

AeroVision connects



Future Information needs for land, agriculture and food

Tamme van der Wal
AeroVision - BioScope



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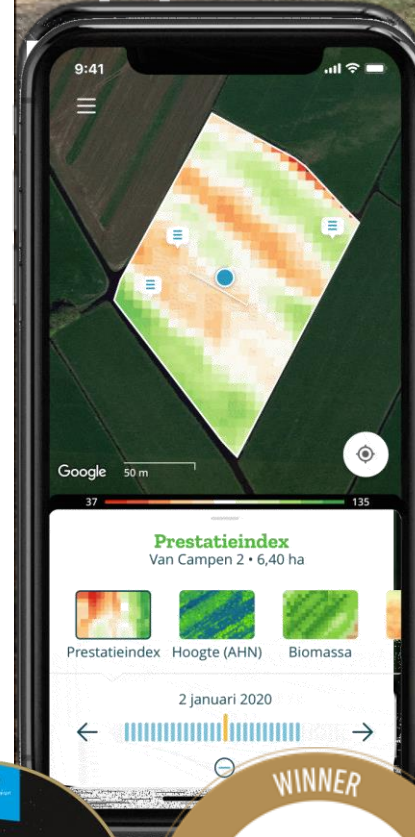
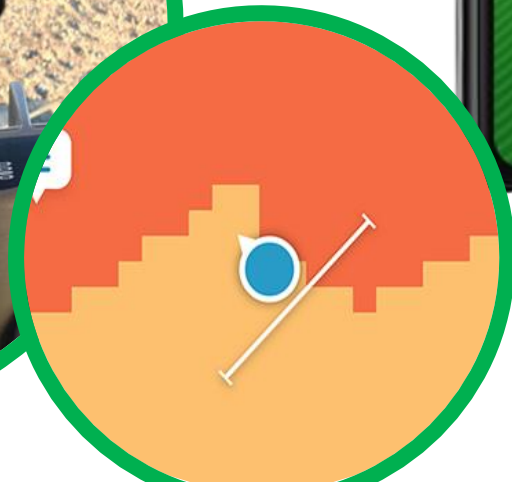


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FieldScout, de Smartphone app

*Making Smart Farming
Easy and affordable*



**GOLD AWARD
FOR BEST TOOL**



CAPIGI 2023, 8-9-10 MAY 2023

SAVE
THE
DATE



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BOTS, BOOTS and BUSINESS

8-9-10 MAY 2023 AMERSFOORT, NETHERLANDS

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Contact us

info@capigi.eu

More information

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Take away message

HighTech innovation:

- Users always want better, faster, more details, more spectra ... boring!
- What (potential) users really want: not to be bothered ...

Demand-driven innovation:

- Increase use of satellite data
- Make life easier

What side are you on?

