

Broadband as Commodity: Hong Kong, China Internet Case Study



For brevity, Hong Kong Special Administrative Region of the People's Republic of China is referred to as Hong Kong in this presentation

Views expressed are those of the author and may not reflect opinion of ITU, its members or the government of the Hong Kong Special Administrative Region of the People's Republic of China

International Telecommunication Union



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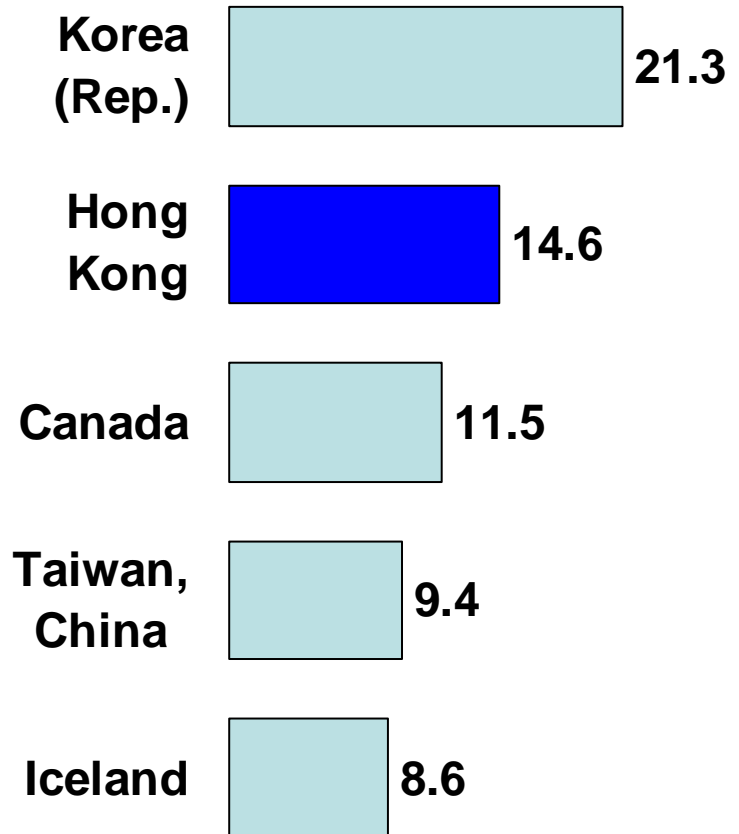
- Factors for Hong Kong's broadband success
- Broadband statistical analysis



Reasons for Hong Kong's success

- Geography
 - Essentially large city
 - 95% live in apartments
- Sophistication
 - On Internet over 11 years
 - 46% of 10+ population use Internet at least once a month
- Wealth
 - GDP per capita of US\$25'920 (12th highest in world)
- Competition
 - 15 broadband suppliers

