



**IRENDRA  
RADJAWALI**

# IDE AWAL

## PROBLEM

- Deforestasi massif
- Jumlah luas konsesi perijinan [pertambangan, perkebunan ] melebihi luas wilayah resmi.
- Masyarakat tergeser dari ruang hidupnya
- Hutan yang dikelola masyarakat dan hutan yang tersisa harus dipetakan dengan presisi, tetapi sangat luas.

Concession Investment based on land and forest	Size (Ha)	Proportion (%)
Oil Palm	4.962.022,28	33 %
Logging Concession	2.808.902	19 %
Forest Estate	6.581.911	44 %
Mining Concession	5.074.338,81	34 %
Total	19.427.173,09	130 %

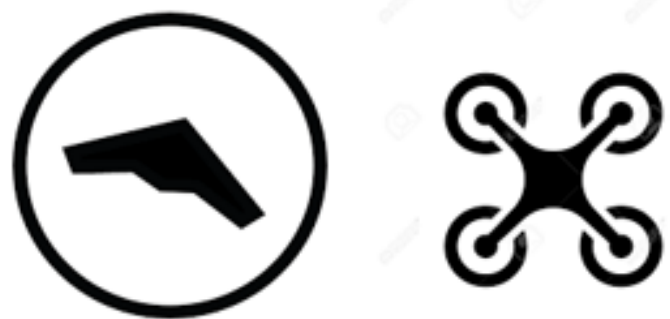
Administrative Size of West Kalimantan Province: ~ 14 Mio Ha

## SOLUSI nya

- Ber-data secara kolektif
- Mampu meng-akuisisi data, menganalisis data sendiri [tidak tergantung orang lain] dengan mengikuti kaidah saintifik
- (re)produksi pengetahuan secara kolektif
- Kecerdasan kolektif
- DIY dan DIWO Drones!

# HOW DID YO DEVELOP?

## Data Acquisition



- RGB [Red-Green-Blue] Camera
- NIR Camera
- Crowd Source



## Data Analysis



- Cartography
- Spatial Statistics
- Automated Object Recognition
- 3D Map / Contour