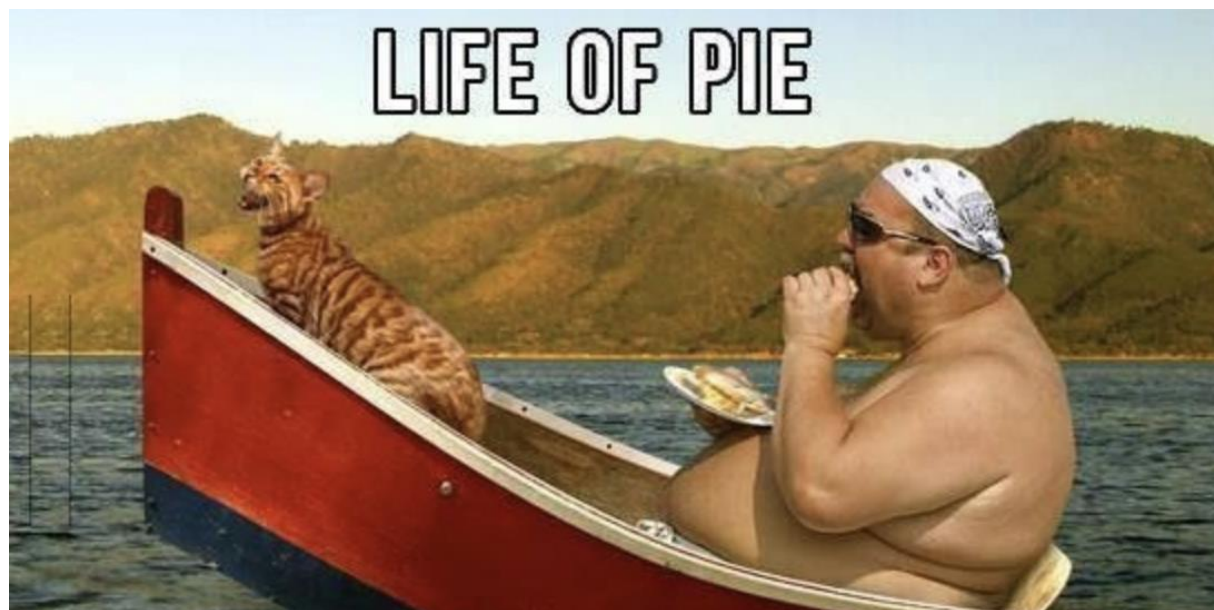


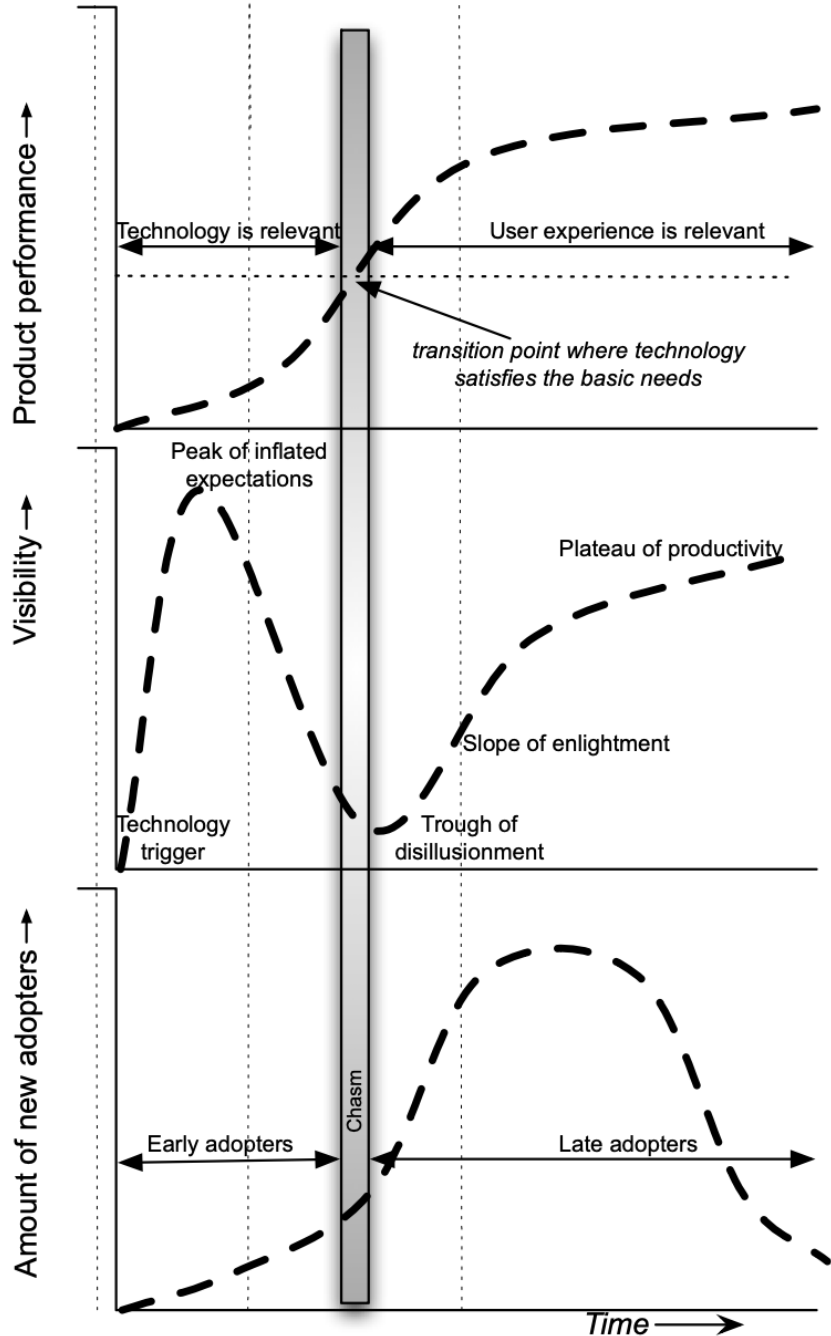
AeroVision.com

THE PROMISE



THE PERFORMANCE





What matters?

- User experience
 - Seamless integration
 - Undisputable data
 - Etc.
-
- Focus on “Customer Success”





Customer's inability to communicate
Their unmet needs ...

cutting costs, less failures ...
"A Car for Every Purse and Purpose"

Frozen design:
"Any color ... so long as it is black"

"If I had asked people what they wanted, they would have said faster horses."



