Mobile Services for the Serving Poor

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During the Summer of 2013,
I started a study on…

- Voluntary migration out of distress due to unmet needs (Not aspiration migration for upward mobility)

- Out migration from Rural Areas (>70% of total migration)

- Migration for employment

- Into informal sector

Why?

Tata Center for Technology and Design
Mission

The MIT Tata Center for Technology and Design is dedicated to quality of life improvements in resource constrained environments and to achieving these ends with the creative application of technology and thoughtful design informed by business and management expertise.

tatacenter.mit.edu

Tata Center Facts (Summer 2014)

- 54 Graduate Student Tata Fellows (34 continuing, 20 new)

- 35 Faculty representing 20 Departments/ Programs

- 40+ current projects (single & multi-student), 7 focus areas:

Health   Energy   Water

Agriculture   Housing/Infrastructure

Sustainability   Entrepreneurship

Labor Pool Connects All Sectors
To successfully serve them, we have to understand their needs and aspirations!
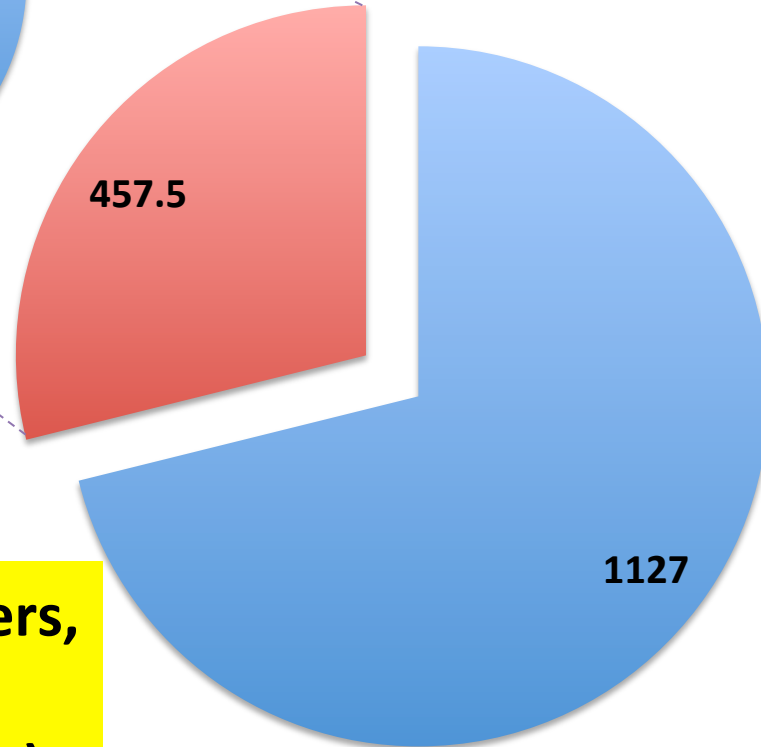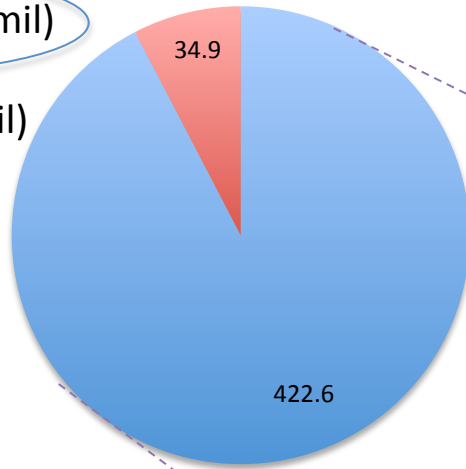
Research Question

- How do migration-related decisions by actors such as employees, employers, and governments affect livelihood and human development? How to think about short and long term tradeoffs?

