



SMARTseeds Information Services

Bali, 19 June 2019

Netherlands
Space
Office



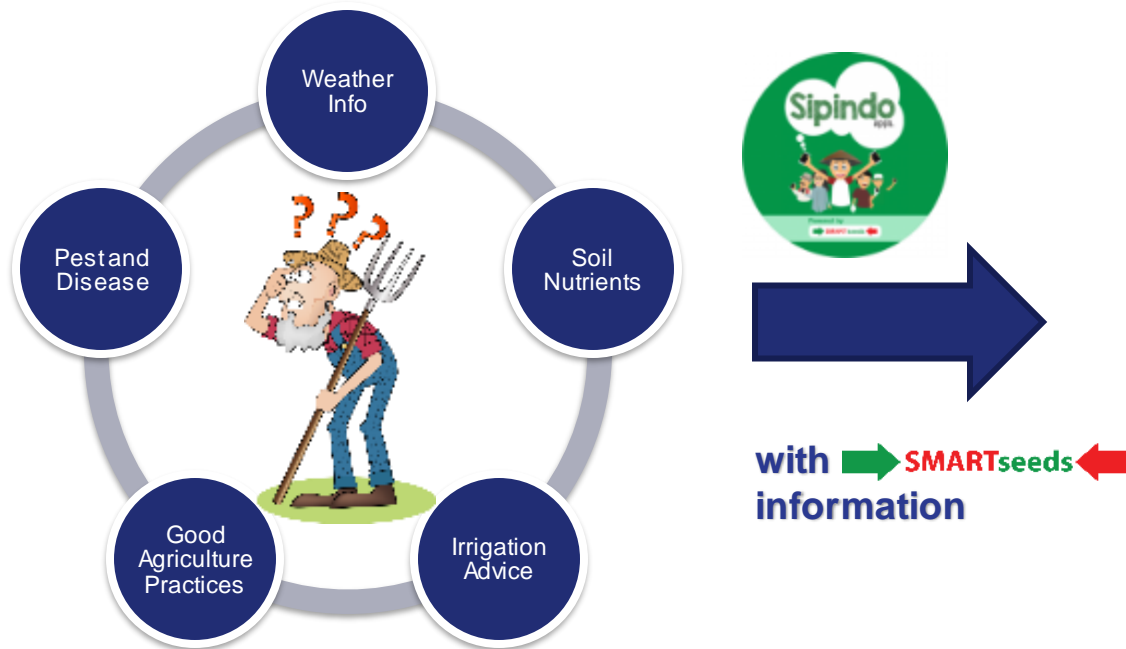
G4AW

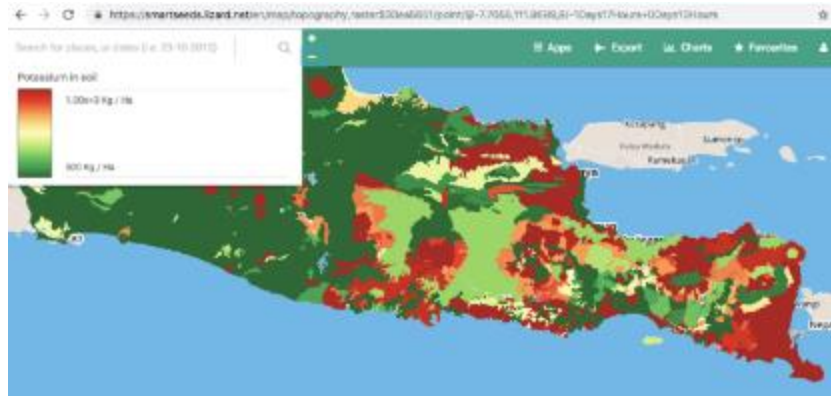
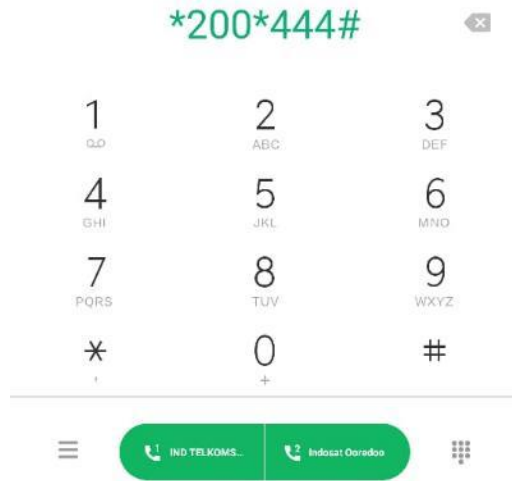
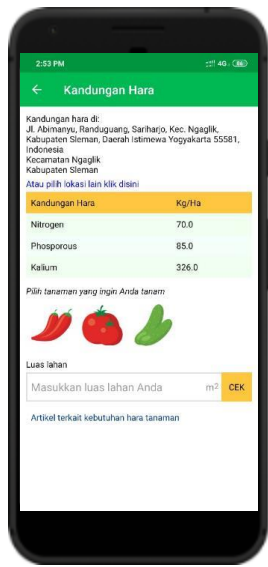
GEODATA FOR AGRICULTURE AND WATER