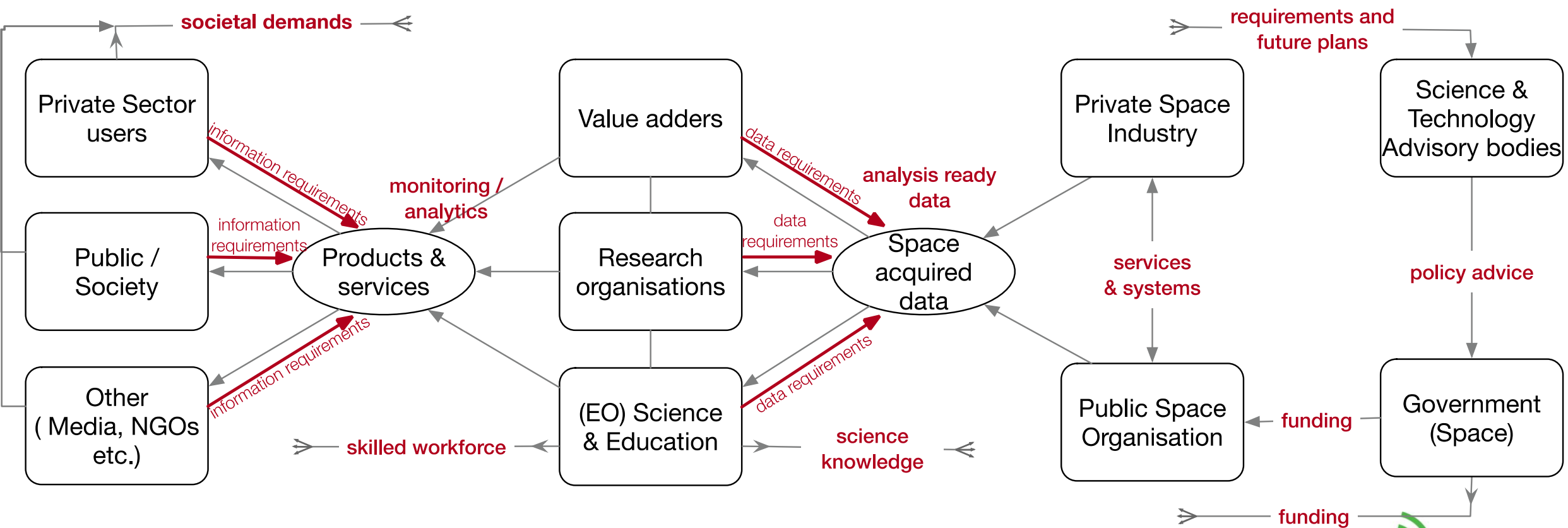


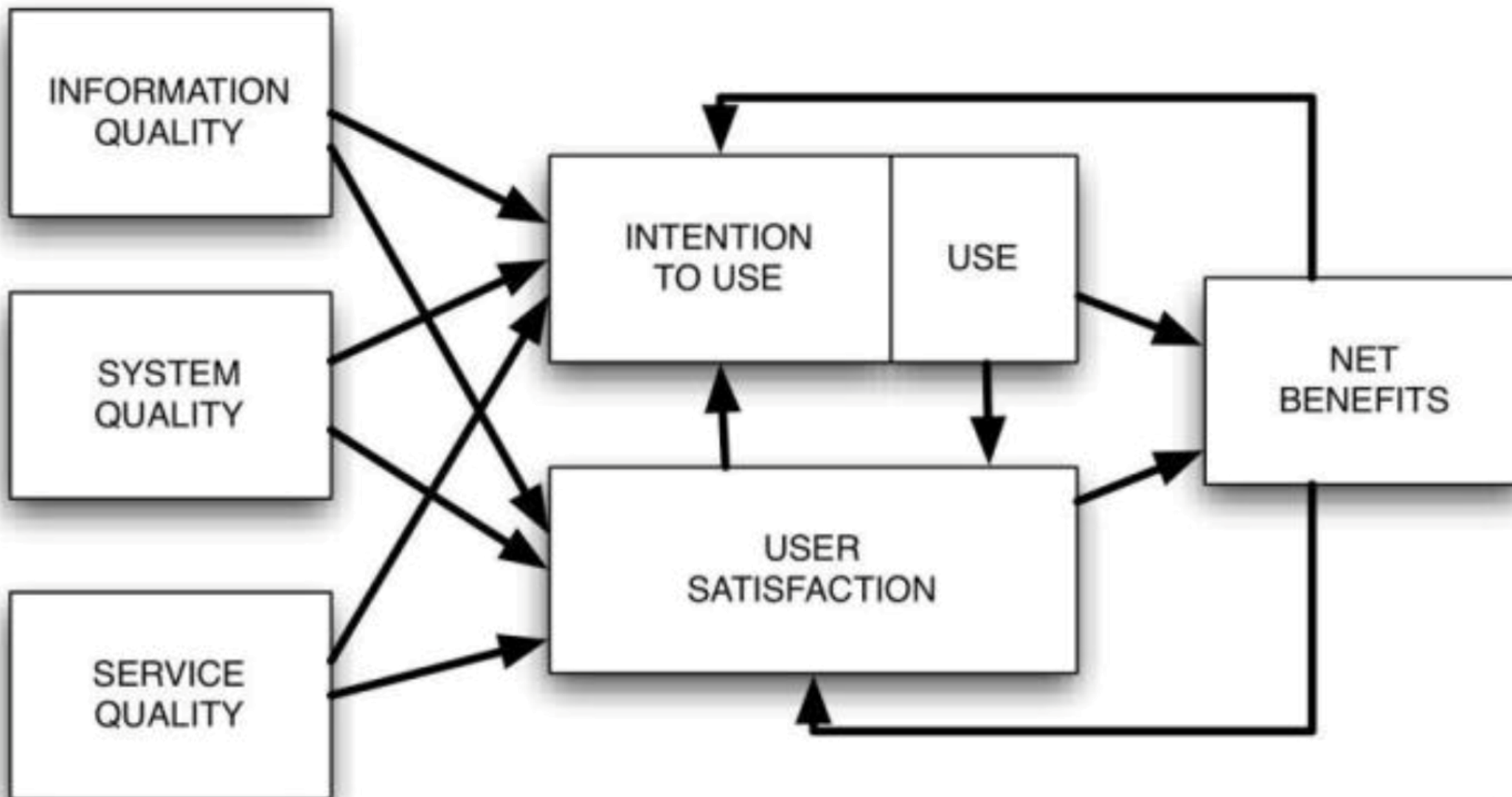
De sloper als ultieme ' eindgebruiker' (illustratie de sloopconcurrent)





Start with the user ...





