



'India model' is our only solution to penetrate Broadband in Indian market

Information technology has deeply integrated itself in our physical environment and transformed the way we lead our lives. The growth of the Internet over the years has been tremendous in India. In a world of changing needs, accelerating pace, advancing technology and shrinking distances, the Internet is becoming integral to communication, entertainment and information.

In the emerging era of the Internet, three things that will bring dramatic change to the way we use Internet are:

Convergence

Convergence of technologies has made it technically possible to deliver voice, data and video services to a subscriber through the same network. Convergence has united the traditionally discrete telecommunications, broadcasting, and networking sectors. The Internet is going broadband and television is going interactive.

The emergence of adaptive technology like speech recognition, gesture recognition, text-to-speech conversion, language translation, and sensory immersion will change the very substance of network-enhanced human communication.

Of late, there has been an increase in the number of Internet application devices that can run anything from smart refrigerators to networked laundry machines. In the near future, emergence of multiple Internet appliances in the home will drive the need for home networks.

Mobility

Cellular phones, personal digital assistants (PDAs) and laptops computers are what we usually refer to as mobile information technology. Cellular phones have been globally adapted and although the network standards differ between the continents, it is possible to keep in touch with co-workers, friends and the rest of the world regardless of where you are - both via voice and SMS. PDAs have been widely accepted ever since the handwriting recognition technique and other input techniques proved sufficient. Handheld devices are increasingly powerful and equipped with color screens, speakers, microphones and networking capabilities.

Laptops continue to lose weight and the interface is sufficient with large screens and full size keyboards. They are close to as powerful as stationary computers, and most importantly, they are mobile.

The comparison between the developments of mobile devices is as rapid as it is interesting. PDAs are converging with cellular phones and now host phone functionality. Phones are equipped with e-mail, calendars and word-processing much like laptop computers and PDAs. Laptops get more sophisticated communication functionality, e.g. wireless local networks (WLAN) and different types of modems. Obviously different handheld technologies inherit features from each other to represent different appliances in one multi functionality and multi channel device.

The rapidly increasing penetration of sophisticated mobile IT into society, and the demands users make on that technology, indicates that a new research area of 'mobile media' is emerging.

Content

Powerful computers and better connectivity have resulted in increased flow of content across networks. With broadband bringing good speed of access, the market is moving towards services that involve high bandwidth Internet usage such as gaming, entertainment, video streaming and others.

Content is key to how internet will take shape in future as it provides services such as movies, music, voice, etc in a single device. Integration with other devices on the network is important for they must work with the PC, TV, printer, camera and all the other devices that users want to attach to the network.

The Internet is a virtual encyclopaedia for people looking for information. In addition, Internet has replaced traditional methods of governing (e-governance), banking (net-banking) and doing business (e-commerce). The conventional concept that physical form is a must for business has been replaced by the virtual world.

Way forward - Internet penetration

In today's scenario, 'India model' is our only solution to penetrate broadband in Indian market. We need to widen our horizon from 42 million telecom subscribers to 120 million TV homes. Today TV has been able to penetrate to such an extent because there is no market regulation and same is required for broadband business.

Hybrid technology is the need of the hour. Government subsidy to the hybrid players would help in taking the Internet to masses. Government spends in thousands to provide a broadband connection. If the same amount can be invested in hybrid technologies such as cable and wireless, the penetration shall be better.

The investment needs to be towards:

- PC Sharing models for villages
- Thin client concepts for corporative societies
- Switches for ensuring quality over cable last mile

Spectrum is a scarce resource and should be allocated to technologies which will enable broadband penetration beyond the 42 million telecom homes.



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