Presented at the FIG Working Week 2019, April 22-26, 2019 in Hanoi, Vietnam

"Geospatial Information for a Smarter Life and Environmental Resilience"
Mobile-Based Land Related Data Collector for Land Registration Activities: Usability Tests of Smart-PTSL Application

Reza Abdullah, Wahyuni, Fahmi Charish Mustofa, and Suharno, Indonesia
Strategic Programme for Land Tenure Security in Indonesia

- The Complete Systematic Land Registration (PTSL) – Registering 60% of 126 M Parcels all over the country
- Completion before 2025 - Targets 2023
Road Map of National Land Registration Completion

The enormous target of The PTSL have to be finished by the end of 2023 (Government of Indonesia/GOI, 2015)
Land Registration process

- Survey and Mapping – TF of Physical Data
- Juridical Data Collection – TF of Juridical Data
- Link the legal document to its spatial data
- Providing Land Title
Problem
Blessed by Cyber Physic, IoT, Big Data era
Mobile Based Land Data Collector – Smart PTSL

- The Smart-PTSL is a mobile-based and web-based application.
- Developed to support land data collecting for Systematic Land Registration
- Connected with external GPS/GNSS
- Have been tested in several District and Province in Indonesia
Survey and Mapping in Jakarta

East of Kelapa Gading
42 Parcels
Applying SmartPTSL using RTK in KLU, NTB
Usability Testing for Smart PTSL

• 86 respondents –
• Various age, background education, and profession
• 5 components usability testing (Nielsen, 2012)
Ease of Operation of Smart PTSL

39 respondents give 4 (45.35%)
30 respondents chose 5 score
15 respondents scores 3 (17.44%) and
2 respondents give score 1 (2.32%).

Overall scores was 353 from from max score 430
Fit to the User Need

Most respondents chose a score of 5 (56.98%) from all respondents. Overall scores was 397 from from max score 430

Compatible to Surveying Instrument

Easy to Acces – Low Pricing
User satisfaction

Score of User Satisfaction
350 out of a total of 430 (5X86)
Conclusion - Summary

• the evaluate of the users' needs for the designed application is very good in the integration of spatial data and textual data based on the requirement to help accelerate PTSL.
• User satisfaction Scores: 4 to 5 ---- reached 84.87% of the total score.
Thank You