Top five economies by broadband subscribers per 100 inhabitants, 2002

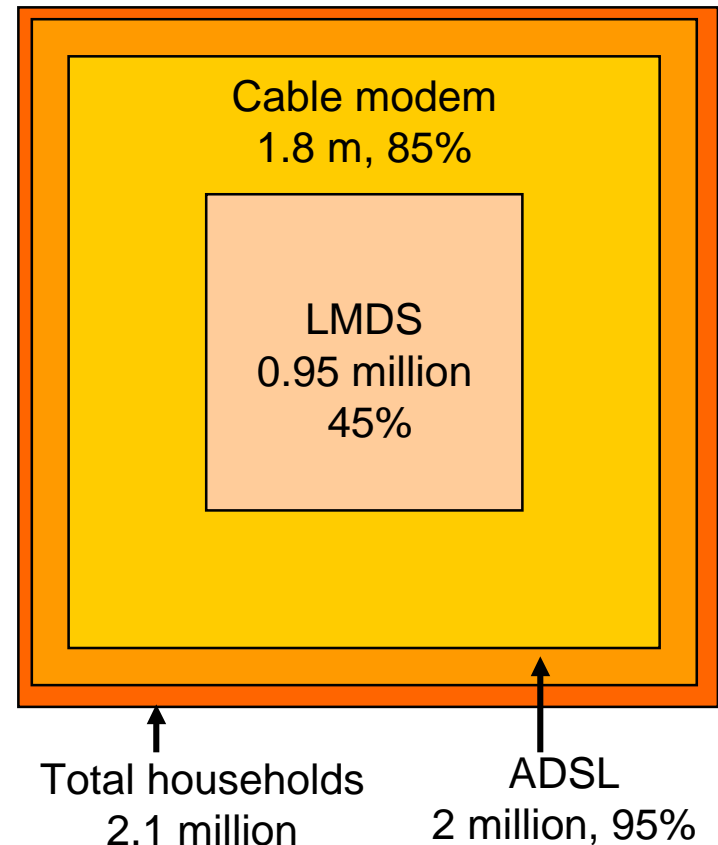


Source: ITU World Telecommunication Indicators Database.

Geography

- Small, compact size and fact that 95% of population lives in apartments makes Hong Kong easy to wire for communications
- As a result, high coverage for availability of broadband services

Broadband coverage, Hong Kong, June 2002

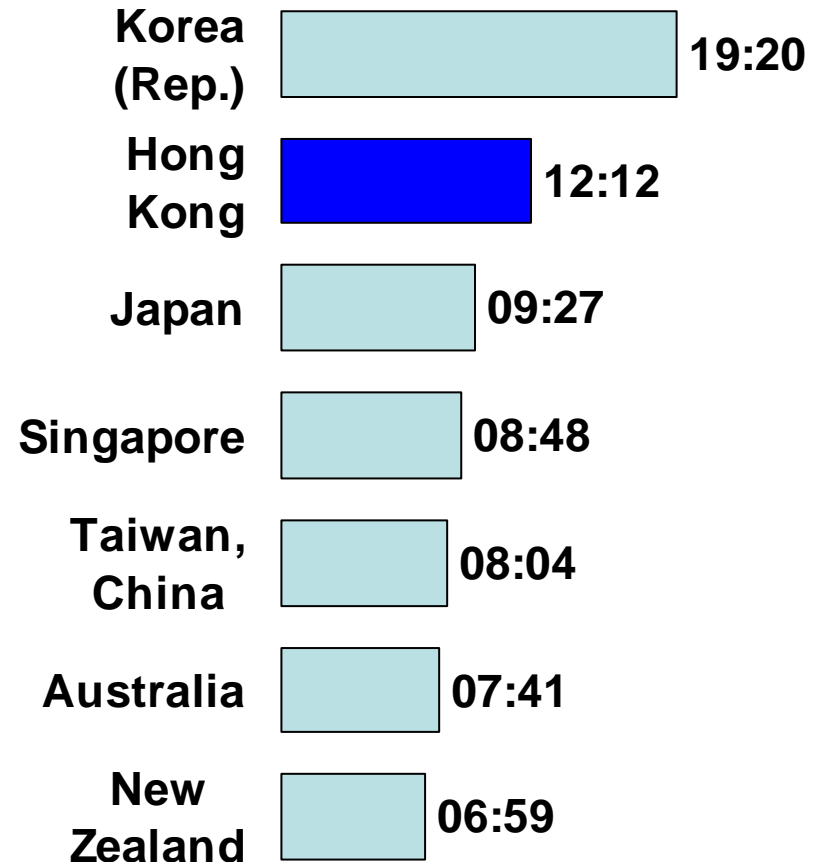




Sophistication

- Online since 1991
- Among most intense Internet users in world
- This drives demand for high-speed access
- One of first economies to launch broadband in May 1998.
- Biggest reason for broadband demand appears to be convenience (no need for 2nd telephone line, always on) rather than sophistication of applications