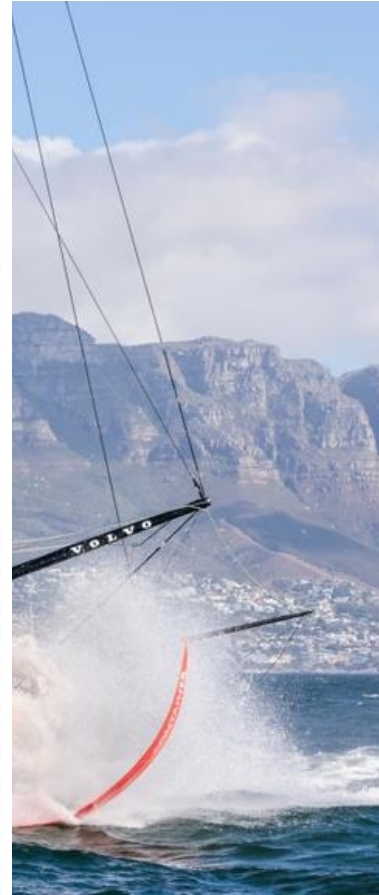
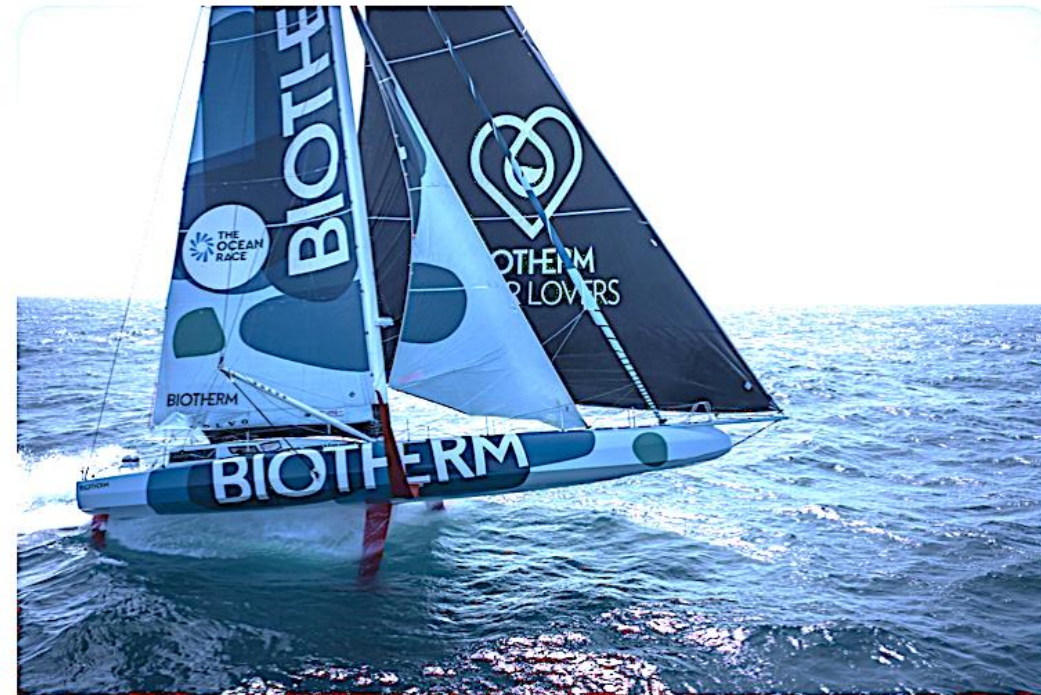
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A race we must win

BIO THERM AND PAUL MEILHAT ARE JOINING FORCES WITH THE TARA OCEAN FOUNDATION TO STUDY OCEAN BIODIVERSITY

2/8/23 **SKIPPER**



© © anne Beaugé



Innovations in race-sailing

- Faster boats
- Safer boats
- Less crew

- I didn't really change sailing until ...