- **Are there areas for technological intervention that could solve problems of the migrant community?**
  - *Is there an underserved market?*
  - *Can we create communications services to meet the needs?*
  - *Can we offer these services profitably?*

India Working

Year 2004-05

Informal Workers (mil)

Formal Workers (mil)

34.9

422.6

457.5

1127

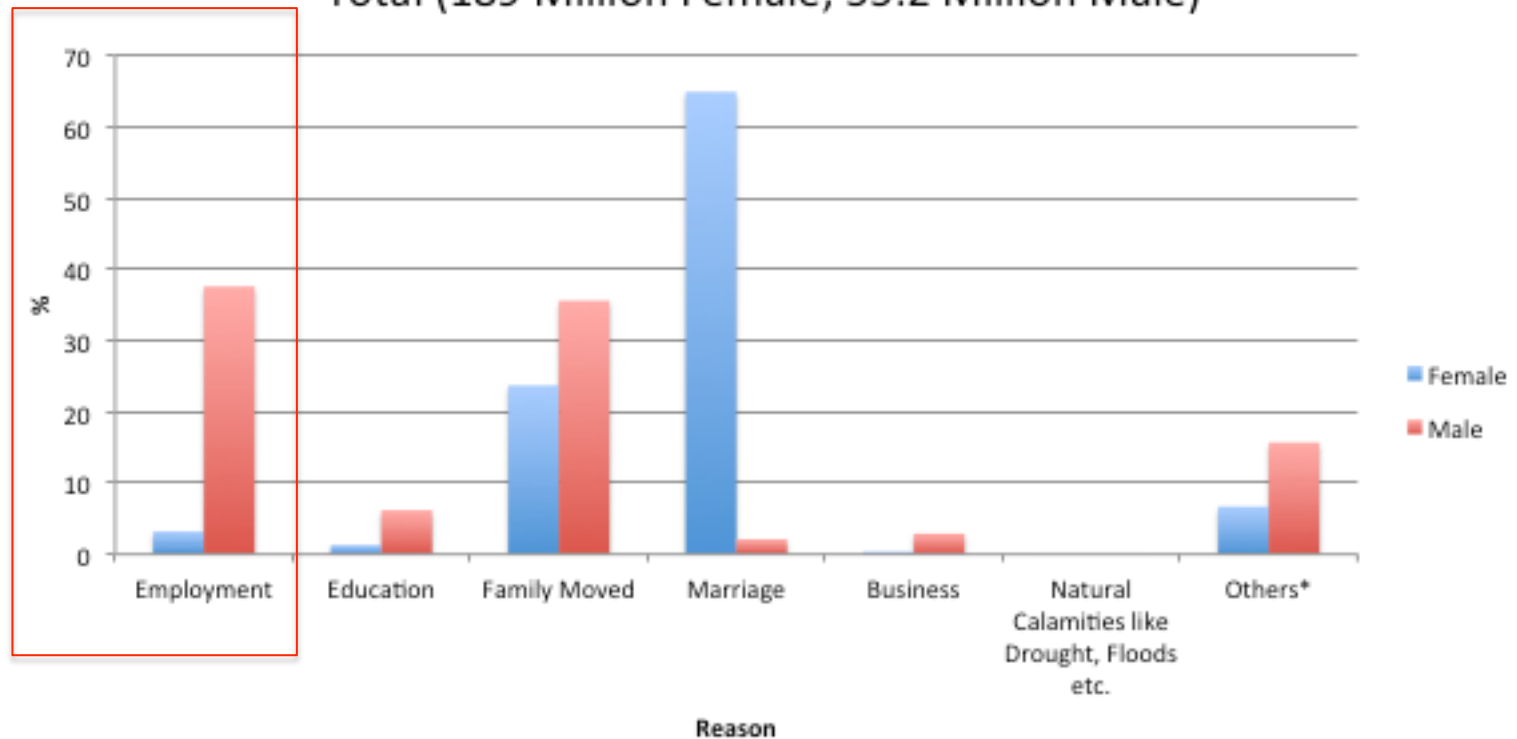**I am studying informal workers, especially migrant workers (~120 Million Indians)**
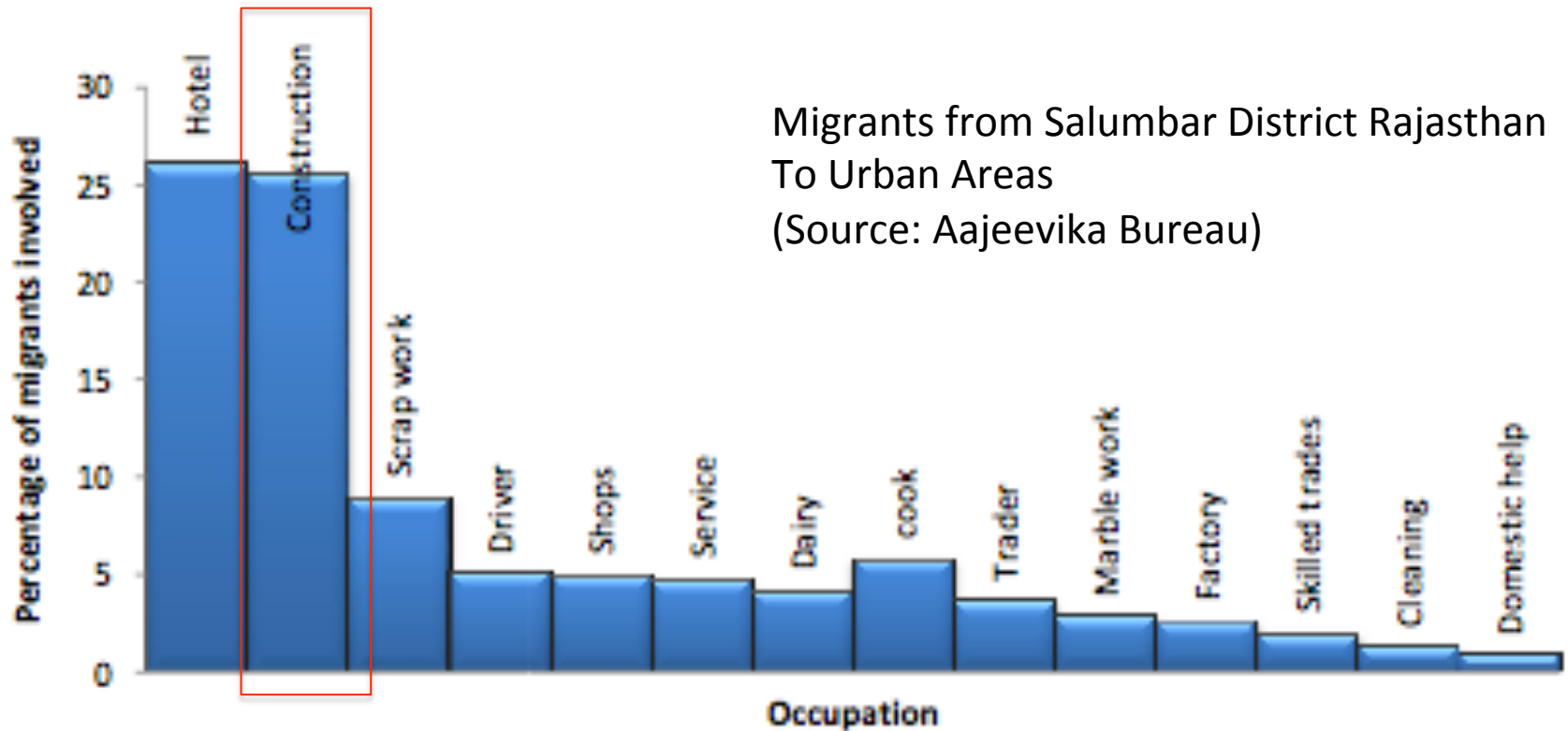
Total Population (mil)   Working Population (mil)