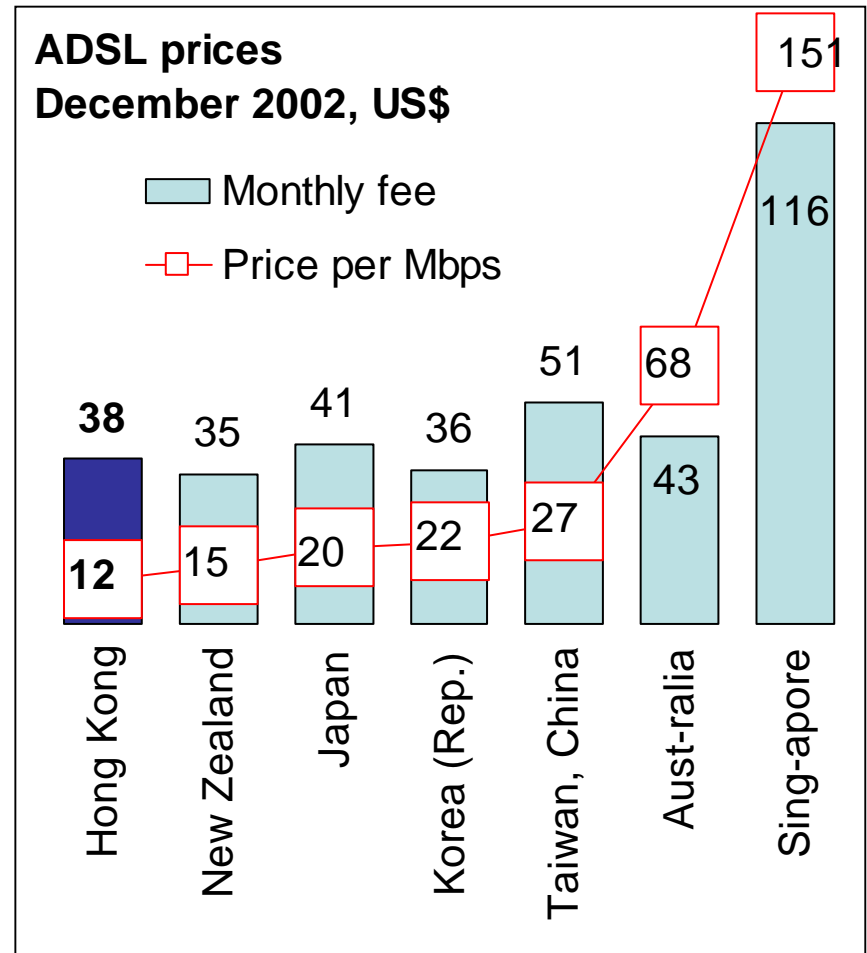
Hours of Internet use per month, July 2000



Source: ITU adapted from Nielsen//NetRatings.

Wealth

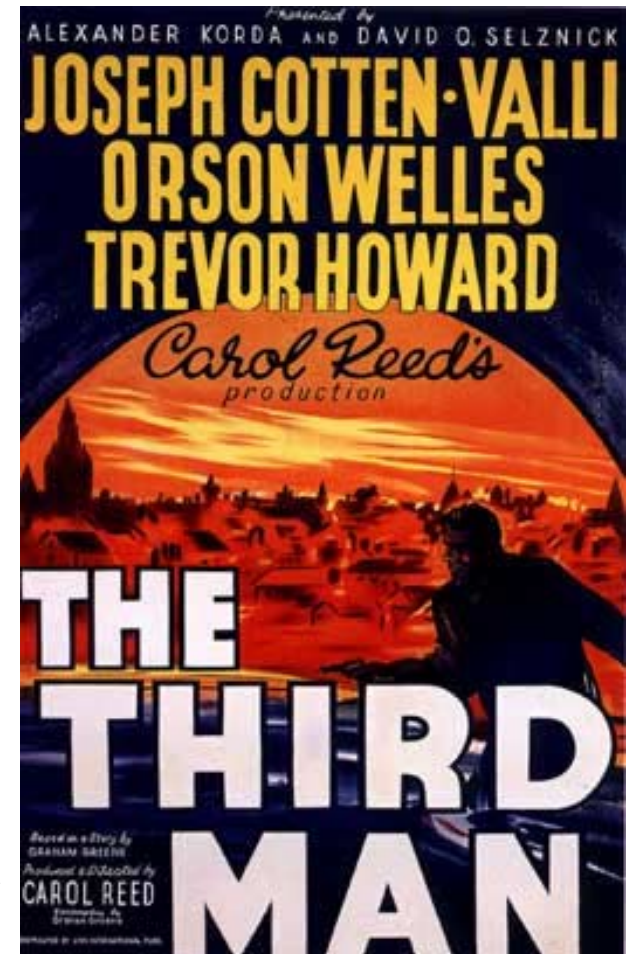
- Relatively affluent
- Majority can afford a broadband subscription
- Broadband pricing lowest in region
- Broadband mainly seen as substitute for 2nd line
- Free local calls but not Internet dial-up



