

THE TELEPHONE'S SECOND CHANCE

Article summary

Telephone companies have long envied the profits cable-television firms make by delivering television programmes into homes. But this was a business that seemed impossible for them to enter. Most telephone networks run on twisted copper wires. Even the fastest modems, signals on these wires were interrupted by too much noise to carry much more than still pictures and text.

The trick is to use fast computer chips called digital signal processors to test each line constantly and then a tailor the data to travel only over the frequencies that are clearest at any time. With such a chip on each end of line telephone companies found they could increase the capacity of their old wires thousands of times-enough to deliver high quality video pictures. Many firms, notably Bell Atlantic in America and BT in Britain, bought these boxes called asymmetric digital subscriber line (ADSL) modems, to try their hand at the media mania of the moment, interactive television. But subscribers turned out to be a lot less interested in this than the telephone companies were. Trials suggested that they would not pay enough to cover the cost of the expensive equipment. ADSL looked like another technology that cost too much and offered too little. Recently two things have rekindled ADSL's flame. First, in America, Congress has opened the local telephone markets to competition, confronting Bell Atlantic & co. The second change is the rise of the Internet. Consumers may not have been wowed by interactive television, but it seems that they cannot get enough of the Internet. The telephone companies reckon that many people would pay a lot for high-speed Internet access. Five of America's Bell companies have all announced trials using ADSL to deliver high speed Internet access.

ADSL is ideal for providing high-speed Internet access to consumers in many other respects. ADSL modems are permanently connected, eliminating trial some delays. ADSL bypasses all that with a direct digital connection, keeping prices down for both customers and the telephone companies.

For ADSL to become the favoured Internet-access technology, the telephone companies may have to change their ways. Their decades-old monopoly of voice technology has endowed them with not lots of money but also with slothful habits. They have done almost nothing for example, to market a slower digital technology called ISDN despite having spent billions to upgrade their networks to support it.

Unless they are to repeat that mistake with ADSL, they will need to order enough ADSL modems to push the price down, while marketing the service hard enough to find takers for them. There are, after all, plenty of rival technologies competing to deliver the Internet to masses: including cable modems, satellites and wireless.

Unknown words

1. to tailor (v) - to make or prepare (something) following particular instructions
2. asymmetric (adj) - with two halves, sides or parts which are not exactly the same in shape and size; without symmetry
3. ADSL (n) - specialized abbreviation for asymmetric digital subscriber line: a system for providing a very fast Internet connection that allows you to use a telephone at the same time
4. to confront – (v) - to face, meet or deal with (a difficult situation or person)
5. slothful (adj) - unwilling to work or make any effort
6. to swamp (v) - to cause something no longer to be able to operate.
7. to upgrade (v) - to improve the quality or usefulness of (something, such as a machine or a computer program), or give (a person) a more important job or state that (their job) is more important than it was in the past
8. to endow (v) - to give money to pay for creating, or for providing an income for, (a college, hospital, etc.)
9. to hog (v) - someone who takes much more than a fair share of something, esp. by eating too much
10. wowed (adj) - very successful, attractive or pleasant
11. pitfall (n) - an unexpected difficulty
12. respect (n) - a particular feature or detail
13. flexible (adj) - able to change or be changed easily according to the situation
14. frequency (n) - the number of times that a wave, esp. a sound or radio wave, is produced within a particular period, esp. one second
15. mass (n) - having an effect on or involving a large number of people or forming a large amount
16. to revenue (v) - the income that a government or company receives regularly
17. chip (n) - a very small piece of semiconductor, esp. in a computer, that contains extremely small electronic circuits and devices and can perform particular operations

18. trial (n) - a test, usually over a limited period of time, to discover how effective or suitable something or someone is
19. to reckon (v) - to think or believe
20. interactive (adj) - a computer program which is interactive is designed to involve the user in the exchange of information while the computer is in operation.