## Data Articulation



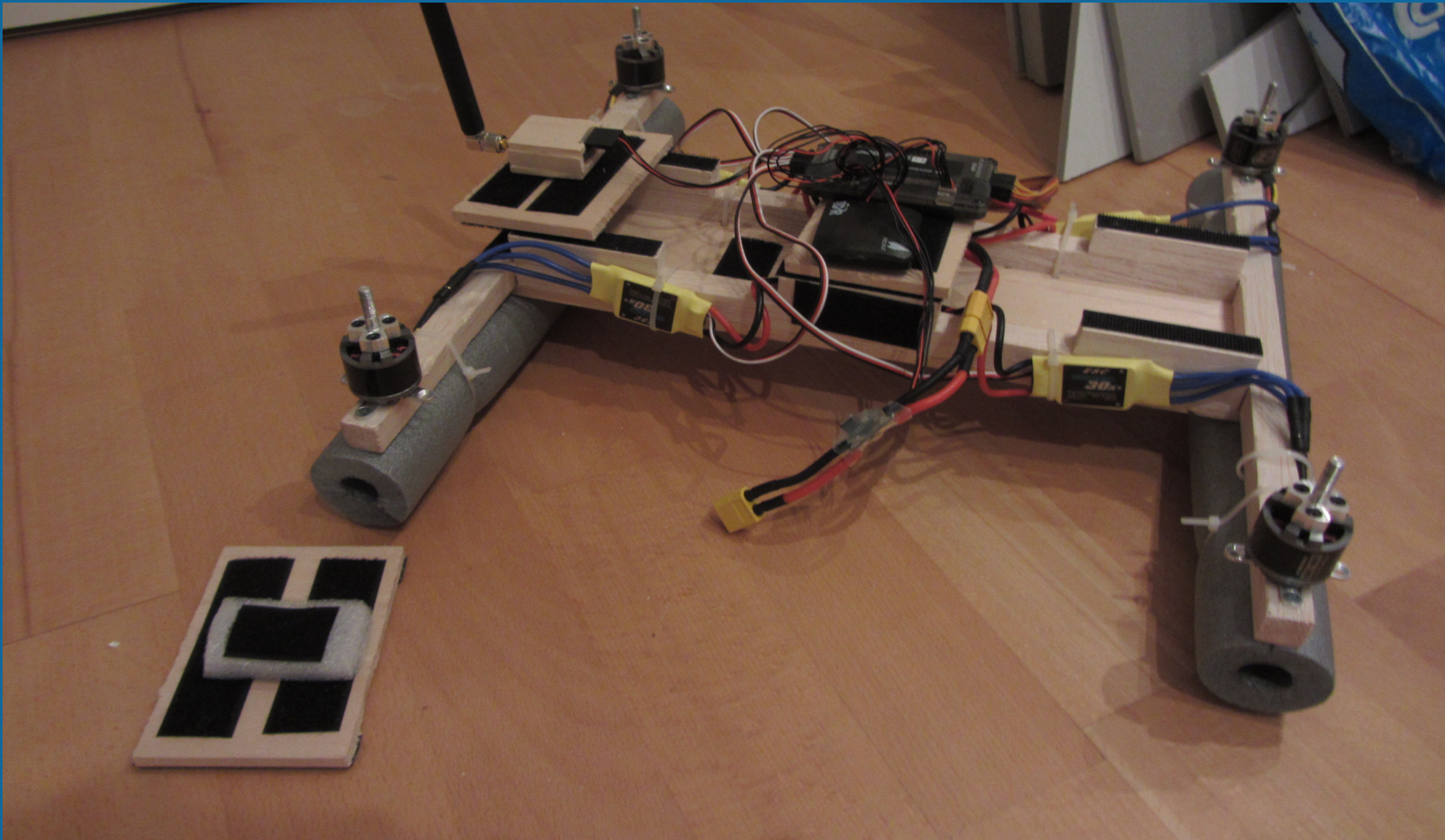
- Apps
- Dashboards

3A Data Approach  
**PRECISION**

# WHAT HAVE BEEN ACHIEVED



# APA PEMBELAJARAN BERHARGA YANG DITEMUKAN? APA WISDOMNYA?

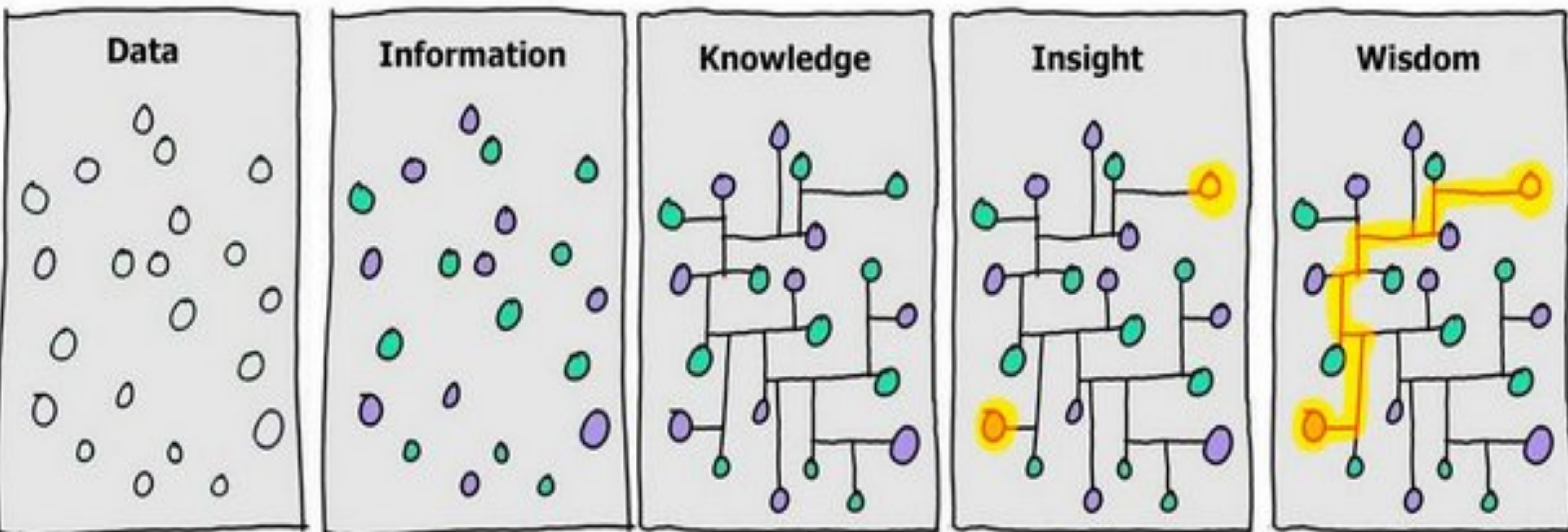


- The ultimate sophistication is simplicity [titik tertinggi dari kecanggihan adalah kesederhanaan]
- DIY & DIWO
- Behind any 'sophisticated' technology is human being and its [social] networks
- Technology is still too masculine! Thus its logic is more "for PRODUCTION" vis-à-vis of (RE) PRODUCTION which needs the femininity! More women in technology [STEAM! – Science, Technology, Engineering, Arts and Mathematics]



# NEXT DREAM

- Collective Data Acquisition, Analytics and Articulation - Paradata
- Data-Information-Knowledge-Insights-Wisdom
- Collective storytelling with Data
- Critical Cartography
- More active women in STEAM



Cartoon by David Somerville, based on a two pane version by Hugh McLeod