Value Proposition

We enable **small holder vegetable farmers** making **smart decision** farming based on **location specific data**





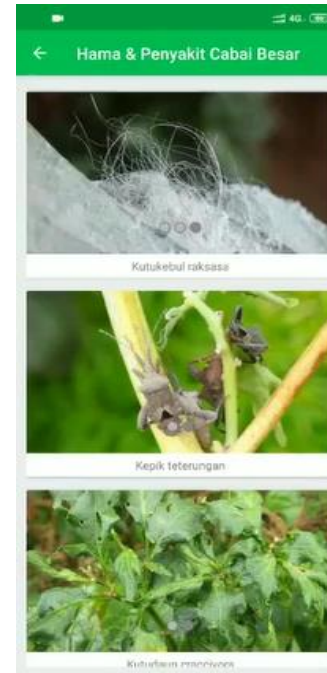
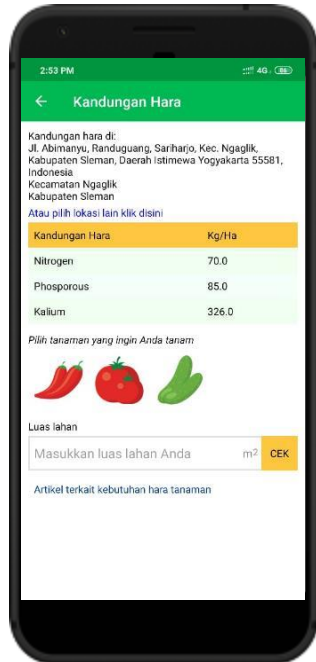
Product & Service

