



USING BIG DATA FOR SDGs

Mobile Data for Tourism and Commuting

BPS – Statistics Indonesia

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BACKGROUND

- ✓ In Indonesia, the SDG Targets have been set up to **achieve the 2030 Agenda** (there are 319 indicators).
- ✓ BPS-Statistics Indonesia contributes to 136 Indonesian SDGs Indicators
- ✓ There are data gaps in terms of coverage, granularity (sub-national), frequency, timeliness
- ✓ **Mobile Positioning Data** is used to fill in the gaps





FILL IN THE GAPS

Use of Mobile Positioning Data for SDGs

8 DECENT WORK AND ECONOMIC GROWTH



Target 8.9: By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products → **Immigration data** available for official gates → **Mobile Positioning Data (MPD)** used to increase coverage, granularity for tourism (inbound, domestic, outbound) statistics

12 RESPONSIBLE CONSUMPTION AND PRODUCTION



Target 12.b: By 2030, Develop and implement tools to monitor sustainable development impacts for sustainable tourism that creates jobs and promotes local culture and products → Arrival/Departure Card are no longer used → **MPD** used for sub-national data for tourism (inbound, domestic, outbound) statistics

10 REDUCED INEQUALITIES



Target 10.7: Facilitate orderly, safe, regular and responsible migration and mobility of people, including through the implementation of planned and well-managed migration policies → **Household survey** is only conducted every two years and not all municipalities → **MPD** used for commuting and internal migration, monthly and all municipalities

11 SUSTAINABLE CITIES AND COMMUNITIES



Target 11.a: Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning → No data → **MPD** for commuting and Metropolitan Statistics Area Estimation

meanwhile...



Policymakers

They need data to for monitoring SDGs and policy making.



Society

They need trusted data



Qualified and trusted statistics & indicators have to be provided

More granular, frequent & timely for monitoring SDGs and other purposes



Benefit of Using Mobile Positioning Data

Increase Coverage

Mobile phone data is used to increase the coverage and data quality.

More frequent data

Annual data for monitoring

Less burden

Less work and respondent burden

Cost Effective

Less budget

Granular Data

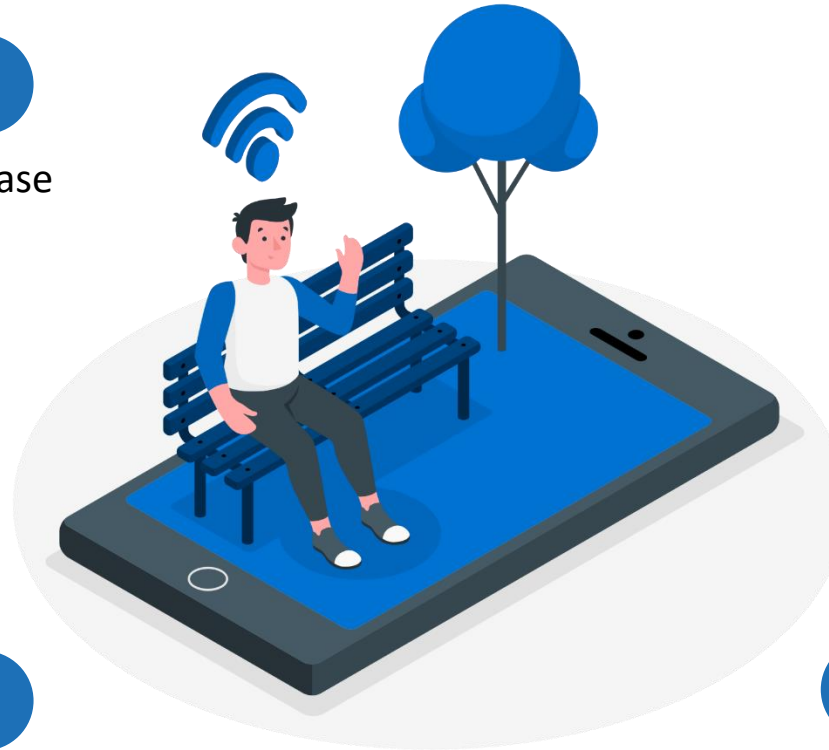
More granular data, such as municipality and sub-district

Timely

More timely data.