Source: ITU adapted from company reports.

Competition

- Regulation
 - Local loop unbundling mandated
 - Regulator ready to act if market negotiations fail
 - Fixed line incumbent has 24% wholesale DSL lines compared to EU average of 16%
- Variety of operators and technologies
 - Technologies
 - DSL
 - Cable modem
 - Fixed wireless / LAN
 - Fibre optic
 - WLAN (> 1'600 hotspots)
 - 15 Providers
 - 4 fixed
 - 5 fixed wireless
 - 1 cable TV
 - 5 ISP resellers



Often seems to be a third player that has an impact on broadband. **Hong Kong Broadband Network** is *The Third Man*. Using fixed wireless to interconnect buildings; Ethernet wiring within buildings



Broadband as a commodity

It is unlikely that there is this degree of broadband competition anywhere else in the world. There are 15 retail broadband providers in Hong Kong, resulting in intense competition for potential customers.

As one broadband provider notes: “Competition is expected to be keener this year as the marketplace approaches *commoditisation*.” This commoditisation is reflected in stands set up in the street to hawk broadband Internet access as if it was apples or oranges. In order to entice potential users, providers offer everything from toasters to stereo equipment. In Hong Kong, broadband is no longer perceived as a luxury but a mass-market product. More work is needed to develop broadband applications and to entice users to use them.

Once that happens, then Hong Kong will have transitioned from a broadband market to a broadband society.



*“Hawkers” selling broadband access.
Wanchai Computer Centre, Hong Kong
December 2002*



Statistical analysis

Census and Statistics Department
Hong Kong SAR People's Republic of China



MARKET DEMAND

- Households
 - With PC
 - With Internet access
 - With broadband subscription
- Broadband coverage
- Price of broadband subscription

