guards against defaults by customers, unlike a postpaid arrangement, whilst the customer gets the benefit of not needing to worry about running out of credit, a benefit that comes at the risk of an unpleasantly high negative balance on their credit card. By the time we ran the online sessions, the customer's risk had been reduced somewhat, for they would receive SMS messages from TPG to alert them if their credit buffer balances were getting close to the trigger point for a buffer top-up charge against their credit card.

Subjects in both treatments of our experiment, including the subjects who recommended TPG plans, provided virtually no evidence of noticing these aspects of the TPG plans. Only Subject 35 (online) actually looked at how the deposit/top-up system worked: doing so was decisive in her looking elsewhere as she rejected TPG because this system seemed 'potentially dangerous'.

Although TPG's plans appear to lie somewhere between prepaid and postpaid plans in the way that they operate, it should be evident that TPG customers could never use the firm's mobile phone services without having made a prepayment of some kind, whether for regular credit or for the credit buffer: the TPG plans did not offer any route whereby the customer received temporary credit from the provider, in contrast to a postpaid service. This is why TPG's plans had to be classified as 'prepaid' once Australia's Telecommunications Consumer Protections Code came into effect in 2012. According to the Code (ACMA, 2012, p. 18),

Post-Paid Service means a Telecommunications Product that can be used fully or in part prior to being paid for by the Consumer,

Whereas

Pre-Paid Service means a Telecommunications Product that must be paid for by the Consumer before it is used.

Clearly, had we used the Code as the basis for deciding whether subjects had made recommendations consistent with the remit's requirement that the recommended plan had to be a 'prepaid' one, then the TPG plans that four of the offline subjects recommended would have been categorized as 'prepaid'. However, the offline subjects were not provided with information about the Code and showed no awareness of it, whereas they were being presented with information from providers about how the latter categorized particular plans. Given this, we opted to use the providers' plan classifications even though this meant that the classification of the TPG plans differed between the two treatments. To use the Code's classifications would have been potentially inequitable, for offline subjects could end up being penalized if they noticed TPG's 'neither prepaid nor postpaid' categorization and opted for a more expensive plan from another provider as they attempted to conform to the task remit. Fortunately, as explained in the main paper, our results, with one minor exception, are robust to alternative classifications of the TPG plans.

As a bridge to the next section, it should be noted that, by the third quarter of 2013, when we ran the online experimental sessions, two new players, Amaysim and Yatango, had imitated aspects of the TPG approach. Amaysim had entered shortly before our offline archive was assembled, offering simple 'pay as you go' (PAYG) plans that could be operated

in prepaid or postpaid modes. However, in the interim, Amaysim supplemented its PAYG offer with 30-day 'Flexi-Credit' plans. If Amaysim customers ran out of Flexi-Credit, their outgoing and Internet service access would stop until the next auto-debit for a new block of Flexi-Credit *unless they had already purchased, or chose now to purchase, a block of PAYG credit*. Yatango, who had entered after the archive was constructed, followed a similar model, except that it had gone one step closer to the format of a typical postpaid plan by using a two-tier pricing system in which its PAYG services were charged at higher marginal costs than those coming from regular prepaid credit. As was the case with the TPG plans, our online subjects were generally oblivious of these aspects of the Amaysim and Yatango plans, for their focus was invariably on finding a plan whose monthly inclusions were enough in their own right to service the usage remit. They were thus operating like consumers who choose postpaid plans with a view to having enough capacity from the plan's 'included value' as to enable them to avoid incurring any overage charges. In the latter case, if they do not underestimate their usage and run out of 'included value', the bill will only be for the next prepayment for 'included value', despite the account being categorized as 'postpaid'.

2 Comparison of the sets of plans available in the offline and online treatments

For reasons of cost and logistics, it was not possible to run the experiment with the strictly controlled choice environment that is normally expected in experimental economics and which some of the authors have previously employed in a less naturalistic environment to investigate other issues in the context of choices of mobile phone service plans (see Friesen and Earl, 2015). With around 50 providers, many of which have complex websites, the process of archiving the set of mobile phone plans available at any point is very time consuming. The mobile phone connection service market can change even whilst one is in the process of archiving it by saving files and taking screenshots, or even whilst one is merely

browsing it.[2] It is thus possible that the set of plans available to each online subject differed, on top of the more obvious difference between the set of plans available to subjects in the offline treatment and the sets available to subjects in the online treatments.

