How to improve tourism data

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IDRC CRDI
Canada

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UKaid
from the British people

RELIABLE DATA ON TOURIST ARRIVALS & EXPENDITURES

Problems with current system

- Border management data: Are non-tourists self-reporting as tourists?
  - Business visitors because tourist visa is easier to get
  - Former Sri Lankans now holding foreign passports who stay with relatives
    - Not all are non-tourists. Some stay in hotels
- FITs are not seen by conventional tourist industry
  - Perhaps “AirBnB” phenomenon is bigger than we think

WHAT CAN MOBILE NETWORK BIG DATA CONTRIBUTE?

Imagine a tourist family, parents + 2 kids

- Given the SEC status of tourists, we can assume multiple mobile phones in such a family: 2 SIMs in smartphones, perhaps 2 SIMs in tabs/laptops
  - But if they believe (rightly or wrongly) that roaming will be very expensive, all except one device may be in “airplane mode”
  - They may buy tourist SIMs at the airport
  - They may also buy SIMs other than at the airport as needs arise

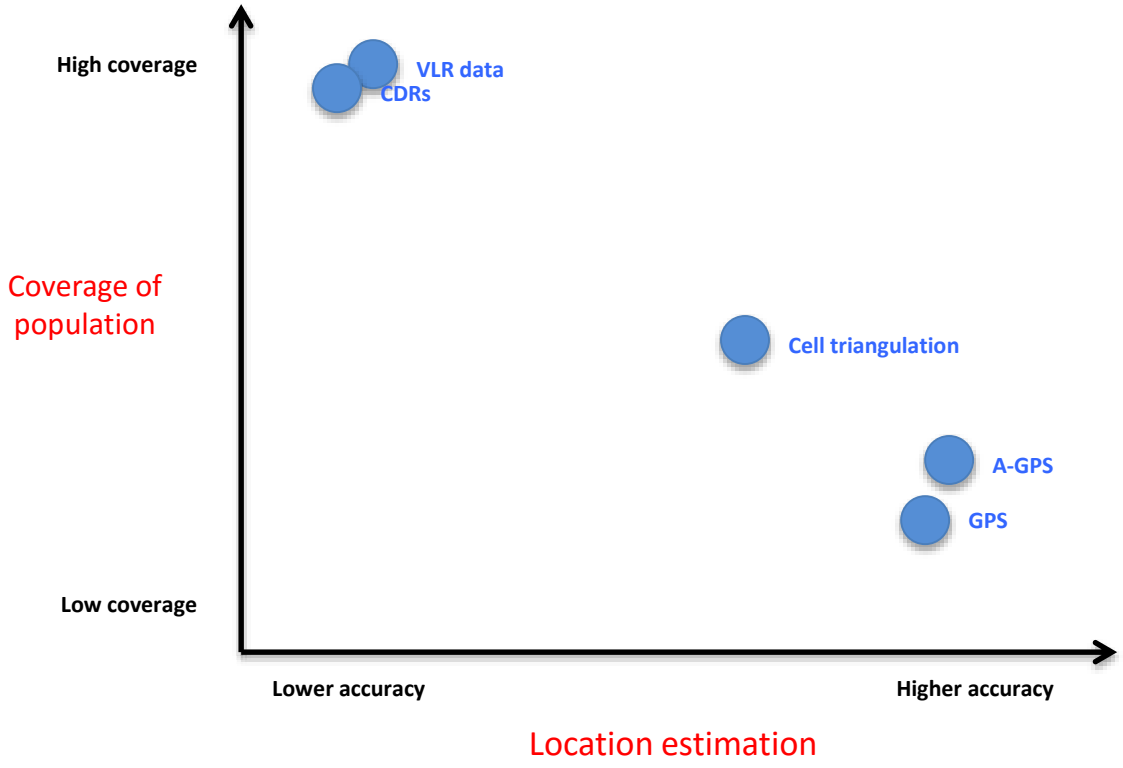
Available big data & limitations

- MNOs can give a lot of data on tourists with roaming phones
  - Pseudonymized data adequate, so privacy concerns manageable
    - However, tourists may roam across multiple domestic networks, so pseudonymization will have to enable cross-checking across networks
- Google and other “OTTs” can give a lot of data on those roaming with smartphones
- Tourist SIMs purchased at airport
  - Pseudonymized data adequate, so privacy concerns manageable
  - May be possible to focus only on SIMs bought showing passports
- SIMs bought other than at airport pose difficulties
  - Possible to identify through identity database

What insights?

