

# The Internet Market

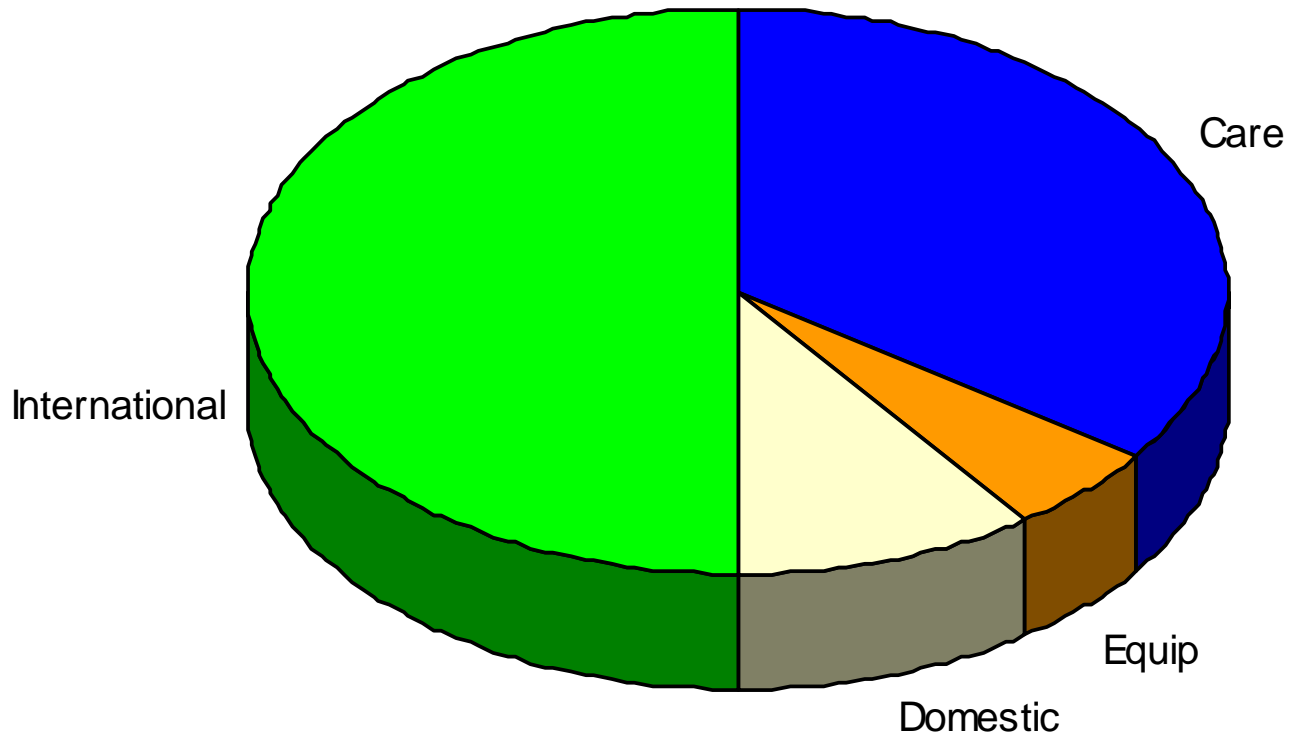
# ISP Economics

- ◆ The ISP business is a repackaging of carriage offerings, combining IT capabilities with data transmission services
- ◆ This is currently an overlay operation, and the economics of the ISP enterprise are strongly dependent on the costs of various carriage offerings
- ◆ Carriage costs are changing due to a combination of technology changes and deregulation of the carriage industry

# Current ISP Cost Profile

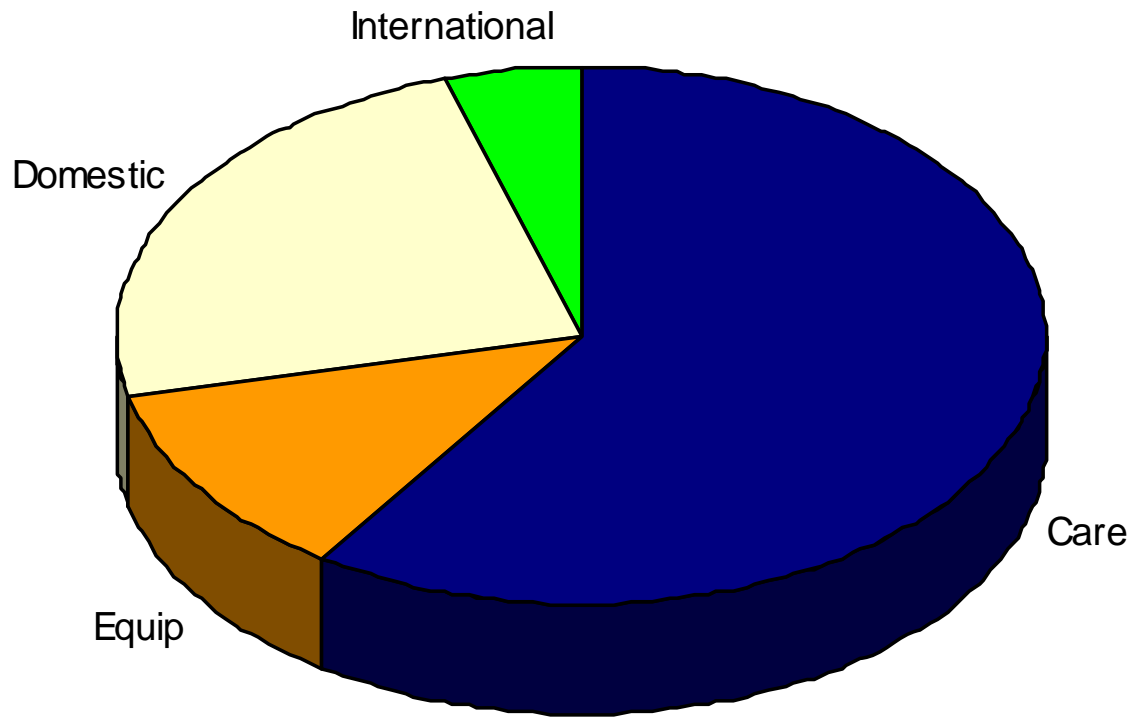
◆ customer care	35%
◆ capital equipment	5%
◆ domestic carriage	10%
◆ international carriage	50%