We knew the scale of resources required to get even an approximately reliable snapshot of the set of offers available at any time, having previously compiled the archive that we opted to use in the offline treatment. When it came to running the online sessions, we were mindful of this experience and did not set out to compile an archive of the full sets of plans available to the online subjects. We thus cannot offer counts for the number of plans available to the each online subject, nor can we say that the average number of plans available when the online sessions were undertaken is greater or smaller than the 800+ plans in the offline archive.

Given the impossibility of running the experiment with all subjects choosing in environments that contained the same set of plans, we sought to get a sense of how the market had changed between the compilation of the offline archive in December 2010 and the running of the online sessions in the third quarter of 2013. Hence, before running the online sessions, we searched for new providers and new plan formats, as well as checking the costs of the offers of the major players. Via this process, we ended up with a list of the 50 cheapest plans (cheapest, in terms of serving the experiment's usage remit) that we could find at the commencement of the online sessions, and their respective costs. At the end of the online sessions, we searched to see if we could find anything cheaper than the cheapest plan on the top-50 list but this merely confirmed that, at the top of the list, nothing had changed.

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[2] One of us had a vivid experience of how suddenly the market can change, during the process of writing a blog piece on the cost of buying an iPhone outright versus the cost of buying one within a postpaid plan (Earl, 2011). The calculations had been completed, using Vodafone as a case study, and the post was in draft form when the author paused for lunch before doing proofreading and a final check of the numbers. However, on returning to check the numbers, it turned out that Vodafone had changed its offers at some point in the morning or early afternoon and it was necessary to redo the calculations.

This process of scanning the market revealed that, at the expensive end of the market, in terms of our usage remit, there had been very little change: the high marginal cost, long-expiry plans offered by the major companies for infrequent users had not changed. Instead, the competitive battle had been mainly at the other end of the distribution, where the major players were now offering much better value and the two cheapest providers from 2010, Crazy John's and GRL, had exited. Vodafone had had interests in both of these companies and in 2009 had also merged with Three, with the latter brand being phased out between the compiling of our offline archive and the running of the online sessions. However, the major players were facing competition from improved offers from TPG and Amaysim, both of whom had been heavily promoted, and from Yatango, which had not been heavily promoted. Yatango was completely unknown to our online subjects before they started working on the task but many of them discovered it rapidly with the aid of Whistleout-com.au. However, Yatango was less popular with actual consumers and went into administration in October 2015. With the spread of smartphones compared with 2010, the focus of competition had shifted towards data inclusions, though many plans from the major providers were now offering far more data than our remit specified, keeping their rankings down even though data prices had fallen greatly in plans aimed at data users.

Clearly, then, our offline and online treatments differed substantially, especially away from the long tail of plans for infrequent users, which our subjects would be wise to avoid. In principle, it is possible that because of differences between the sets and distributions of plans available to subjects in our offline and online treatments, we could have reached erroneous conclusions about the benefits of being able to make market-assisted choices. To put it starkly, it is possible that in both treatments subjects were so overwhelmed by information overload that they made purely random choice, with the online subjects having been able to do better because of the way the set of plans had changed, rather than because of having

access to online market institutions. Were this the case, it would at least mean that differences in the total number of plans or providers between the samples—for which we had not ascertained figures—would have no impact on their ways of choosing.

Although such a situation is possible in principle, the evidence available to us does not suggest that this is what was going on in practice. Here, we refer the reader to Tables 1 and 2 below. These tables show the 50 cheapest plans available to subjects in the experiment. Table 1 covers the online treatment, based on the assumption that the GRL cap plans allow voicemail retrieval calls to be charged as standard calls against 'included value' (where GRL's $29 cap offered '$200 for standard calls' as one of its inclusions), as is the norm in this sector but which was unclear from the archived website. Table 2 shows the 50 cheapest plans available for servicing the experiment's usage remit around the time we started running the online sessions. Clearly, the subjects who recommended plans listed as 'prepaid' by their providers were not choosing randomly: all but one of the offline subjects who recommended a prepaid plan managed to recommend a top-50 plan from the roughly 200 prepaid plans in the 2010 archive, whilst all of the online subjects who recommended a prepaid plan recommended a top-50 plan. Even offline subject 2, who failed to recommend a top-50 plan, recommended a plan (Kiss Mobile $15 with a 250MB data add-on) whose $1774.80 cost (255% of the cheapest available plans) was within the top 70, well inside the distribution's median plan cost of $2400.

