

# **Bridging the Connectivity Divide from an Applications Perspective**

*Experiences, Challenges, Opportunities*

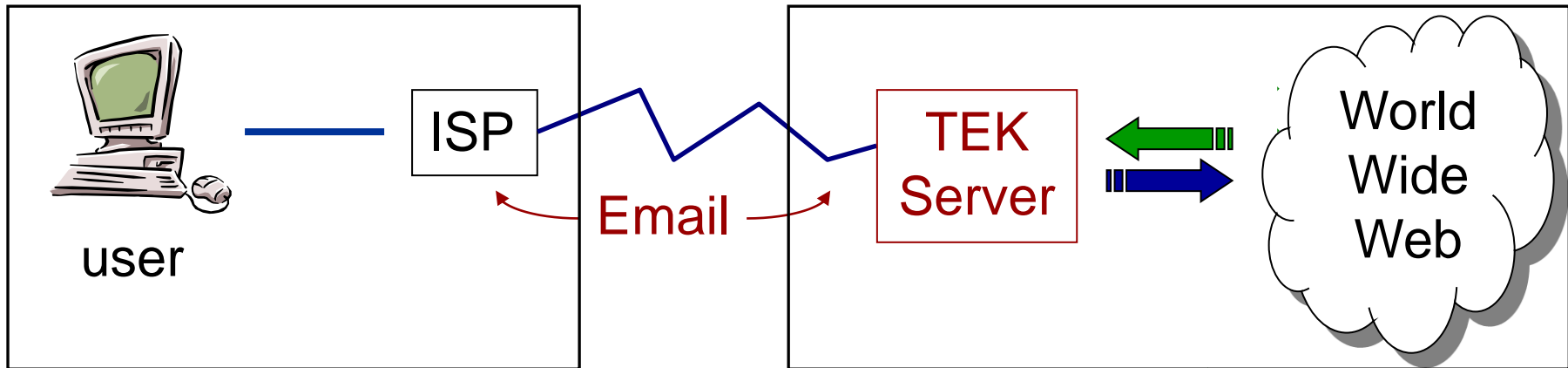
**Bill Thies**

Microsoft Research India

COMSNETS 2011

# TEK: Browsing the Web via Email

*with Saman Amarasinghe, Libby Levison, and many contributors from MIT*



- **Widely deployed with moderate impact**
  - 10,000 searches from 500 users in 40 countries
  - Enabled first Web access for Solomon Islands
- **Lessons learned**
  - Beware of technology inflection points (email → webmail)
  - Web is missing locally-relevant content

# Enabling User-Generated Content in Rural Areas

- **Approach: Interactive Voice Portals**



*Citizen Journalist in Chhattisgarh*

*First instantiation:*

**CGNet Swara:**

**A portal for citizen news journalism**

- “Press 1 to record, or 2 to playback”
- Posts available via Web and phone

**Recent milestones:**

- 15,000 calls and 450 published reports since Feb 2010
- Anecdotal impact on the political process

**Potential to create rich, scalable audio communities**

# Opportunities and Challenges



- **Opportunities**
  - Leverage entertainment
  - Leverage peer-to-peer
  - Leverage humans
- **Challenges**
  - Manage metered bandwidth
  - Find killer apps



# Can Streaming Video Enable Cash Flow into Rural Areas?

*with Kapil Vaswani, Sriram Rajamani, B. Ashok*



**Second Life**



**“Third World”**

- **Revenue-generating opportunities**
  - Virtual tourism
  - Remote shopping
  - Evidence-based philanthropy