The 3 Digital Divides
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Figure 2.5 Rates of travel from New York, 1800. From Alfred D. Chandler, Jr., The Visible Hand: The Managerial Revolution in American Business (Cambridge, Mass.: Harvard University Press, 1977), 55.

Figure 2.6 Rates of travel from New York, 1857. From Alfred D. Chandler, Jr., The Visible Hand: The Managerial Revolution in American Business (Cambridge, Mass.: Harvard University Press, 1977), 55.

http://madeincumbria.co.uk/coldir/kendal.htm
But the real digital divide issue is in the developing world. That gap will retard economic development. It will also inevitably lead to international trade conflicts.
• It is important to distinguish between three kinds of gaps

3 kinds of digital gaps:
• The 1st gap is telecommunications connectivity.
  – That gap is being fixed by investment and policy reform.
  – Telephone penetration in developing countries has improved
  – Will prove to be the easy part

• The 2nd gap is for Internet access. In 1999, only 3% of Internet computer hosts were in non-OECD countries.
  • Progress is being made.
    – Latin American > 50% CAGR
  • But this, too, is the easy part

The Simputer, $190

• Encourage flat rate pricing on local calls.

• 1st world does not stand still
  • Now, residential broadband connections for Internet, raising speed by 30x.
• This upgrade is expensive, and LDCs (and some Europeans), even as they catch up with narrowband networks, are about to fall behind in broadband.
• Even so, closing the Internet gap will prove to be the easy part.

The 3rd Gap is in E-Commerce and E-content

Developing World
• 5% of world commercial websites
• 2.4% of world internet commerce revenues

The Myth: E-commerce enables easy entry

The Reality
• E-commerce is harder than traditional business, not easier
• Economies of scale larger
• Entry barriers will become higher
• Especially hard for LDCs to compete and close the e-commerce gap

3rd Gap, is E-commerce
• Hardest to overcome
• General societal modernization
  – Business system
  – Legal arrangements
  – Funding system
  – Logistics
  – Infrastructure
  – Education
Dynamics of Global E-commerce

• 3 Factors:
  1. The price of international transmission is dropping rapidly.
  2. Domestic Internet penetrations are increasing rapidly in LDCs
  3. Most e-commerce applications have economies of scale.

• Fixed costs are high, variable cost very low. This gives an advantage to being first and large.
• The implications are that e-commerce will be dominated by firms from the US and other electronically advanced countries.

• What counts are not absolute cost reductions, but relative cost reductions relative advantage of e-commerce go to advanced countries

• Overcoming the first and second gaps will exacerbate the third gap.
  – It opens the electronic highways to homes and offices.
  – To avoid a one-way flow, need to build e-commerce with priority

A successful E-commerce policy must address “16 C”s

• Connectivity
• Capacity
• Critical mass by government
• Commerce priority
• Commercial law
• Cultural proximity
• Cross-border tele-working
• Customs, logistics, and taxes

• Credit system and investment
• Credit Cards
• Control and regulation
• Copyrights and patents
• Consumer protection
• Content
• Community creation
• Colleges and schools
• These and similar initiatives are urgently needed, because LDCs are losing the protection of distance

Anti-WTO Protesters

• Challenge to developing countries to move beyond the first gap, that of telecommunications, by overcoming its policy squabbles,
• To close the second gap, that of the Internet
• And to focus on the 3rd gap, that of e-commerce

The Myth:
E-commerce enables easy entry

End of Presentation
Thank you.