It might next be objected that subjects could be choosing randomly from amongst a subset consisting only of those plans that were not clearly woeful for serving the remit, and hence that the results are still a consequence of the differences in the plan distributions rather than of the benefits of being able to make market-assisted choices. However, this is inconsistent with the patterns of choices within the top-50 plans in the respective treatments. First, note that only four offline subjects recommended top-10 plans, whereas 13 online

subjects recommended top-10 plans from the set available to them. Secondly, note the average and standard deviation figures for the offline and online sets of top-50 plans: the distributions of plans were indeed different but in a way that meant the online subjects would have be expected to do worse if they had been choosing randomly within the top-50 group. The average top-50 plan cost was very similar across the offline and online samples ($1089 versus $1127). However, the variation in plan costs was considerably larger for the *online* sample whether measured by the standard deviation of the top 50 plan costs ($194 in offline versus $408 for online), or by the ratio of the cost of the fiftieth plan to the best (twice as much in the offline versus more than four times as much in the online).[3] Based on this metric, finding a better option in the online sample could be considered more difficult. These results suggest that, if anything, our findings might understate the benefits of being able to make market assisted choices.

For completeness we also present in Table 3 the corresponding figures for the offline archive's top-50 plans, recalculated on a more pessimistic (and less likely) assumption that the GRL cap plans' voicemail charges could not be debited against the plan's included minutes for standard calls. This increases the number of recharges required if the GRL $29 cap is to meet the remit, thereby pulling it down the ranking from first-equal to fourth and raising the top-50's mean and lowering the standard deviation. The inference that the online top-50 poses a more challenging distribution than the offline one stands, as the changes to the offline average and standard deviation scores are very small indeed.

Finally, we reflect on whether differences in the set of plans between the two treatments affected the extent to which subjects' viewed plans of the cheapest providers, even

[3] The choice of subject 2, the only one to select a prepaid plan from outside the cheapest 50 offline plans, is interesting in relation to these figures: even this subject's choice was in the offline archive's cheapest 70 plans and though outside the cheapest 50, its correctly calculated 24-month cost ($1774) was only 2.54 times that of the cheapest plans in the archive ($696). In the online top-50 plans, a plan whose total cost was 2.54 times that of the cheapest plan would have rank 36th.

if they did not ultimately recommend the cheapest available plan. Given the popularity of alphabetical search among providers by offline subjects, their chances of viewing the best plans was enhanced by the fact that the two providers that tied for top ranking, Crazy John's and GRL came relatively close to the front of the alphabet. Self-reliant choices in the offline treatment could have come out far worse had the dominant plan been much later in the alphabet, as was the case in the online treatment for the providers of the first- and second-ranked plans, respectively, Virgin Mobile and TPG, between which there was almost a tie.

An examination of how many subjects viewed the products of the cheapest two providers in each treatment reveals a striking difference that can clearly be attributed to the difference between the treatments in terms of access to market institutions. It turns out that the much stronger performances of online subjects were achieved even though fewer online subjects examined plans from the cheapest two providers. In the case of offline subjects, 16/21 visited the archived Crazy John's website and 11/21 visited the archived GRL website, whereas 17/20 online subjects examined Virgin Mobile's plans but only 4/20 online subjects examined plans being offered by TPG. The TPG figure reflects the impact of TPG's plans being misclassified as 'monthly' plans by two of the most heavily used comparison sites—with the result that most online subject did not peruse TPG's plans at all. By contrast, in the offline treatment, 19/21 subjects spent time examining TPG plans, so despite the tendency of subjects initially to examine providers in alphabetical order, TPG's position in the alphabet did not prove to be a disadvantage. Moreover, four offline subjects recommended TPG plans from the archive, which offered far worse value (when their costs were correctly calculated) than the firm was offering in 2013. All four of these offline subjects recommend TPG plans after calculating their costs incorrectly. Although the comparison sites let the online subjects down by not including TPG's products on their lists of prepaid plans, they clearly helped them to discover high-ranking plans by other providers, most notably Yatango.