☐ Android based service

☐ Text based service

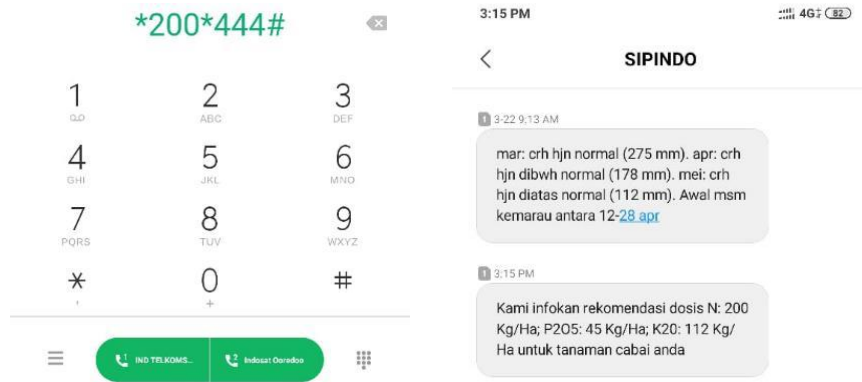
☐ Web based service

The Android-based Information Services



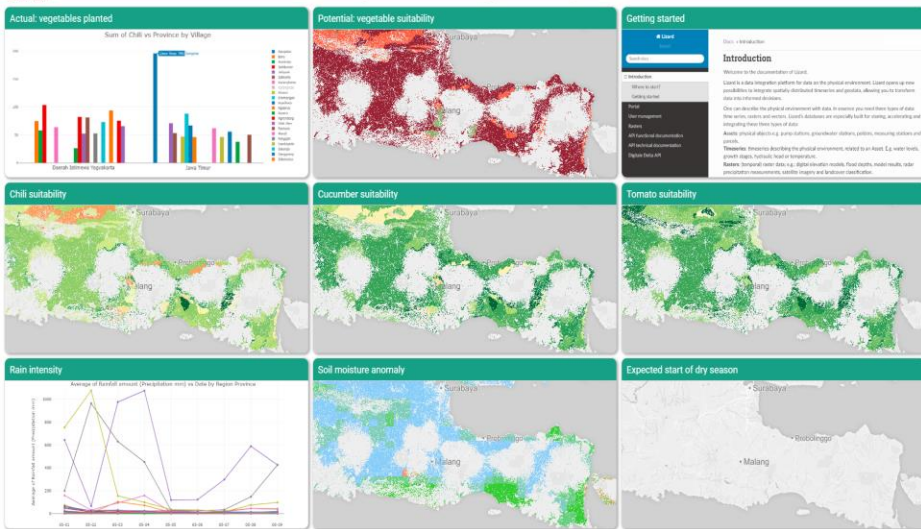
akvo.org

Nelen & Schuurmans



Text-based Advice

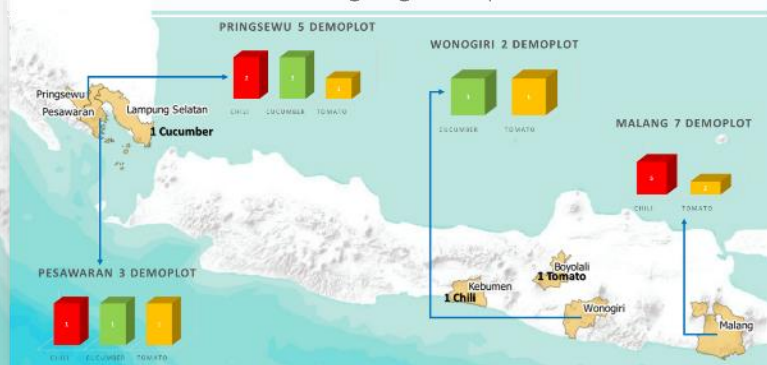
Provide text based advice for non-smartphone users with Kinetica as system integrator, using USSD (Unstructured Supplementary Service Data) protocol *200*444#.



Web Info Services

- Insights for better marketing and logistics
- Insights for credit risk assessment
- Intelligence for business development

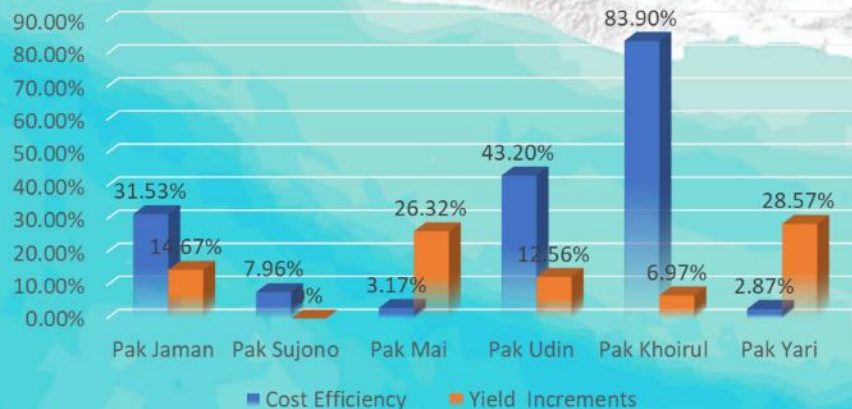
2019 SMARTseeds Ongoing Demoplot Distributions



