Measurement of On Net Mobile Traffic Among Students in Auckland and Dunedin: Key Findings

May 2009

PHOENIX RESEARCH

The Research Approach

- **Objective**
  - To estimate customer market share and the proportion of mobile traffic that is on net, among students in both Auckland and Dunedin
  - Pilot study of Auckland students in September 2008, rolled-out to Dunedin in May 2009

- **Research methods**
  - Intercept interviews at the Auckland and Otago Universities and at four high schools (2 in Auckland, 2 in Dunedin)
  - In each city,120 interviews split equally between venues, capturing call and text behaviour data from logs stored in students' phones

Two Key Results

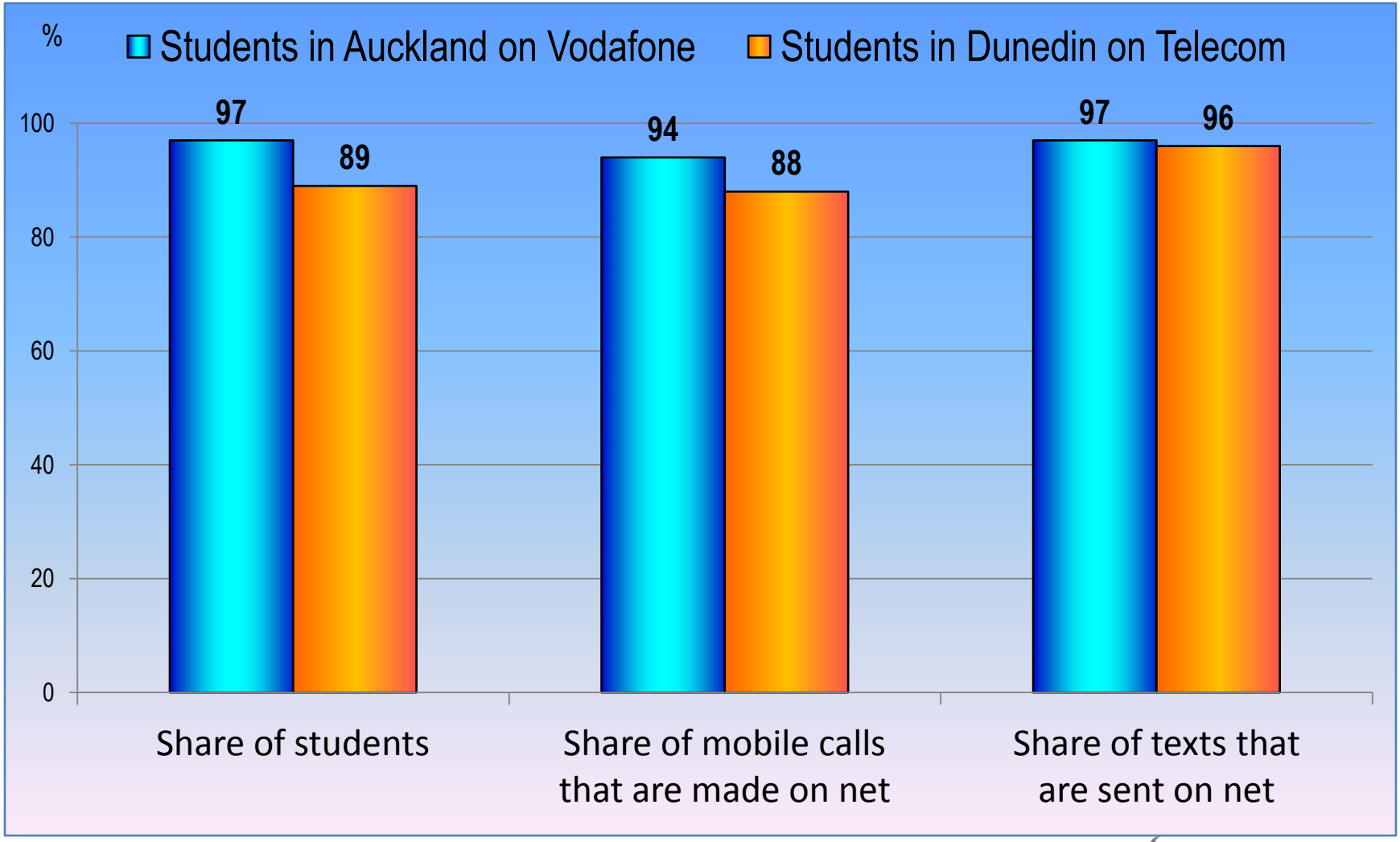
- **Market Share**
  - 97% of Auckland students covered by the survey are on the Vodafone network
  - 89% of Dunedin students covered by the survey are on the Telecom network

- **Share of Mobile Traffic that is On Net**

  Of the mobile traffic generated by students to other mobile phones, where the student knows the network provider of the recipient phone:

  - For Auckland students on Vodafone:
    - **94%** of their calls were made to another phone on the Vodafone network
    - **97%** of their texts were sent to another phone on the Vodafone network
  - For Dunedin students on Telecom:
    - **88%** of their calls were made to another phone on the Telecom network
    - **96%** of their texts were sent to another phone on the Telecom network

Each market has one dominant provider/traffic is essentially on net regardless of provider



Based on analysis of phone logs and registers of 120 Auckland and 120 Dunedin students' mobile phones. The last 10 calls made and 10 texts sent were analysed for each student.

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Key technical underpinnings

- Share of students is share of all students interviewed in each city
- Traffic share results (share of mobile calls made that are on net and share of texts that are sent on net) are based on total calls made/texts sent to other mobiles by students, where the student knows the recipient's network provider
- The numbers of calls made and texts sent that underlie the four traffic share results in the graph are 569, 454, 827 and 966 respectively. These numbers are of course very much larger than the numbers of students surveyed: this makes the traffic share results much more accurate and robust than a base simply of 120 students' phones in each location

Traffic share and number portability

- An alternative way to measure traffic share would be to base it only on the prefix of the recipient's phone. However that would not allow for number portability. Traffic share measurements based only on recipients' prefixes (which we do not recommend) differ from the traffic shares shown by no more than 1%
- Students very rarely call or send a text to a phone whose prefix is the same as their own, but the network provider different
- On the rare occasions when students call a phone with the rival network's prefix, they relatively often know the recipient is actually on their own network (i.e. has a ported number)

Related evidence of high on net traffic

- The high on net traffic by students for their *outgoing* calls and texts is strongly corroborated by the high proportions of their *incoming* calls and texts that are also on net. That is, those who call and text the students we interviewed were also very inclined to make their calls and send their texts on net. The base for these findings is very solid in that there were substantially more than 120 people in each city that called or texted the students we interviewed
- Further evidence pointing to high on net traffic comes from analysis of the contacts students store in their phones. Random sampling of 10 contacts in every student's phone shows that 89% of the mobile phone contacts in the phones of Auckland students on Vodafone were on net contacts. The equivalent figure for Dunedin students on Telecom is 88%