Table 1: The cheapest 50 prepaid plans in the December 2010 offline archive for serving the task remit

Provider and Plan Name	Total Cost for 24 months (AU$)	Excess Cost (% of $696)	Selected? (N=12 of 13)
Crazy Johns Crazy Cap $29 + Data	696	100%	1
GRL mobile GRLcap $29	696	100%	1
Crazy Johns Crazy Cap $49 + Data	784	113%	
GRL Mobile GRLcap $19	784	113%	
Virgin $29 Pre-paid Cap	899	129%	2
Go Talk Aussie Extra $50	900	129%	
Go Talk Aussie Extra $60	900	129%	
Go Talk Aussie Extra $90	900	129%	
Go Talk Aussie Extra $100	900	129%	
Go Talk Aussie Extra $70	910	131%	
Virgin $35 Pre-pad Cap	910	131%	
Crazy Johns Crazy Cap $49 + SMS	931	134%	
Crazy Johns Crazy Cap $79 + SMS	948	136%	
Crazy Johns Crazy Cap $79 + Data	948	136%	
Telstra Pre-Paid Cap $40	960	138%	
Optus Turbo Text $40	960	138%	
Optus Turbo Cap $40	960	138%	
Go Talk Big Talk Caps $40	960	138%	
Go Talk Aussie Extra $80	960	138%	
Boost Super Cap $40	960	138%	
Go Talk Big Talk Caps $30	1020	147%	
Go Talk Big Talk Caps $20	1040	149%	
Telstra Pre-Paid Cap $30	1080	155%	
Virgin $45 Cap	1080	155%	
Go Talk Aussie Extra $30	1080	155%	
Crazy Johns Prepaid FLATchat $95	1140	164%	
Crazy Johns Prepaid FLATchat $15	1140	164%	
Crazy Johns Prepaid FLATchat $25	1150	165%	
Crazy Johns Prepaid FLATchat $35	1155	166%	
Crazy Johns Prepaid FLATchat $55	1155	166%	1
3 $29 Prepaid Cap	1160	167%	
Crazy Johns Prepaid FLATchat $45	1170	168%	
3 $49 Prepaid Cap	1176	169%	
Vodafone Flexi Cap Recharge $49	1176	169%	
GRL mobile GRLcap $49	1176	169%	
Optus Turbo Text $50	1200	172%	
Optus Turbo Cap $30	1200	172%	
Optus Turbo Cap $50	1200	172%	
Go Talk Big Talk Caps $50	1200	172%	
Boost Super Cap $50	1200	172%	
Vodafone $29 Flexicap	1247	179%	4
Go Talk Big Talk Caps $10	1300	187%	
Amaysim One Pure SIM	1310	188%	3
Go Talk Big Talk Caps $20	1340	193%	
Optus Turbo Text $30	1380	198%	
GRL mobile GRLextreme $15	1395	200%	
GRL mobile GRLextreme $25	1400	201%	
Telstra Pre-Paid Cap $60	1440	207%	
Boost 1-cent Text	1440	207%	
Go Talk Aussie Extra $20	1440	207%	
Average (Standard Deviation)	**1089 (194.28)**	**156% (28%)**	

Table 2: The cheapest 50 prepaid plans available to online subjects for servicing the task remit

