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 in 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)