The Use of Mobile Positioning Data
Indonesia’s Experiences
More than 5 billion people around the world subscribed to mobile services

-GSMA Intelligence-
Mobile Positioning Data

- **Reduce**
  - Respondent burden
  - Enumerator workload

- **Increase**
  - Coverage
  - Timeliness
The Use Of Mobile Positioning Data

MPD

- Commuting
- Tourism
- Event Analysis
Inbound
October 2016
Cross border area

Problems:
Not All Borders have border gates
Not All Border Gates have 24/7 Immigration service
High cost of Border Survey
Limitation of Mobile Positioning Data

- Lack of Qualitative Data (such as purpose of visits, accommodation type).
- Expenditure.
- Mobile phone usage (mobile phone usage behaviour).

Small data (survey data) is required to obtain data that cannot be provided by mobile positioning data.
Domestic Pilot in 2018 and 2019
O-D Model

Source: Saluveer, E 2018
One subscriber
Tourism Trip
DOMESTIC TOURISM WITH MOBILE POSITIONING DATA (MPD) AND DIGITAL SURVEY (PILOT)

Coverage: 190 million subscribers, all Indonesia
Time reference: Monthly
Output: Number of trips, O-D Matrix of 514 kabupaten/city
DOMESTIC TOURISM

Origin Yogyakarta Province & Province Level Destination January 2018
DOMESTIC TOURISM

Origin Yogyakarta Province & Regency Level Destination January 2018
DOMESTIC TOURISM WITH MOBILE POSITIONING DATA (MPD) AND DIGITAL SURVEY (PILOT)

Digital survey is conducted to overcome limitation of MPD such as no expenditure data, no motivation. Digital survey was conducted using selected sample indicated by Mobile Position Data

Expenditure data : Digital survey 50,000 travellers
Estimation : Other MNO subscribers & non cellular user from conventional household survey
Domestic Visitor – Digital Survey to complete Big Data

Survei Wisatawan Nusantara 2018 - BPS14

Data diri
Gender

- Pria
- Wanita

Berapa biaya yang Anda keluarkan untuk perjalanan tersebut?

Mohon untuk mengisi perkiraan pengeluaran Anda pada kotak isian di bawah ini:

- Akomodasi (a)
- Makanan / minuman (b)
- Angkutan (c)
- Cinderamata (d)
Outbound Pilot in 2019
EVENT ANALYSIS

18th ASIAN GAMES
Jakarta
Palembang
2018

ANNUAL MEETINGS
2018 | indonesia
INTERNATIONAL MONETARY FUND
WORLD BANK GROUP
25 August 2018

Other destinations for Asian Games visitors out of a 1000 people

Destinations include: Jakarta, Palembang, Surabaya, Yogyakarta, Depok, Bogor

- 1-5
- 6-10
- 10-125

Asian Games locations

OpenStreetMap, Corb (2018)
THANK YOU