Integrating economic statistics in monitoring the 2030 Agenda

Indonesia : Big data for market frame creation

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Problem

BPS needs a list of all markets in Indonesia to conduct surveys on prices and retail sales.

Current process is to have BPS staff collect lists from administrative data sources.

Quality is questionable.
Can Big Data help?

- Google maps
- Is maintained by businesses & users
- Timely
- Accuracy
- Accessible
Technique – Acquire

- Keywords
- Coordinates and midpoint of each region
- extract market directory
Technique / Methodology

• Organize
  • importing
  • cleaning data

• Analyse and decide: matching two sets of market data
Results / Example

- Google Identified 27 markets for Bandung
- 5 false positives removed
- 9 markets already on frame
- 13 additional markets identified
- Google missed 8 on NSO frame.
- Best result is both combined
Conclusion

1. Best result is Big Data + Admin data
2. Not Free - needs resources
3. For a bigger scale of region, a program for matching process is needed
Group Discussion

• Can you think of other examples of where combining big data and admin data could work?
• What are the risks of this process?
• What are the costs?

• Questions for the author?