~120 Million Migrate (Seasonally) for Employment

% Distribution of Migrants in India by Reason (2001)
Total (189 Million Female; 55.2 Million Male)

Occupations of Migrant Workers

Migrants from Salumbar District Rajasthan
To Urban Areas
(Source: Aajeevika Bureau)

I am focused on Construction; though I also scratched the surface of Hotel, Shops, and Services
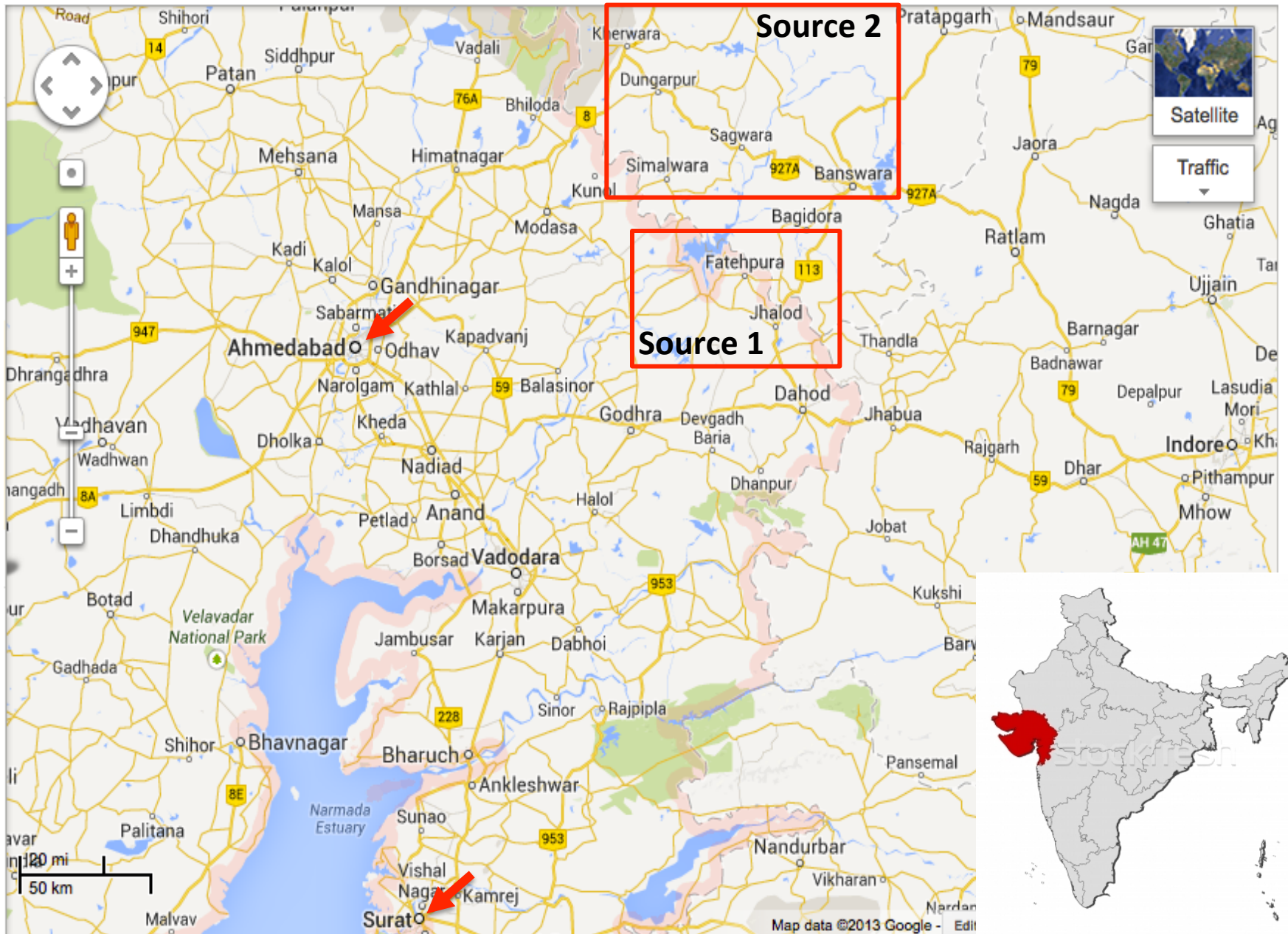
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Method

- Participant Observation of the migration phenomena

- A mathematical model of the various agents making decisions

- A combined analysis of model, ethnography, and expert opinion

An Underserved Market:
A Story of Migrants

Where do they work?
Construction Work, Ahmedabad, Gujarat (~1.4 million laborers)

Where do they work?
Wholesale Textile Markets, Surat, Gujarat, India
(300+ markets, ~300,000 workers)

Daily Wages
(1000-1200 saris for $2 a day)

How do they find work?
Employment Exchange Place (Naka), Ahmedabad

Laborer -> Contractor -> Builder (?)

Where do they live?

Source to Destination

Not my pictures!