Provider and Plan Name	Total Cost for 24 months (AU$)	Excess Cost (% of $494)	Selected? (N=17)
Virgin Prepaid Caps $19	494	100%	1
TPG 3G Plenty Plan	500	101%	2
Amaysim Flexi	639	129%	5
Yatango Mobile 200 minute prepaid plan + 200MB data pack + 100 text pack	684	138%	1
Yatango Custom Plan $21	684	138%	1
Virgin repaid Caps $29	696	141%	3
Telstra Beyond Talk $30	720	146%	
Optus Prepaid Social $30	720	146%	
Vodafone Prepaid Cap $30	720	146%	1
Woolworths Cap $29	754	153%	
Woolworths Cap $49	784	159%	
Telstra Pre-paid Cap Encore $30	780	158%	1
Hello Mobile Combo 30 Local	834	169%	
Aldi Mobile Unlimited bolt on	840	170%	
Vodafone All Time $35	840	170%	
PennySIM Endless Lite $35	840	170%	
GoTalk Anytime with Unlimited Talk and Text add-on	852	172%	
Lebara Unlimited National Plan $29.90	868	176%	
Lebara Mini Mega Plan $24.90	918	186%	
SavvyTelPrepaid $39 top up	936	189%	
Lebara Mega Plan $39.90	957	194%	
Telstra Pre-paid Cap Encore $40	960	194%	
Tekstra Beyond Talk $40 (recharge amount assumption)	960	194%	
Vodafone Prepaid Cap $40	960	194%	
Amaysim Unlimited	1076	218%	
Boost Unlimited Prepaid $40 recharge + int SMS package	1080	219%	
Vodafone All Time $90	1081	219%	
Dodo Magic SIM Pay as you go	1081	219%	1
Aldi Mobile Pay as you go	1122	227%	
Amaysim Pay as you go	1139	231%	
Vodafone Flexi Cap $49	1176	238%	
Penny SIM Go Local	1180	239%	
Vodafone All Time $50	1200	243%	
Telstra Pre-paid Cap Encore $50	1200	243%	
Vodafone Flexi Cap $29	1248	253%	
Kogan Mobile PrepaidPrepaid	1296	262%	
Lebara Unlimited $49.90	1348	273%	
Telstra Beyond Talk $30 (extra credit assumption)	1420	287%	
Optus $2 Days	1440	291%	1
Optus Crew Cap $100	1500	304%	
PennySIM Go Global	1588	321%	
Vodafone Prepaid Cap $10	1620	328%	
Optus Crew Cap $50	1650	334%	
Telstra Beyond Talk $40 (extra credit assumption)	1660	336%	
Optus Crew Cap $70	1680	340%	
Optus Crew Cap $40	1720	348%	
Telstra Simplicity (All recharge values) + $10 Data bolt-on	1888	382%	
Vodafone TXT & Talk $150 plus $5 data bolt-on per month	1920	389%	
Optus Crew Cap $30	1950	395%	
Telstra Simplicity (All recharge values)	2128	431%	
Average (Standard Deviation)	**1126 (408.85)**	**228% (83%)**	

Table 3: The cheapest 50 prepaid plans in the December 2010 offline archive for servicing the task remit (worst-case assumption for GRL's voicemail retrieval charges

Provider and Plan Name	Total Cost for 24 months (AU$)	% of $696
Crazy Johns Crazy Cap $29 + Data	696	100%
Crazy Johns Crazy Cap $49 + Data	784	113%
GRL Mobile GRLcap $19	784	113%
GRL Mobile GRLcap $29	870	125%
Virgin $29 Pre-paid Cap	899	129%
Go Talk Aussie Extra $50	900	129%
Go Talk Aussie Extra $60	900	129%
Go Talk Aussie Extra $90	900	129%
Go Talk Aussie Extra $100	900	129%
Go Talk Aussie Extra $70	910	131%
Virgin $35 Pds-pad Cap	910	131%
Crazy Johns Crazy Cap $49 + SMS	931	134%
Crazy Johns Crazy Cap $79 + SMS	948	136%
Crazy Johns Crazy Cap $79 + Data	948	136%
Telstra Pre-Paid Cap $40	960	138%
Optus Turbo Text $40	960	138%
Optus Turbo Cap $40	960	138%
Go Talk Big Talk Caps $40	960	138%
Go Talk Aussie Extra $80	960	138%
Boost Super Cap $40	960	138%
Go Talk Big Talk Caps $30	1020	147%
Go Talk Big Talk Caps $20	1040	149%
Telstra Pre-Paid Cap $30	1080	155%
Virgin $45 Cap	1080	155%
Go Talk Aussie Extra $30	1080	155%
Crazy Johns Prepaid FLATchat $95	1140	164%
Crazy Johns Prepaid FLATchat $15	1140	164%
Crazy Johns Prepaid FLATchat $25	1150	165%
Crazy Johns Prepaid FLATchat $35	1155	166%
Crazy Johns Prepaid FLATchat $55	1155	166%
3 $29 Prepaid Cap	1160	167%
Crazy Johns Prepaid FLATchat $45	1170	168%
3 $49 Prepaid Cap	1176	169%
Vodafone Flexi Cap Recharge $49	1176	169%
GRL mobile GRLcap $49	1176	169%
Optus Turbo Text $50	1200	172%
Optus Turbo Cap $30	1200	172%
Optus Turbo Cap $50	1200	172%
Go Talk Big Talk Caps $50	1200	172%
Boost Super Cap $50	1200	172%
Vodafone $29 Flexicap	1247	179%
Go Talk Big Talk Caps $10	1300	187%
Amaysim One Pure SIM	1310	188%
Go Talk Big Talk Caps $20	1340	193%
Optus Turbo Text $30	1380	198%
GRL mobile GRLextreme $15	1395	200%
GRL mobile GRLextreme $25	1400	201%
Telstra Pre-Paid Cap $60	1440	207%
Boost 1-cent Text	1440	207%
Go Talk Aussie Extra $20	1440	207%
Average (Standard Deviation)	**1093 (189)**	**157% (27%)**