Current services result from SMARTseeds Demoplot

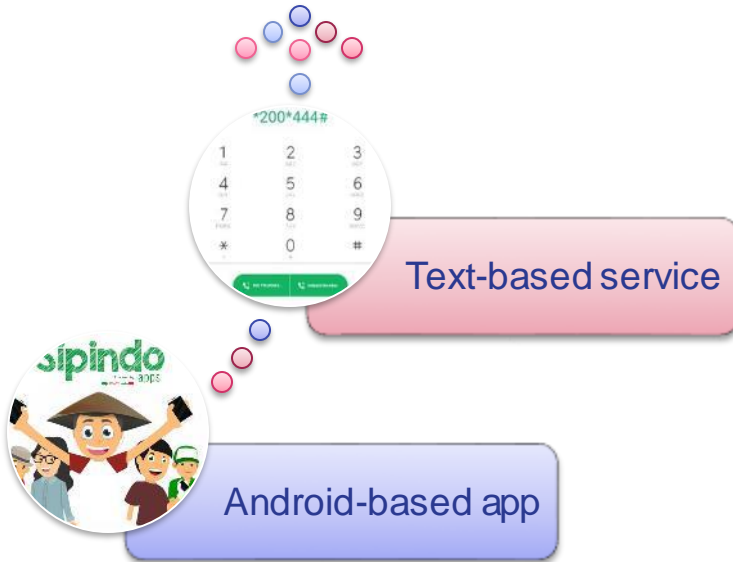
- The advice can reduce the cost from **3 % up to more than 80 %**
- The advice also increase the yield (crop production) **up to 28.5 %**
- The establishment of the demoplot still continue in order to do the next level of services validation and promotion

DEMOLOT RESULT ON ACTUAL COMPARISON CONCEPT

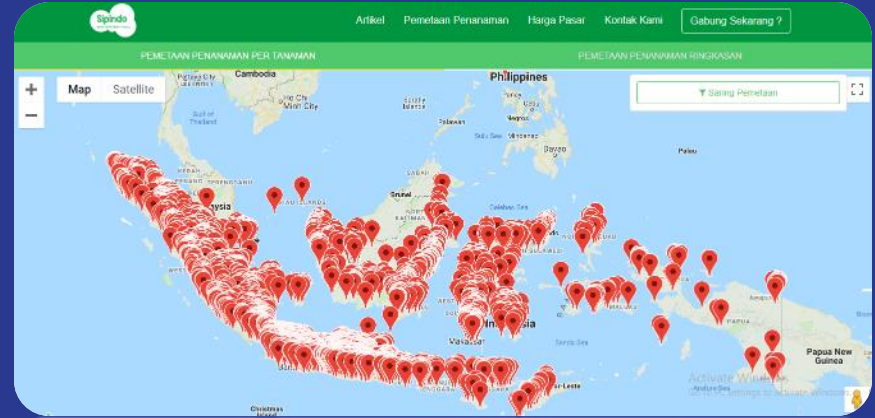


JAWA TIMUR

Users achievement



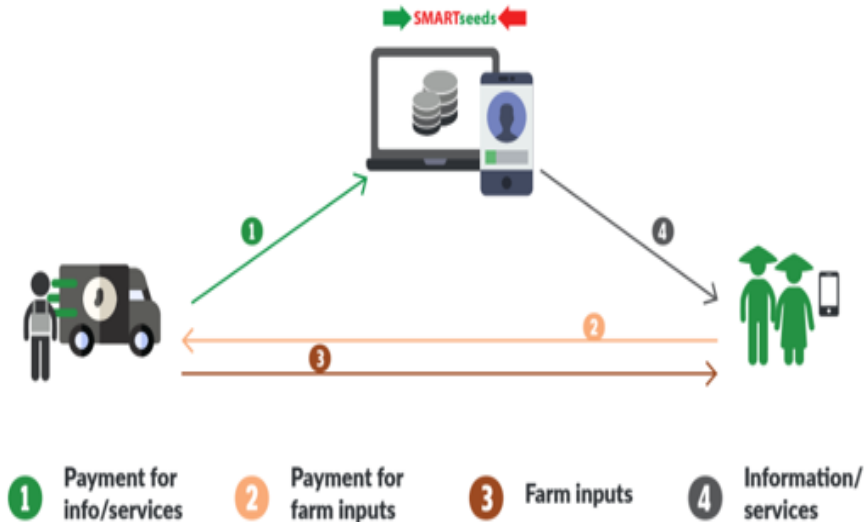
- 25,610 Sipindo app downloaders distributions



