

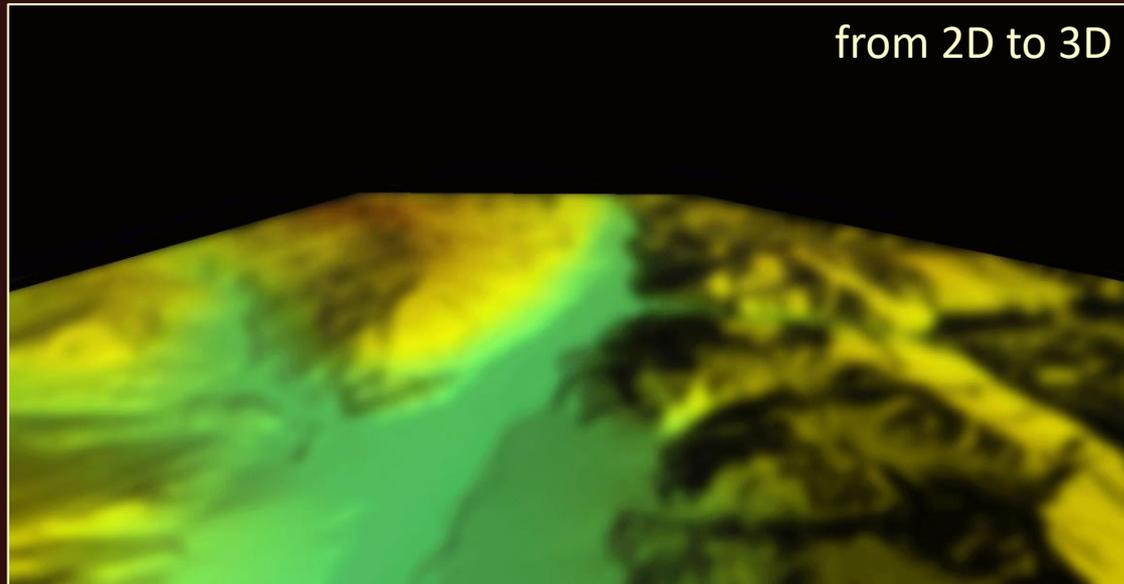
Quality Through Integration

Geospatial Industry → Geosciences → Geoinformatics
→ Geospatial Analytics → Geomorphometry → **Digital Elevation Model**

Tomaž Podobnikar

Digital elevation model (DEM)

... is about taking data
and creating a spatial representation
of a topographic surface



