AirJaldi — Ten Years Later

Jim Forster
jim@airjaldi.net
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Outline

- History
- Vision, Mission, Objectives
- Current Status
- Opportunity
- Appeal to IRTF

History

- **January 2005**: Started by Yahel Ben-David as personal project to help Tibetan community
- **Oct 2006:** AirJaldi Summit conference, with ~120 people from all over
- **2007:** Non-profit Community Network
- 2**009:** Rural Broadband Pvt Ltd created
- **2010-2013:** Growth; 5 states
- **2014:** Profitable
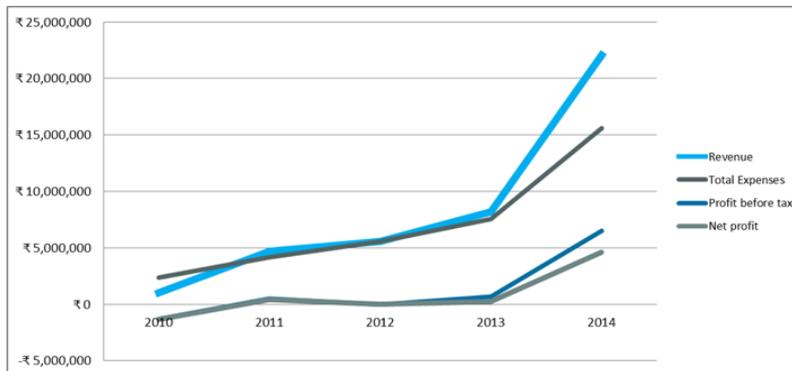
Vision, Mission, Objectives

- **Vision:** A world where all people have access to communication and the Internet, leading to happier lives
- **Mission:** To develop and implement economically and technically sound connectivity and related services for the benefit of people in rural areas
- **Objectives:** 1M people served

AirJaldi Dharamsala Map — 2007

- Fixed wireless service
- Relays are cheap
- No hot-spots (currently)
- Higher bandwidth than typical consumer service

Successes and Opportunity

- Successes
  - Technical Training
    - Boot Camp, Intern, Junior
    - Zero to Networking in 6 months
  - Solar powered relays for $1,200
  - 50 employees
  - Proof of Replication - 8 separate networks
  - Profitable in networks > 18 months old
- Opportunity
  - We are in 10 districts. India has 600; maybe 150 are suitable for us
  - New government promoting NFON/BBNL; could use WiFi last mile

Difficulties

- Indian laws and regulations
  - Sales Tax (per-state, bank deposit required in each state
  - ISP License
    - Uncertainty about changes
    - $50K filing
    - $400K bank deposit required
  - KYC Laws require record keeping, prohibit use without authentication
- Hiring Mid-Level Managers
- CPE Expense (even Ubitquity-class kit is a problem)

Growing the Internet — What Matters?

1. Increase Geographic Range

2. Make it Much Cheaper

3. Make it Much Faster

Appeal to IRTF and Community: 10x Cost Reduction in 5 Years

- Cost reduction is key to wider coverage
- Moore's Law well accepted for chips, storage — why not for service?
- But what are the cost components?
  - People
  - Upstream Bandwidth
  - Equipment
  - Power
  - Regulatory
- What is the current cost?
  - Use existing studies
- What is the existing availability?
  - NetRadar (but blank spots)

AirJaldi *Reaching you.*

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Extras

Sustainability

- **Most basic criterion:**
  - Value is greater than costs, and therefore people will pay for it.
  - Adaption scale then drives down costs, increasing % that can afford the service
- **Not really sustainable:**
  - Donation/crowd sourced based activities
  - Volunteering (commendable, but undervaluing expertise does not scale)