- How many?
  - To some extent, from what countries?
- Where do they go?
  - Some possibilities re what do they do? Safaris, etc.
- Where do they stay?
  - On smartphones, can zoom to actual hotels and guest houses

Choices re zooming in on location



How to improve quality of MNBD

- Promote roaming and/or airport SIMs, so we minimize tourists buying SIMs other than at airport
  - What do we do about those who come via Mattala and on cruise ships?
- Need to use common definitions so data will be comparable

Strengths/Weakness of MNBD in tracking tourism

Strengths	Weaknesses
Consistent longitudinal tracking	Complexity of access and continuity of access to data
Captures otherwise unrecorded activities (non paid, unregistered)	No data on purpose or mode of travel/stay, expenses etc.
High geospatial resolution (analysis by region)	Inherent biases in the data (same day vs. overnight trips)
Support for near real time automated analytics	Qualitative problems due to lack of information on purpose of observed travel
Ease of capturing behavioral characteristics (POI, frequency of visits)	Over/under coverage due different level of mobile phone usage among tourists
Potential for cross border international statistics	Difficult to assess quality since the interaction between mobile phone usage and travel is not well understood

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Source: Feasibility Study on the Use of Mobile Positioning Data for Tourism Statistics. European Commission (2014)

WHAT CAN CREDIT/DEBIT CARD DATA CONTRIBUTE

Limited number of credit/debit card firms

- Mastercard is open to requests by researchers
  - Visa and Chinese cards?
- Possible to assume great majority of tourists depend on credit/debit cards

Training data

- Necessary to use sample surveys to train the algorithms
- Need to understand several dimensions to ensure representative results
  - The size distribution of tourist groups
  - Likelihood of a tourist (group) being on roaming or purchasing a SIM at the airport
  - Demographics
  - Travel/accommodation choices
- Potential strategies
  - At the airport
  - Data from hotels and through arrangements with services like AirBnB

ACCOMMODATION DATA

Collect data from way they do business, not self-reports

- No one can function as accommodation provider without a presence on Internet
- Information provided on web can be assumed to be reliable though not complete
  - Discounts are usually not on web, especially in small places

How to collect

- Dedicated robots for sites such as Bookings.com
- General robots for web postings

- Have to be nimble as transaction platforms change rapidly

SENTIMENT ANALYSIS

COMMENTARY
5/7/2015
08:00 AM

Cuba Turns To Analytics, Big Data To Help Tourism

As Cuba prepares for an influx of American tourists and businesses, the government turned to a Spanish analytics firm to help it crunch big data to improve hotels and infrastructure.

Pablo Valerio
Commentary

While Cuba has never stopped receiving a regular influx of tourists from Canada, Latin America, and Europe, the potential growth the US market offers is enormous.

Currently Cuba receives around 2.8 million visitors every year, half of them from Canada. Mintur, the Cuban Tourist Ministry, estimates that if Americans were free to travel to Cuba today, the number of visitors would increase by two million the first year.

6 Ways To Master The Data-Driven Enterprise

(Click image for larger view and slideshow.)

Last year the Cuban government was interested in getting its hands on analytics software to process the data generated by visitors on social networks. The idea was to quickly identify problems at government-run hotels and tourist facilities.

Because of the existing ban on American companies supplying technology to Cuba, Havana had to look somewhere else and found SocialVane, a small Spanish company on the island of Menorca, which has been working with the local tourist sector to analyze issues, trends, and potentials of the tourism industry.

The SocialVane platform was specifically designed by tourist industry professionals for the public administration to monitor and help make