



Bridging the Digital Gap: The Mobile Way

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Understanding Digital Divide

- Digital Divide : A gap between those able to benefit from ICT and those who cannot.

Gap Between **'Have' and 'Have Not'** ----- Not just ICT accessories But **Life Style**



Why should it be Bridged ?

- Bringing 'Means of living' in 'Life'
- Social Responsibility
- Economic Reasons
- Investing in Human Resources for better tomorrow

Bridging it : Does it make business sense?

- Yes, It does.
- Focus on 'Bottom of Pyramid'.
- Growth in Eco-System leading to new opportunities
- High volume, low margin - sustainable



Causes of Digital Divide

- **Economic Factors:** Digital divide has been attributed most commonly to socio-economic factors. Financial factors contribute significantly to the ICT deficit for lower socio-economic group.
- **Technological Factors:** Deploying traditional wired infrastructures in remote, sparsely populated areas has been commercially unfeasible and has created a huge financial barrier to getting these communities connected to the Internet.
- **Ability Gap:** A community's inability to use ICT effectively also contributes to the digital divide. Causes for this "ability gap" include **differing levels of literacy and technical skills.**
- **Socio-Cultural Factors:** Location, age, culture, and background significantly influence the likelihood that users will embrace ICT.

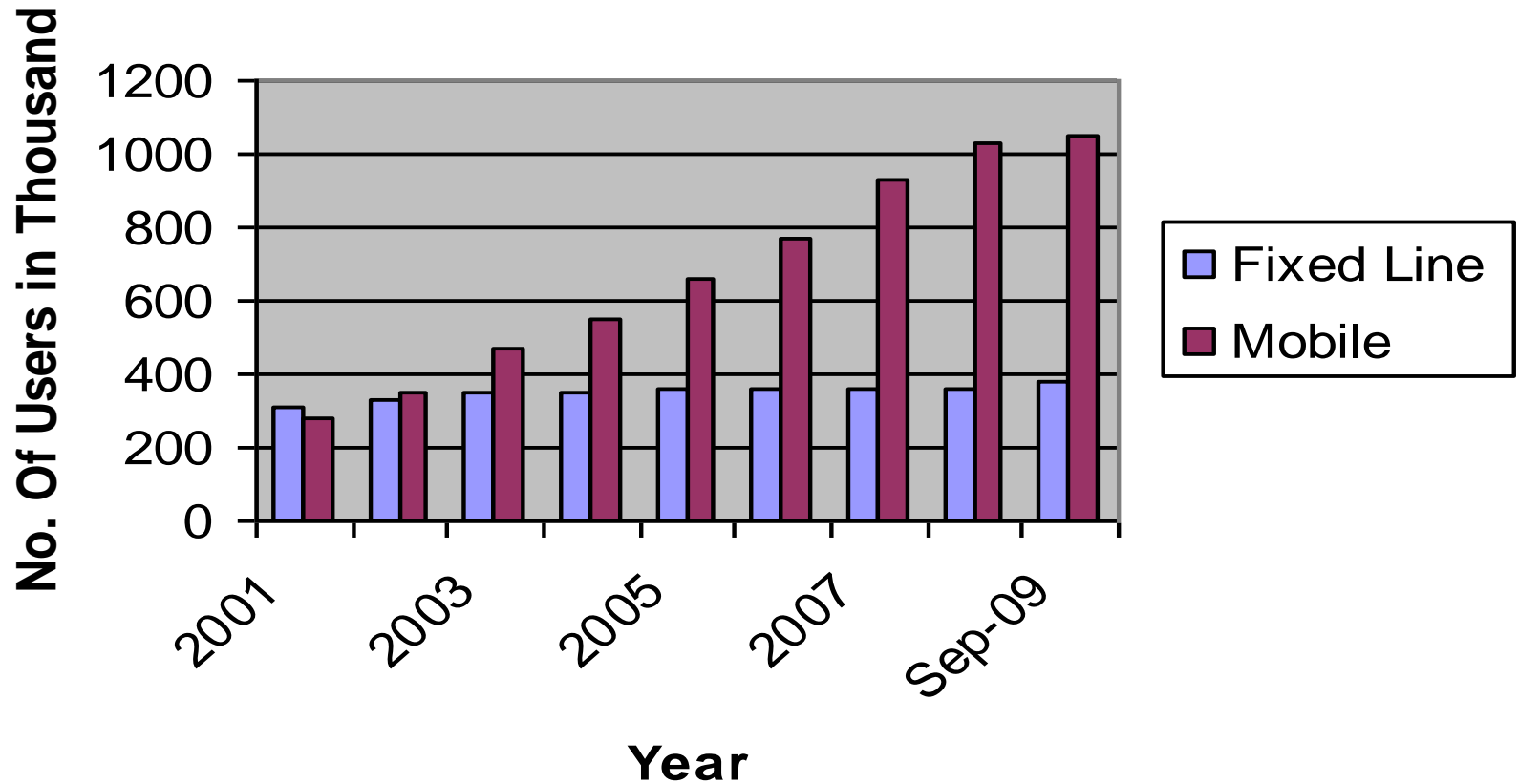


Present Status of ICT Infrastructure

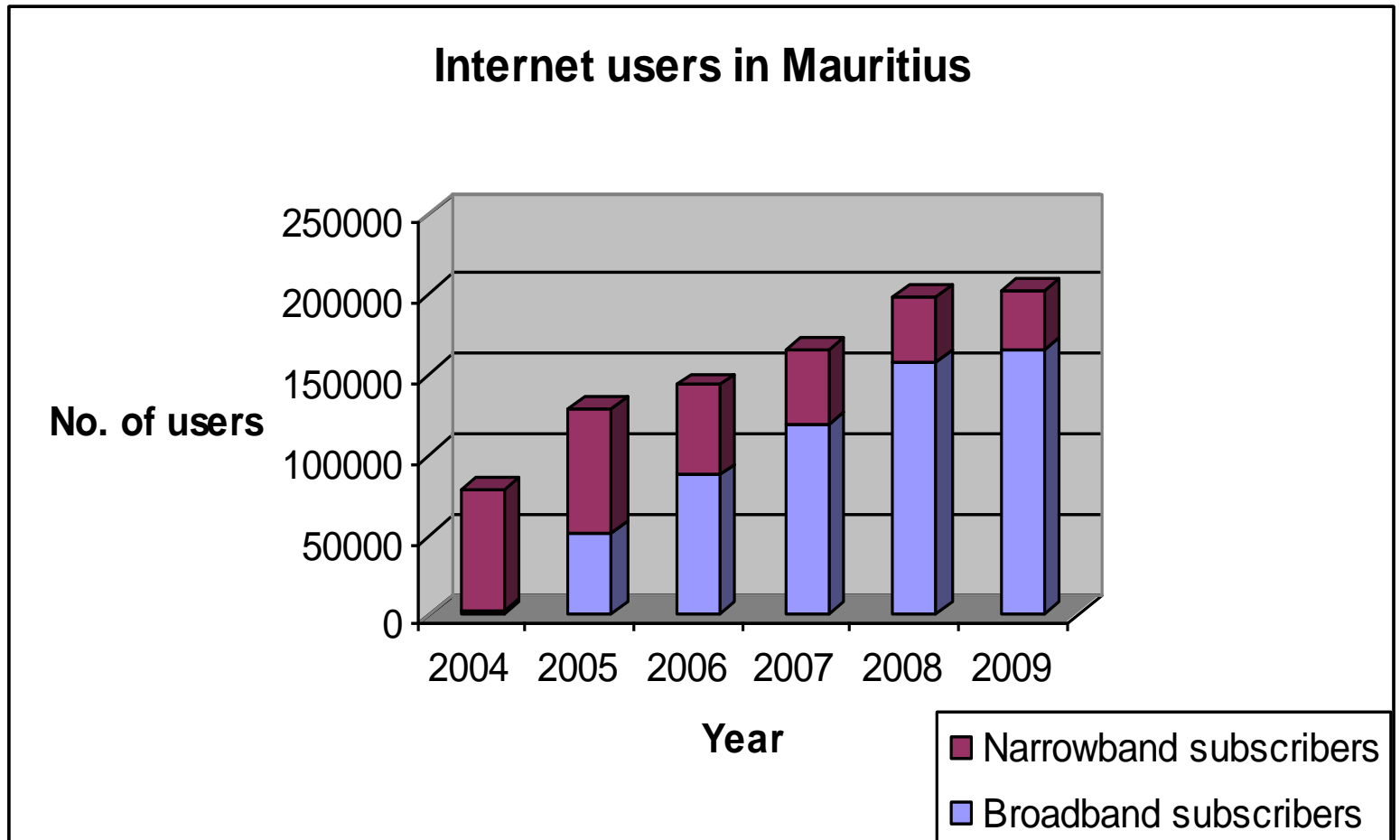
- Significant Growth in various fields
- Exponential growth in Mobiles