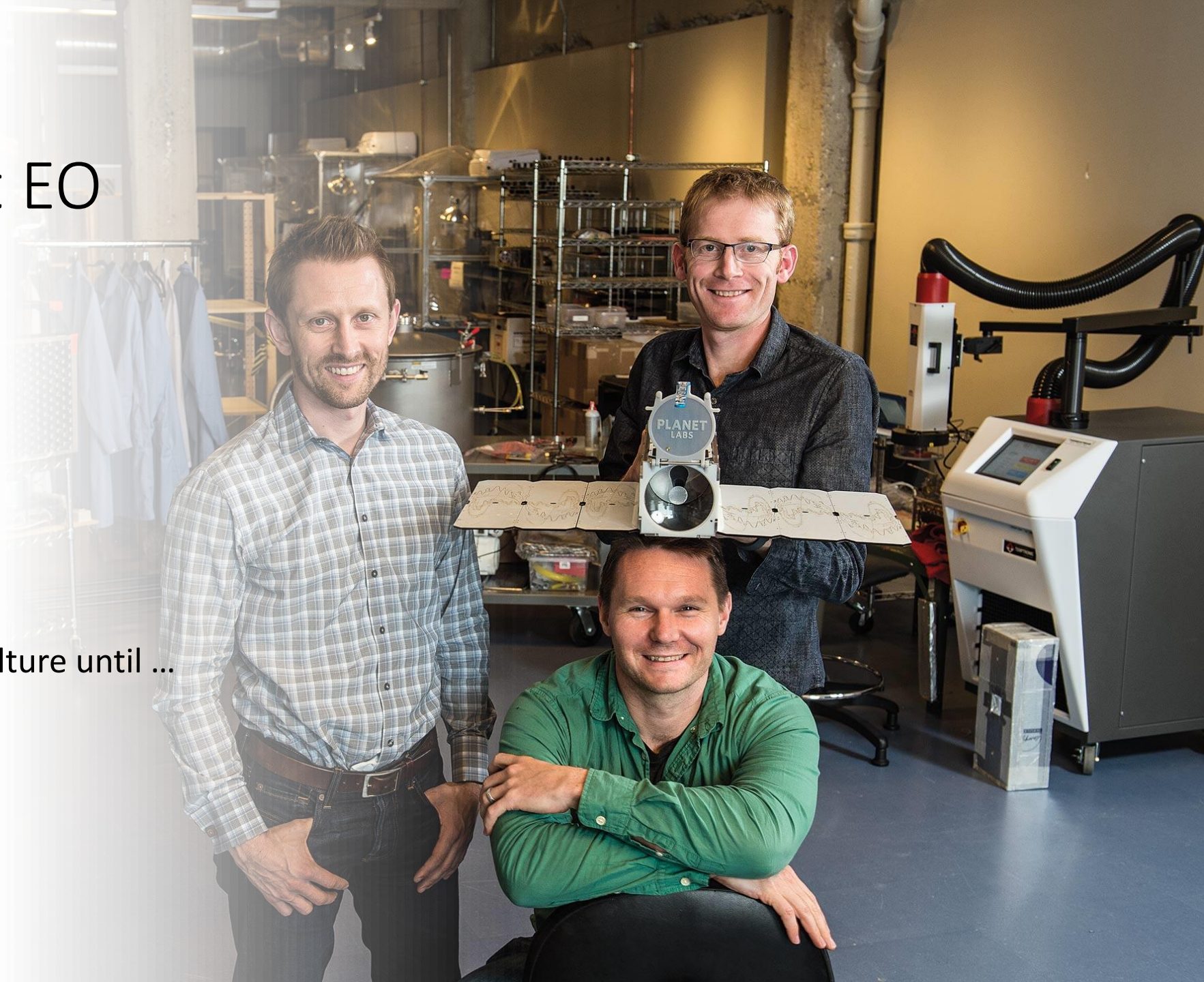


Innovations at EO

- Higher capacity
- Shorter revisits
- Better access

It didn't really change agriculture until ...