assumes an ISP operating in Australia with a SME customer profile



# Trends in Costs

- ◆ Offshore cable transmission costs will drop by a factor of up to 20
  - ◆ impact of Southern Cross and deregulation of international carriage
- ◆ Resultant cost profile:
  - ◆ customer care 60%
  - ◆ capital equipment 12%
  - ◆ domestic carriage 24%
  - ◆ international carriage 5%



# The Wholesale ISP Market

- ◆ There are two major wholesale market opportunities:
  - ◆ Resale of carriage services
    - ◆ point-to-point data services
    - ◆ 'upstream' ISP services
  - ◆ Local Loop Customer Access Services
    - ◆ PSTN access services
    - ◆ point-to-point data services
    - ◆ alternate media access

# Carriage Wholesale

- ◆ Declining unit value of IP carriage services
  - ◆ erosion of value-added premium data service market by 'no-frills' ISP carriage demands
  - ◆ low value add opportunity for wholesale operator
  - ◆ cross impacts on traditional high value business activities
  - ◆ negligible 'lock-in' component



# Access Services

- ◆ PSTN issues prevail today:
  - ◆ slow, complex, low margin,
  - ◆ structural cross-subsidies in the PSTN sustain financial opportunities for modem-access ISP enterprises
  - ◆ 'over' competitive? The resurgence of the "Free IUSP" is indicative of some degree of market skew

# Breaking out of the PSTN

- ◆ Broadband cable
  - ◆ high cost non-switched shared access medium
- ◆ DSL
  - ◆ high potential, but with wholesale access issues
- ◆ City LANs
  - ◆ gaining momentum as a 'neutral' high speed local access method
- ◆ Wireless Local Loop
  - ◆ CBD-based low cost high speed alternative technology

# Post-PSTN Alternative Access

- ◆ Unclear technology model
- ◆ Either:
  - ◆ 'neutral' common switched substrate with attached service providers
  - ◆ dedicated substrate linking access to service

# Current Issues

## ◆ Unbundling

- ◆ hybrid of point-to-point carriage and upstream ISP
- ◆ domestic only service
- ◆ international only service
- ◆ separate accounting of domestic and international carriage
- ◆ service-unbundled wholesale packet transit services
- ◆ per-application accounting
  - ◆ e.g.: web cache feeds usenet news feeds

# Current Issues

- ◆ Wholesale Service Quality
  - ◆ Resiliency and reliability
  - ◆ Engineering for robustness
  - ◆ Access to expertise for high resiliency customer services
  - ◆ Provider level of commitment to service quality
  - ◆ Service Level reporting and guarantees

# Current Issues

## ◆ ISP Futures

- ◆ ISPs are already largely squeezed out of the residential access market. A combination of economies of scale and extensive brand marketing has reduced the level of diversity in the residential ISP market to 5 major players, all using low margins and rely on a large customer base.
- ◆ The SME market is increasing in its levels of service requirements. Current focus is now on providing identifiable business benefits for the enterprise.

# Current Issues

- ◆ Better, Faster, Cheaper
  - ◆ DSL is the key technology for improved residential and SME services



# Current Issues

## ◆ Free ISPs

- ◆ Current wave of FreeNets are using plans of advertiser revenue to subsidize ISP operating costs
- ◆ Requires use captive browser for push advertising
- ◆ Is the radio and TV free to air model transportable to the Internet
  - ◆ It appears unlikely
- ◆ Is this a high profile market entry ploy for a longer term paid service?
  - ◆ Probably - the advertising economics do not appear to work in this



# Current Issues

- ◆ Australia a small market
- ◆ Telstra has as much market share as it willing to tolerate
  - ◆ High margins on retail invite lower margin competitive offerings
  - ◆ Poor service quality invites churn (the incompetence margin)