3 Online task instructions[4]

A friend of yours has just come back to Australia after living overseas for several years. They do not know anything about mobile service carriers here, and they have asked for your help in choosing a mobile phone service to use for the next 24 months. They have an unlocked mobile phone and do not want to get a new one. Also, they only want to use a prepaid service, and are completely unwilling to use a postpaid service. Your friend gives their exact monthly usage as:

Domestic **phone calls** made: 100
Exact length of each domestic **phone call**: 75 seconds

Domestic **SMS** (standard texts) sent: 41
International **SMS** (standard texts) sent: 10
Domestic **MMS** (picture texts) sent: 5

Voicemail retrievals: 15
Exact length of each **voicemail** retrieval: 120 seconds

Data usage: 200MB

Your friend does not use their phone for anything else other than the above. They do not care about network coverage or whether friends are on the same network. All they care about is the total cost of the above monthly usage over a 24 month period and that the service is prepaid.

You may think your friend is a bit weird to give you exact call lengths and the time spent retrieving voicemails, but this will make your task less complicated than if they had specified their usage as averages.

Your task is to search online to find the cheapest service for your friend, given their pattern of use. [Offline: Your task is to find the cheapest service for your friend, given their pattern of use.] You have a maximum of 60 minutes to do this and will receive a '5 minutes remaining, please make a decision' prompt if you have not reached a decision after 55 minutes. At any point you may indicate that you've reached your decision, or that you wish to withdraw without reaching a decision.

You may use the calculator and/or pen and paper to do calculations, and may assume that any expiry period of 28 days or more is equal to a coverage period of a full month. Please ignore SIM costs when calculating the total cost of a plan.

The research team knows what the cheapest available plan is and the closer you get to this with your recommendation, the bigger your reward, according to the following scale:

1) $50 if you find the cheapest plan overall

[4] Variations for the offline group are included in brackets.

2) $40 if you recommend a plan that is within $150 (total cost over 24 months) of the best one

3) $30 if you recommend a plan that is within $151 - $300 (total cost over 24 months) of the best one

4) $20 if you recommend a plan that is within $301 - $450 (total cost over 24 months) of the best one

5) $10 if you recommend a plan that is within $451 - $600 (total cost over 24 months) of the best one

6) $0 if you recommend a plan that is more than $600 (total cost over 24 months) of the best one

In addition, you will also receive a $20 fee for participating today.

As you search for information and consider what you find, please say out loud everything that you are thinking. Simply think aloud, as in the practice session, rather than explaining what you are thinking or why you are doing something. Do not worry about speaking in full sentences or using correct grammar - just keep thinking aloud. If you stop thinking aloud for a few moments, you'll be reminded to 'keep talking'.

When you've finished, write the provider's name and the plan name in the box at the bottom of this sheet, and please be sure to leave the page open **from the service provider's site** for the product you have chosen; you'll then be given a short set of questions to answer while we work out what your reward is.

You are free to search on the Internet in any way you wish to find mobile phone service products and make your choice. Do you have any questions about what you are being asked to do?
[Offline: You can only search for information in the research team's offline archive of plans. The home page on the computer has some links to get you started. Once you are at a provider's website you will find that links only work if the cursor arrow is green; the others have been disabled. You may start immediately. Click the house-shaped icon in the menu bar whenever you want to return to the home page and the original set of links.]

Remember to keep talking, and that you will have one hour to complete the task with a '5 minute warning' if you are approaching the maximum time. You may start immediately.

My recommendation:
Provider name:

Product name:

Please be precise about the product name, including any monthly cost or recharge amount that is part of the product name.

Thank you!

References

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