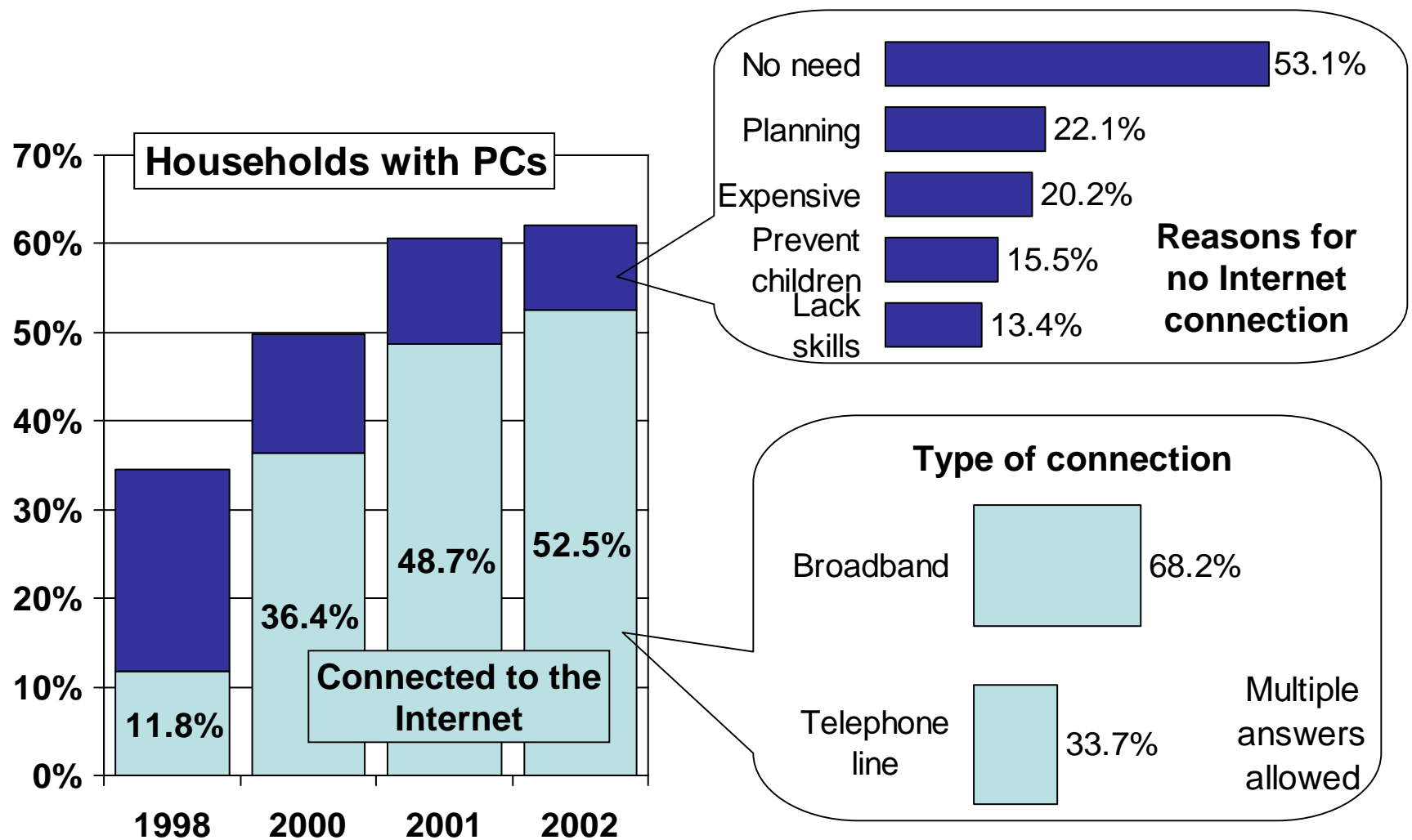
+ operator reports

BROADBAND ANALYSIS

- Total broadband subscribers
 - By subscriber:
 - Residential subscribers
 - Business subscribers
 - By technology
 - DSL
 - Cable modem
 - Other
- Total Internet subscribers



