





ASEAN-Japan Transport Partnership (AJTP)

JITRI International Seminar on Utilization of Mobile Phone Big-Data (MDB) for the Transport Sector in Thailand
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Present situation of mobile phone big data (MBD) acquisition from telecommunication companies for analysing.

In year 2017, Land Public Transport Commission (SPAD) has done REGIONAL LAND PUBLIC TRANSPORT MASTER PLAN that suppose to publish in year 2020 but that agency has been dissolved in year 2018 and Land Public Transport Agency (ARAD) has formed under Ministry of Transport Malaysia. This master plan will be continue/ revise soon by APAD

The processing of mobile data in order to determine mode of transport is complex. So we have complement the origin-destination person-trip matrix with the traditionally collected data with Mobile Big Data (as supporting).

The following stages are involved in the extraction and processing of the data:

Extract a snapshot of positional information based on the closer 'dwell' for each user at the following times:

- -Night: 03:00 Assuming the phone is stationary consistently at this time, it is a proxy for the individual's place of residence);
- Mid-morning: 10:30 For the majority of people, a snapshot of the closest dwell after the AM peak period is a good indicator for the journey to work (i.e. people moved from the night snapshot to the mid-morning snapshot);
- Mid-afternoon: 15:00 a representative snapshot to assess those users whom either stay at their work location, work half-day or have potentially left the office on the employer's business
- Post-PM: 20:00 representative of users who have either returned home, or travelled to another destination."



Current status of the "Personal Data Protection Act"

"The Malaysian Personal Data Protection Act 2010 (Act 709) which came into force on 15 November 2013 regulates the processing of personal data in commercial transactions. The Act 709 applies to any person who processes and who has control over or authorizes the processing of any personal data in respect of commercial transactions."

In Malaysia, the definition used is PERSONAL DATA, unlike Japan where the term used is PERSONAL INFORMATION. However, the term is not an issue since the definition of personal data means any information that can identify an individual including expression of opinion about a data subject (the individual who is the subject of personal data).

Meanwhile, sensitive personal data means personal data consisting of physical or mental health or condition of a data subject, political opinions, religious beliefs, commission or alleged commission of any offence or any other personal data may be determined by the Minister.

Act 709 does not applies to -



i) Federal
Government and
State Governments



ii) Non-commercial transactions



iii) Personal, family or household affairs, including recreational purposes



iv) Credit reporting business



v) Personal data processed outside Malaysia



Present issues and barriers of MBD acquisition and analysing.

Government-law/company-policy

Coordination between
Ministry of Transport and the Ministry of
Communications is necessary and it will involve
a lot of preliminary meetings before we can get
information that we want because the Ministry of
Communications need to coordinate with various
telecommunication companies

Insufficient knowledge and human resources in MBD analysis

For the Moment Ministry of Transport can support this Mobile Big Data Analysis with existing Infrastructure and after the proper training we can propose to buy relevant software for analysis

Lack of budget/finance for data analysis

The Personal Data Protection Act 2010 (Act 709) does not apply to the Federal Government or State Governments. Ministry of Communications and Multimedia Malaysia is currently developing a National Data Sharing Policy with the cooperation of various agencies such as MAMPU and MDEC

Institutional barriers

For the moment Ministry of Transport doesn't have expertise that able to do Mobile Big Data Analysis especially on Transport Planning Mobile Big Data Analysis. We are looking for more trainings and capacity building such as AJTP and we welcome to our country to give training to us if you have expertise in transport Analysis Mobile Big Data.

infrastructure (computer and software)

At the Moment we lack of budget for data analysis and looking for more allocation budget by government or from other sources for our data analysis



Future plan and expectation of MBD analysis.

- We have future planning to revise the Regional Transportation Master Plan to be expended to National Transportation Master Plan
- Mobile Big Data Analysis will be implemented after relevant person attended proper training and capacity building related to Transportation Planning.
- The Commissioner of Personal Data Protection is reviewing the current Act 709. The objective of the review is to update Act 709 which was enacted in 2010. The grounds for review will take into account the needs for effective & efficient implementation of Act 709. It is also to streamline act 709 with best practices of international requirements with regards to personal data patection



Fell free to say hi to Big Data

THANK YOU

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