Mobile revolution in Country

Fixed Line Vs. Mobile Users

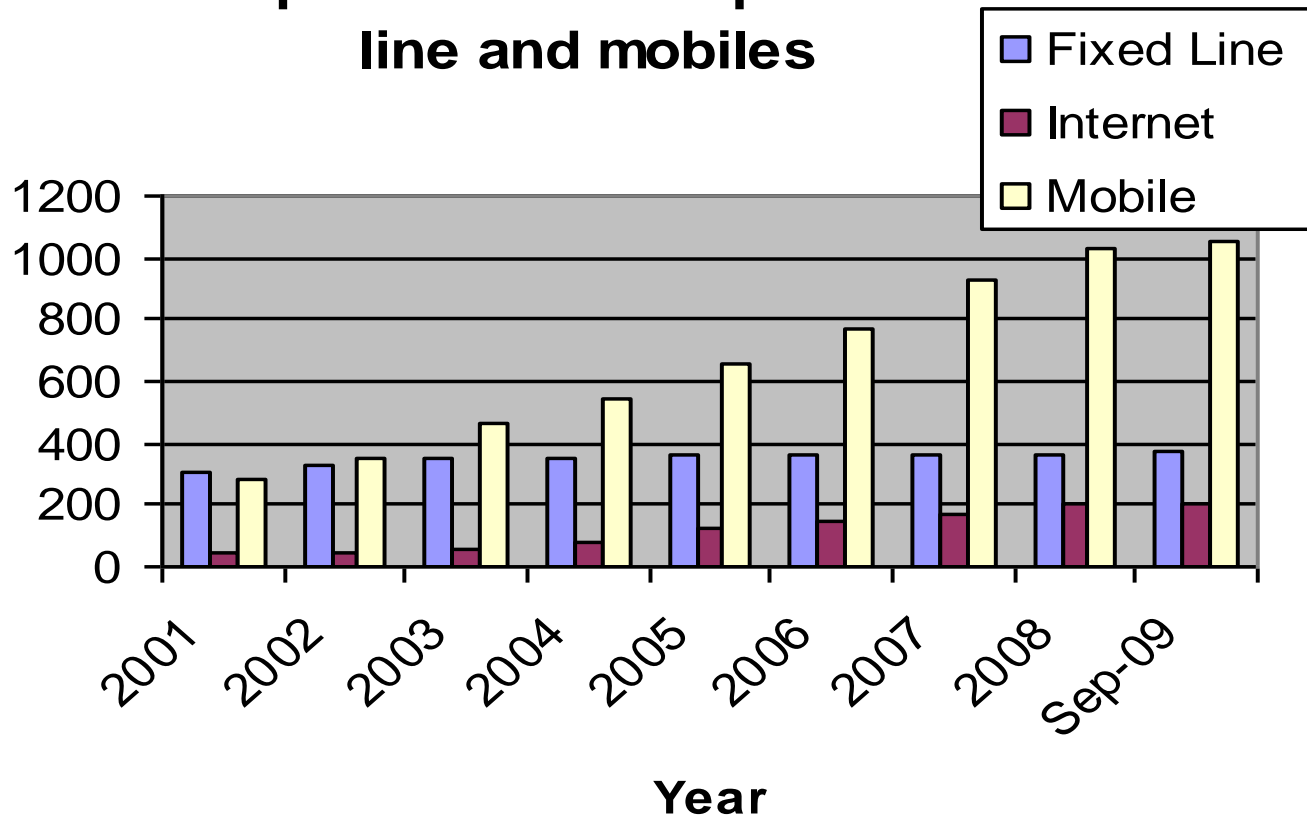


Internet Growth



Internet penetration compared to Fixed line and mobiles

no. of subscribers in
thousand





Bridging the Gap : Why Wireless?

- Landline penetration is limited
- Fast Deployment of wireless
- Cost effective services
- Overcoming the challenges of terrain
- Easy understandable devices
- Reach of mobiles
- Technological Revolution in Wireless Broadband – **2G, 3G, 4G and still counting**



Options Available

- GPRS/ EDGE
- HSDPA/ HSPA
- EVDO Rev A/ B
- WiMax
- Wi-Fi



Not just Technology

- Building Highway is not sufficient
- We need Vehicles
- And a Desirable Destination
- People want services not technology
- Need to develop content/
applications

What Applications?: Some Examples

- **KHETI Project :**

- The Knowledge Help Extension Technology Initiative (Kheti) is a project of UK-based Sheffield Hallam University. Kheti offers a mobile phone-based agriculture advice service in India:

- Farmers take six photographs of an ailing crop,
- Record a short audio explanation
- Upload this information to a website where
- Experts offer advice.

Examples ... contd

- **ITC e-Chaupal in India:**
- Computer is installed in a farmers house.
- Connectivity through VSAT.
- Serves an average 600 farmers in 10 surrounding villages in 5Km radius.
- Farmers can use it for
 - Tracking daily closing prices in local mandis.
 - Information regarding new farming techniques.
 - To order seeds, fertilizers and consumer goods.

Example contd

- E-Learning :

- Online books available
- Live tutorials/ classes
- Any information on finger tips



Examples ... contd.

- Tele-medicine – Pan African Project
- Cattle Management
- Natural calamities warning systems

MTML's Efforts for bridging the Digital Gap

- CDMA EVDO Upgradation/
Expansion to whole country
- Affordable Terminals/ services
- Bundling with Computers/
Subsidizing the cost
- Tie up with content providers for
value services




Challenges

- Internet Bandwidth
 - Cost
 - Availability/Redundancy
- Last mile connectivity
- Infrastructure Cost
- Fast Changing Technology
- Computer/PDA Cost
- Content Availability

What needs to be done?

- Rationalizing IP Bandwidth Cost
- Sharing of Local fibre infra
- Sharing of Tower and other infrastructure
- Subsidizing PCs/ handheld internet devices to less privileged
- Developing e-applications



Together We can Bridge this
Gap --- Much sooner than
expected



THANK YOU