Less labour

Less manual labour (enumerators)



Data Science Team



9 data scientists can handle work load that usually need 8.000 enumerators for each quarter on domestic tourism household survey and 500 enumerators on commuter household survey



Alfatihah Reno
MNSPM



Amanda Pratama
Putra



Ignatius Aditya
Setyadi



Amin Rois Sinung
Nugroho



Wa Ode Zuhayeni
Madjida



Hamim Tsalis
Soblia



Agus Ruslani



Panca Dwi
Prabawa



Dini Arifatin

MOBILITY
STATISTICS

TOURISM
STATISTICS

1

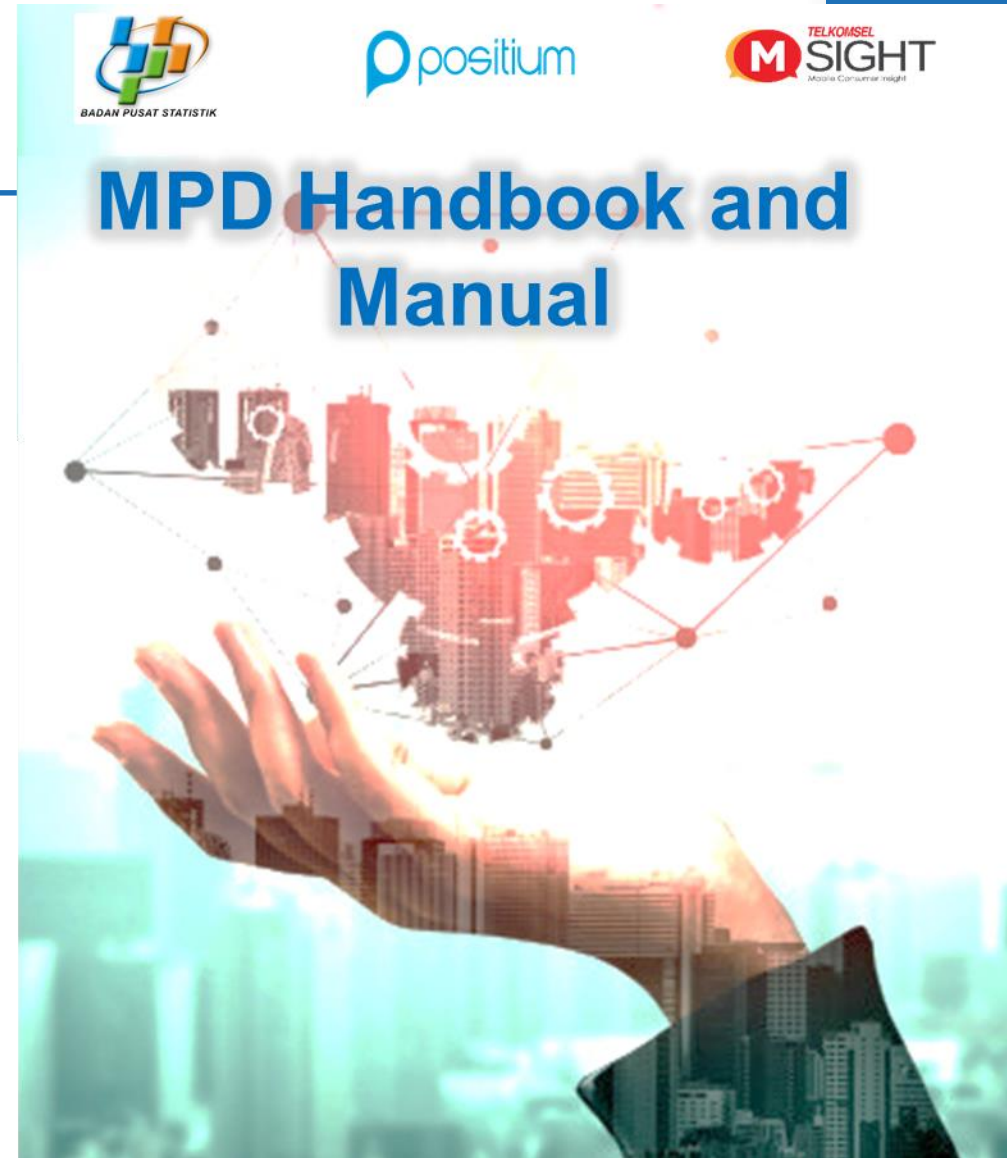
Quality Assurance

2

Sound Methodology

3

Privacy-Preserving
Processing



Key Partners and Engagement



Partnership with any organizations:

Ministries and institution, private sector, academic, international organization, data users

Engagement

- ✓ *Presidential decree for SDGs, One Map Policy, One Data Policy*
- ✓ *Building Collaboration/MoU with private companies*
- ✓ *Develop one data forum → involving multidisciplinary expertise*

GWG MPD Subgroup for Tourism

- ✓ Gather experiences of all Task Team members
- ✓ Develop Second Handbook for Tourism
- ✓ Create e-learning material

*BPS Statistics

Indonesia

CBS Statistics

Netherlands

Geostat Statistics

Georgia

Istat Statistics Italy

Saudi Arabia Statistics

Eurostat

Positium

UNSD

ITU

* Subgroup lead





THANK YOU

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