Satellite Broadband as Backhaul for Digital Inclusion Initiatives

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Michael Calabrese
Director, Wireless Future
Open Technology Institute at New America

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Satellite Broadband:
The Digital Inclusion Opportunity

- **LEOs & MEOs:** Increasingly cost-effective broadband backhaul in virtually any location
  - **Trending:** More satellites, More capacity, Lower latency

- **Anchor Use Case:** Backhaul to extend rural mobile cellular coverage
  - Vanu, Africa Mobile Networks, Herotel, et. al

- **Anchor Institutions:** Backhaul to expand public-purpose fixed broadband access
  - Including free & low-cost paygo public Wi-Fi

The Satellite Backhaul Recipe for Public Interest Connectivity

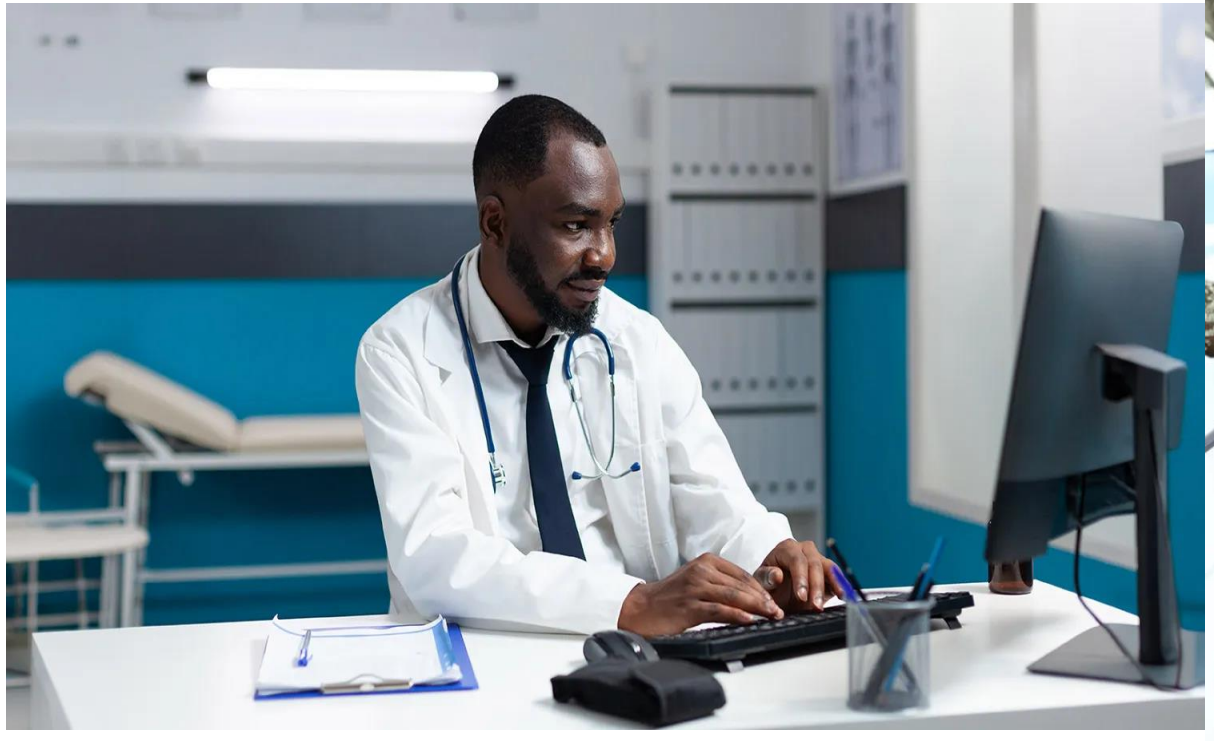
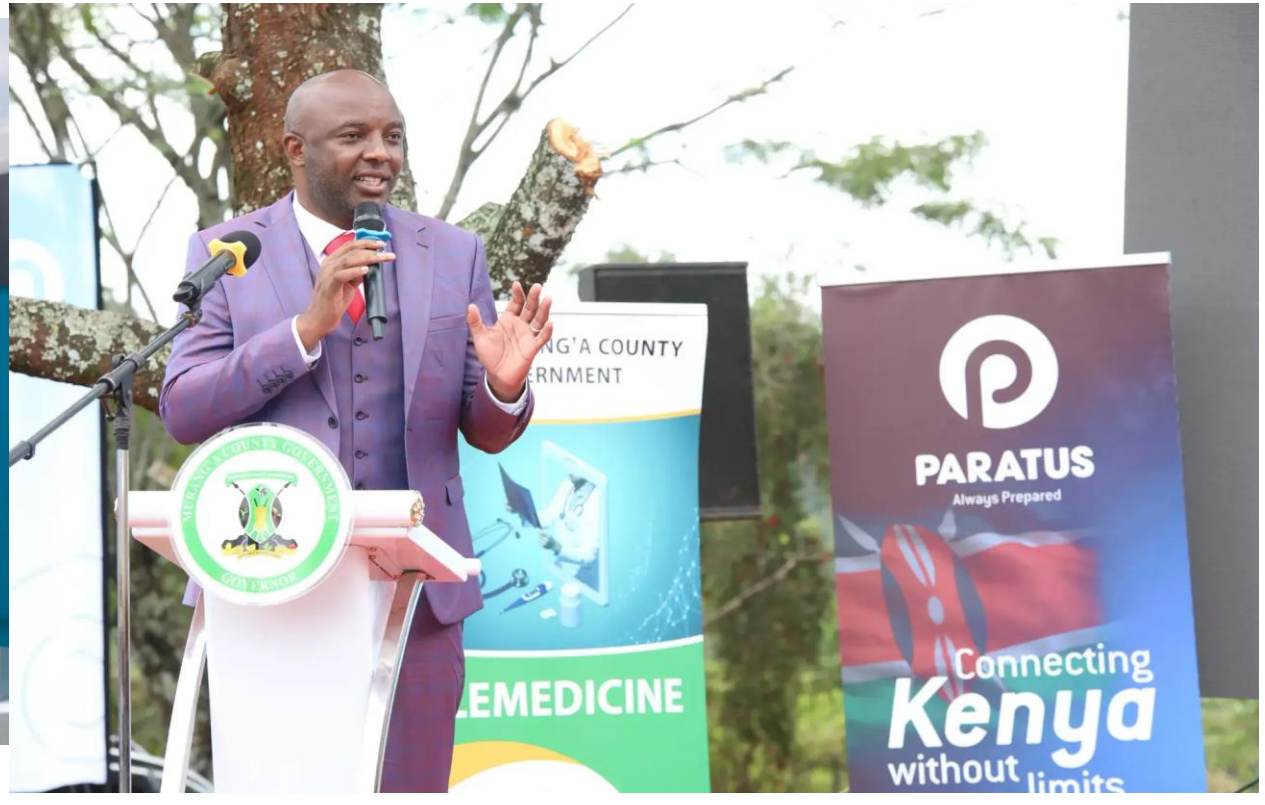
- **Successful models typically combine:**
  - a public or non-profit anchor institution;
  - a wholesale or enterprise plan; and
  - a sustainable way to pay the ongoing monthly fee
- **Sustainability is difficult, but can be achieved via:**
  - Government subsidies
  - Licensing conditions and/or
  - Fees to local operator/ISP
    - e.g., from low-cost, low-friction pre-paid public access

Connecting Rural & Remote Schools

- **Ghana: Links Across Borders**
  - 85 remote schools, 22,000 students connected
- **Kenya: Karibu Connect**
  - Connecting rural technical colleges
- **Brazil: Viasat Community Connectivity**
  - Free Internet/hotspots >1,000 remote schools

Connecting Communities

- **Malawi: Fast Networks**
  - Sustainability for schools via public access to low-cost Wi-Fi
- **Philippines: DICT Free Wi-Fi for All**
  - PIALEOS initiative to backhaul Wi-Fi to 5,775 schools, tourist sites, public markets, etc.
- **Somalia: Flexiconnect Mogadishu**
  - Backhaul for community wireless network for low-cost Wi-Fi on pay-go basis

Rural Health Care & Telemedicine

- **Kenya: Muranga'a County Telemedicine**
  - Linking rural clinics & local access points to central telemedicine hub & e-records
- **Indonesia: Community Health Centers**
  - Connecting 2,200 puskesmas (community health clinics) in rural/remote areas
- **Zambia: SmartCare Digital Health Network**
  - Connecting 600 rural/remote health facilities to national digital health network