- Analysis Ready Data
- Fusion

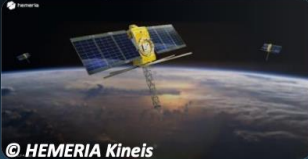
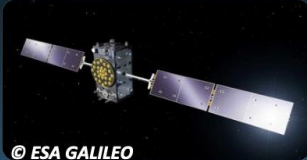




My take away: Slow progress in EO usability

connect
by
cnes

SPACE TECHNOLOGIES AND DATA



© ESA GALILEO

© HEMERIA Kineis

Mapping Guidance Data Collection

- 1 Earth observation**
Land Cover
Crop monitoring
Yield prediction
Farming inputs optimisation
- 2 Positioning Datation**
- 3 Satellite communication**
In-situ sensors
Weather
Soil humidity
Insects traps

LIBERTÉ
ÉGALITÉ
FRATERNITÉ

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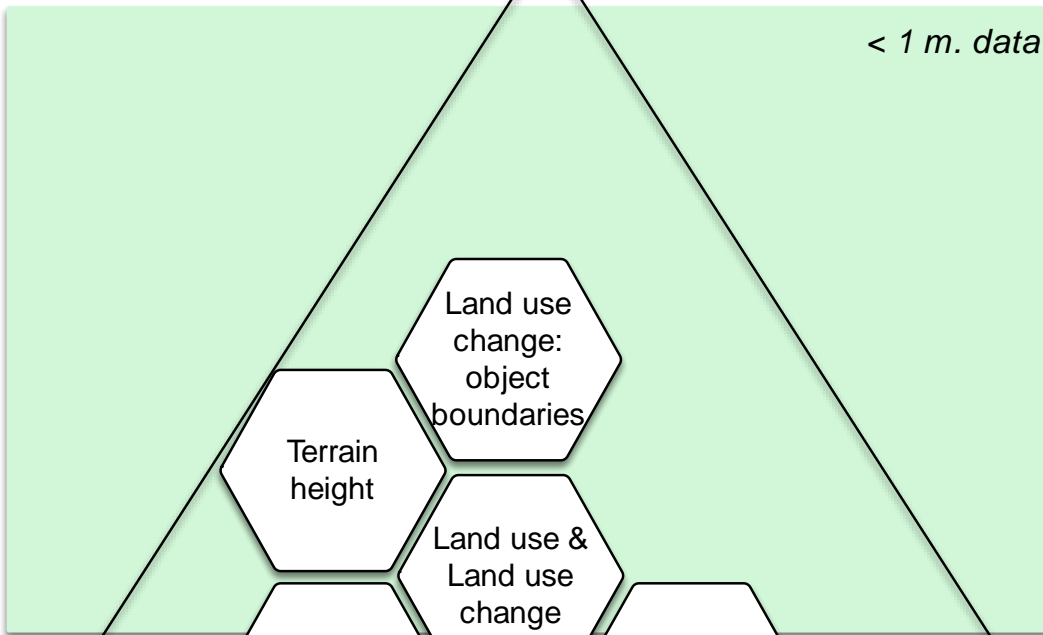
Courtesy of Thierry Chapuis - CNES



SPATIAL RESOLUTION



< 1 m. data



Land use change:
object boundaries

Terrain height

Land use &
Land use change

Specific detail

Biodiversity

vegetation species

Vegetation health monitoring

Soil moisture monitoring

Depositions

Soil carbon stock monitoring

Human-Nature interactions

Livestock whereabouts

Fauna activity / identification

Emissions

Detection of agricultural activity

daily data

SPECTRAL RESOLUTION

TEMPORAL RESOLUTION





What are yet-unmet expectations?

- Don't bother users with “cloud issue”
- Don't bother users with atmospheric correction, rectification etc.
- Create a dataflow that is
 - Available
 - Accessible
 - Affordable
 - Applicable
 - Acceptable





Conclusions

- Satellite data is still a “nice to have” in most application domains
- Demand driven innovation is almost non-existent
- “Sun-synchronous” prevents innovative use (looking around the clouds)
- Thermal data has been neglected too long
- Demonstrations and experimentation for USERS is lacking
- System and service quality are as important as information quality
- Satellites are never a one-off solution ...

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Thank you for your attention!

- Tamme.vanderWal@aerovision.nl
- Tamme.vanderWal@bioscope.nl





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