- Text-based services *200*444# reached 455 times visit while only 91 user registered since March 2019

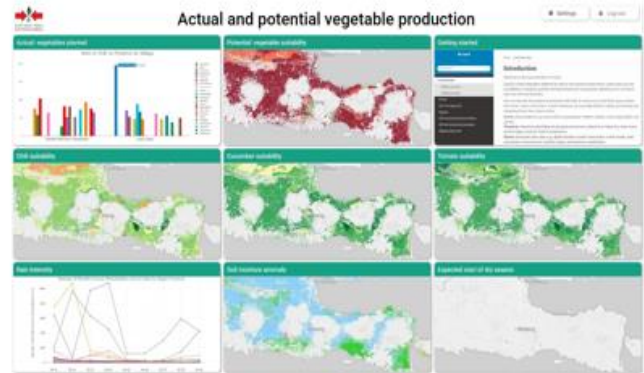
Business Models

Inclusive Business Model



Helping agri-input companies provide better customer experience and increase farmer loyalty to their product

Business Intelligence Business Model



Helping companies take a data-driven business decision by providing geo-data based business intelligence information

Business Models

Advertisement Business Model

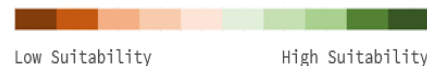
- From google admob (google ads in the app), assuming we have 100,000 users and 1,1 percent of it click on the ads, we can collect 200 million rupiah per year from google.
- If we can pitch to agri input companies to put their ads in our app, the revenue can be bigger.



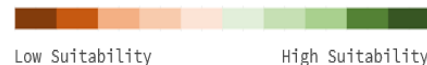
Credit Scoring Business Model

“Helping MFIs minimize the risk of non-performing loan by providing agri-tailored credit risk assessment tool which integrates geo-data based information”

Soil Suitability Index



Weather Suitability Index



Climate and Weather Risk Index



Challenges and Solutions

Foreseen Challenges

- **Project Management.** Complicated communication and coordination of the consortium. Aside from the consortium members, there are additional parties hired under third parties mechanism.
- **Remote sensing output** (crop map) for vegetables is considered difficult due to small size of the vegetable farm. The research outcome is not always directly suitable for commercial use. The road from research to a commercial product is longer than the three years of the project.



Solutions

- Regular communication in smaller group (work packages) via bi-weekly skype group and in-person meetings added with yearly plenary meeting.
- In this case, ITC demonstrated the algorithm for vegetable mapping of one dry season only for two different project areas. Ewindo as the main private sector user is still waiting for a more concrete use of the remote sensing component in relation to the irrigation component.

Unforeseen Challenges

- **Bankruptcy of TTC.**
- **Product development.** In general it took longer time than expected. The delayed output delivery of the service at the end has delayed the user engagement activities.
- **Product quality :** additional time is needed to review user friendliness, usefulness, and commercial viability of the product/service.
- **Regulatory changes.** Govt of Indonesia is drafting new law related to data security. The use of Indonesian based server for sensitive data is mandatory. This would affect the current data storage in Lizard.



Solutions

- TTC was replaced by Indonesian-based company called Kinetica.
- No-cost (budget neutral) extension is being considered to allow work package II (user engagement) get additional time. Also for the WP III to finish the output.
- User satisfaction survey is to be conducted within the no-cost extension period to get direct feedback from the users and provide the reference for improvement of the service.
- The use of Indonesian-based server is to be considered for data storage

THANK YOU