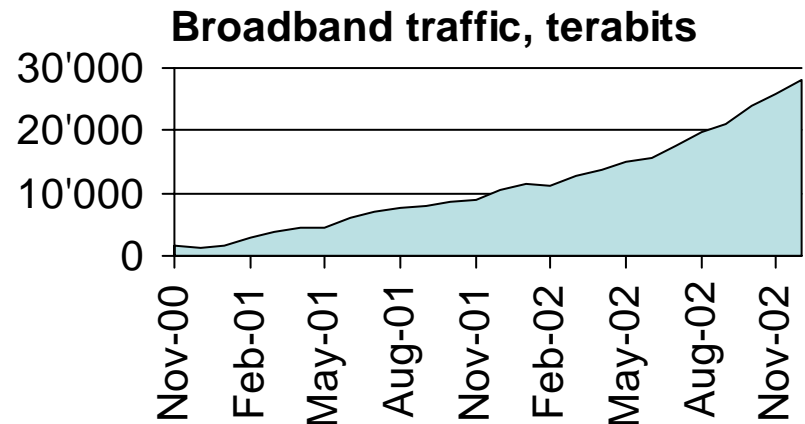
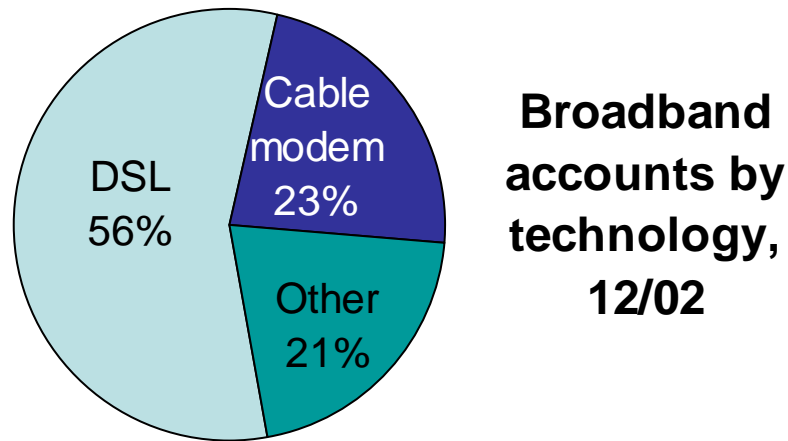
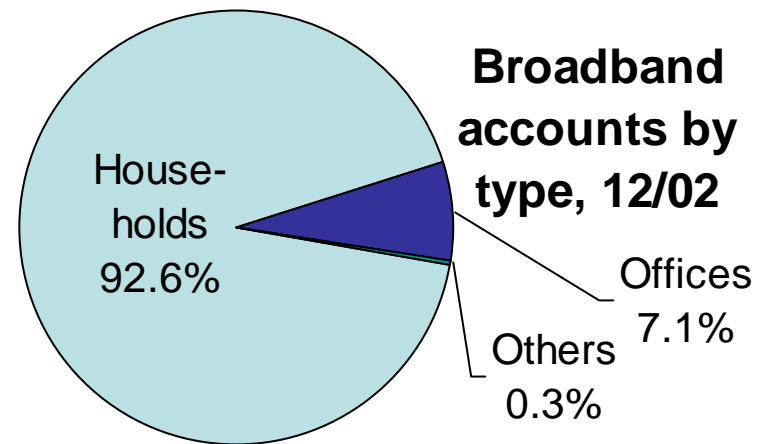
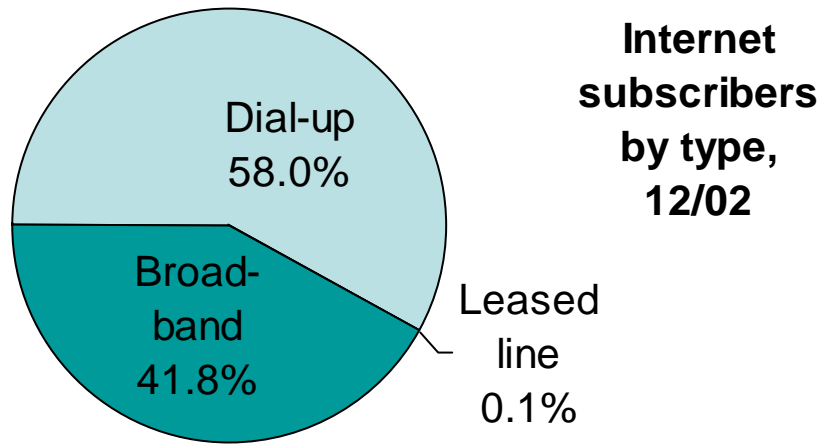
Demand analysis



Source: ITU adapted from Census & Statistics Department, "Thematic Household Survey Report No. 10, Information Technology Usage and Penetration".



Broadband analysis



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