## Realizing Wireless Broadband

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#### Wireless Broadband: the Future

- Wireless vs. wired:
  - Freedom for roaming and mobility
  - Personal vs. location
  - Cheaper for coverage
- Broadband vs. narrow band:
  - Broadband (VVD) >> narrow band (voice only)
  - Broadband cheaper: fiber cheaper than copper

Thus, wireless broadband is the best.

### 3G/LTE/4G: Bottleneck

- Limited spectrum
- Limited bandwidth
- Cannot support large scale Internet application / traffic
- Expensive equipment and infrastructure
- Few affordable broadband application and little usage
- All 3G operators loosing money (except NTT DoCoMo)

#### Reason and Solution

#### Wireless not equal to mobility

- 3G/LTE/4G: mixing mobility with wireless
- Expensive, difficult

# Solution: stationary/roaming wireless broadband

- Over 90% broadband users stationary
- Especially important for developing countries

### The Internet Spirit

Of the people,

By the people,

For the people.

### Network Strategy

door coverage: KEY

l capacity (no additional cost)

tdoor coverage

uare kilometers: 3,000 hotspots

3M (at \$1,000 each)

or landline operators

nge coverage / trunking: fixed

X (802.16d)

nsive