Migrant workers set off for Ahmedabad from Kherwada

60-70% of the village migrates seasonally

Bhandara
Pop: 3421 (2010)

11 Km

Santrampur (Taluk HQ)
Pop: 15777 (2010)

To Ahmedabad (Pop: 5.57 million)
Distance: 175 km

Map data ©2013 Google - Edit in Google Map Maker
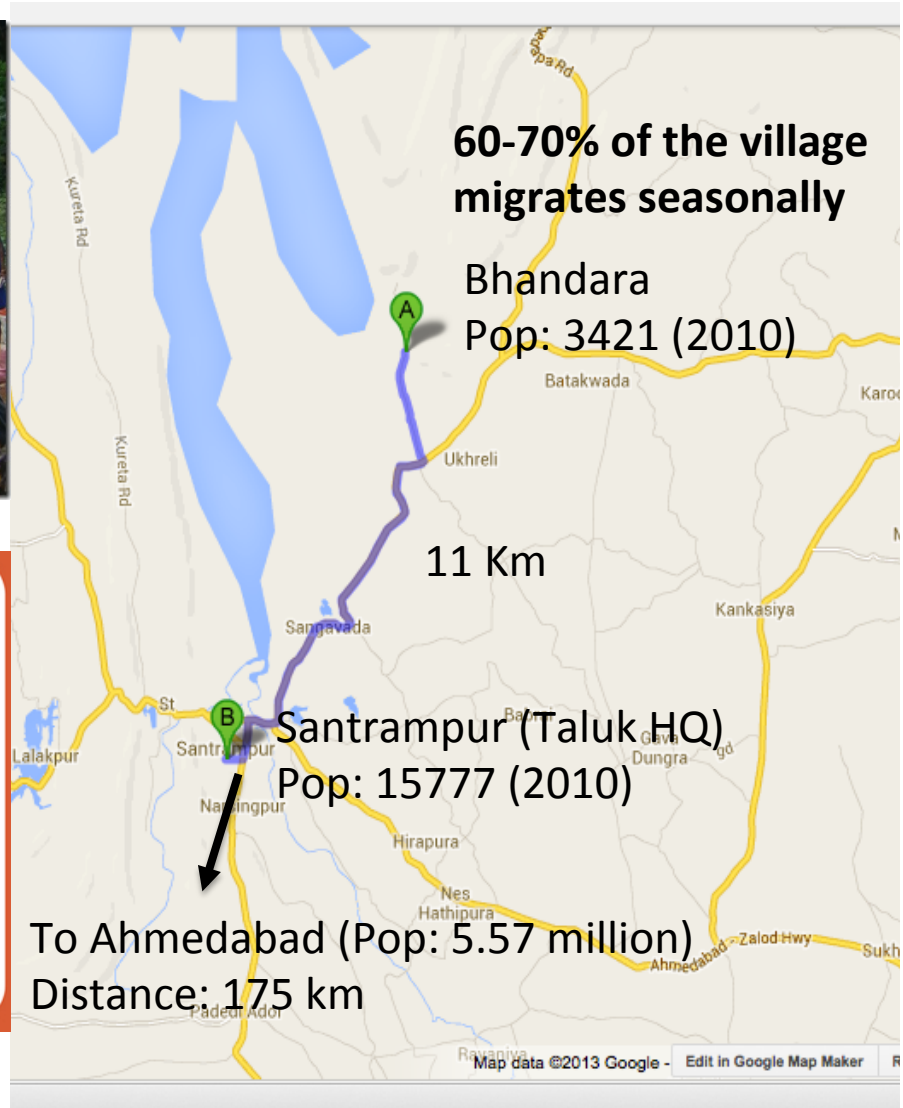
How can we serve this market profitably?

Contractual Clarity

Problem: Contractual dispute due to no record of work done

Possible Solutions:

- Applications for logging, collecting, and processing work done

- Location-based solution of work performed

Who is willing to pay?

- Law firms working on dispute resolution

- Large NGOs helping migrants with registration and other migrant services

- Some State Governments

Global Problem? Yes.

Education

Problem: They can't go to school, can schools go to them?

Possible Solutions:

- Mobile-based, skill-oriented education (e.g., basic accounting)
- Staying connected with your school

Who is willing to pay?

- Parents
- Some schools and skill training institutes
- Some State Governments

Global Problem? Yes

Health

Problem: Poor health (working age 12-45)

Possible Solutions:

- Mobile-based health tracking, logging, processing
- Tele-medicine with a doctor they trust

Who is willing to pay?

- Public hospitals via Municipal Corporations
- Large NGOs focused on Health Service
- User?

Global Problem? Yes

It is possible to create profitable services for this large market!

If creating these services interests you, I am happy to work with you!

Thank you!

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