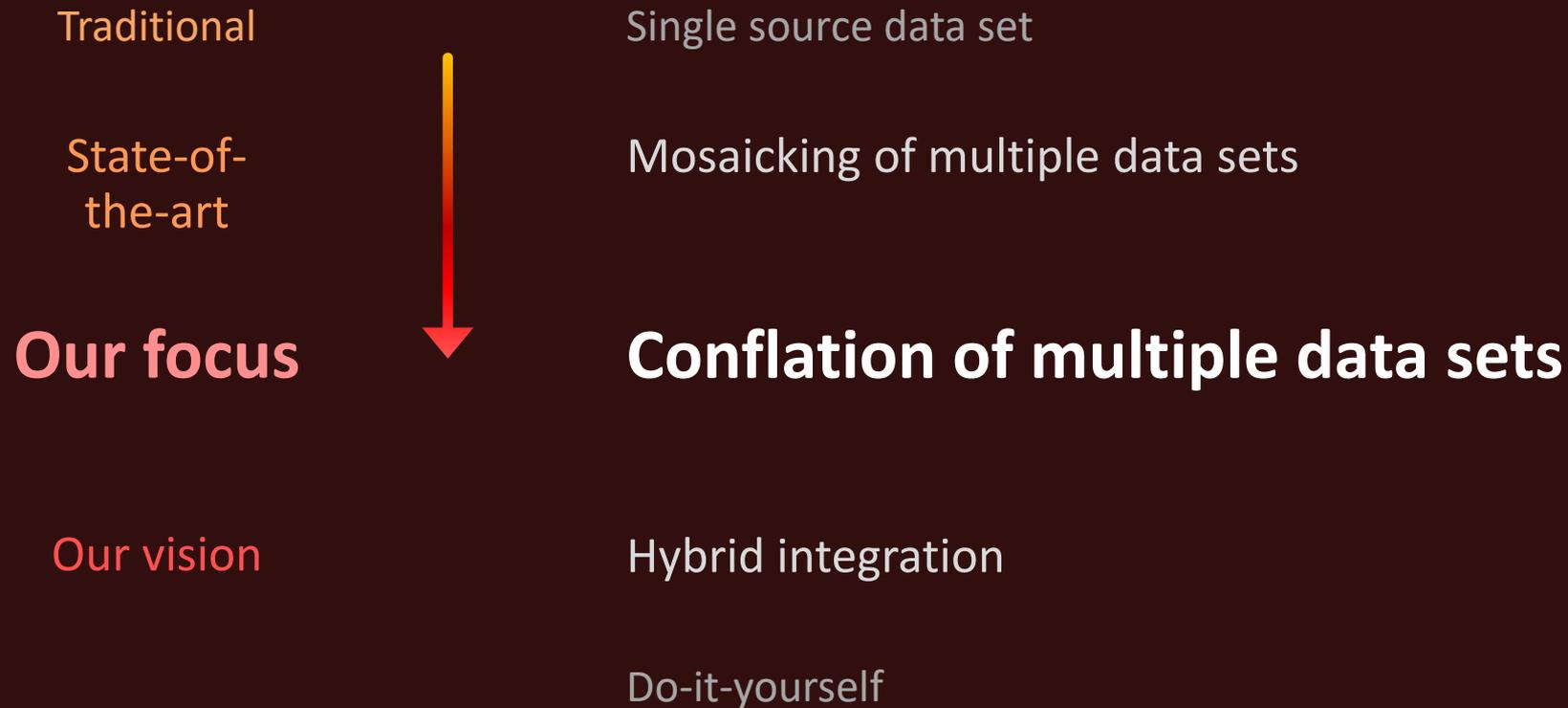
Critical issues of existing solutions

Are applications that use a DEM reliable?

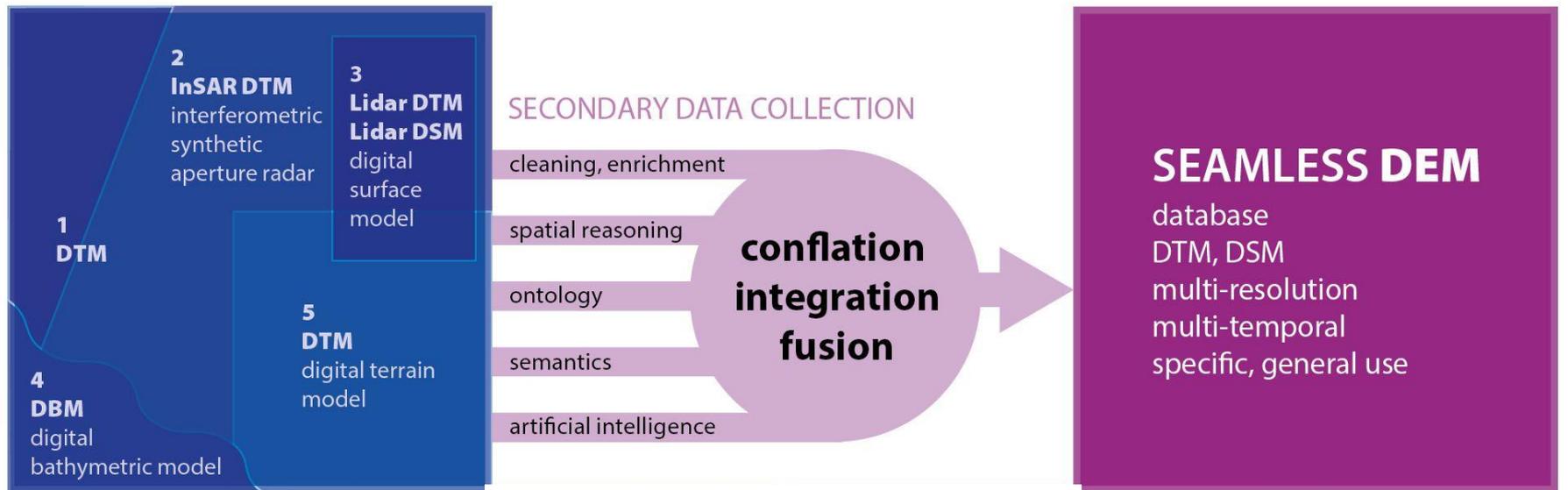
Customers overestimate DEM's properties!



State and vision of development



Concept with solution

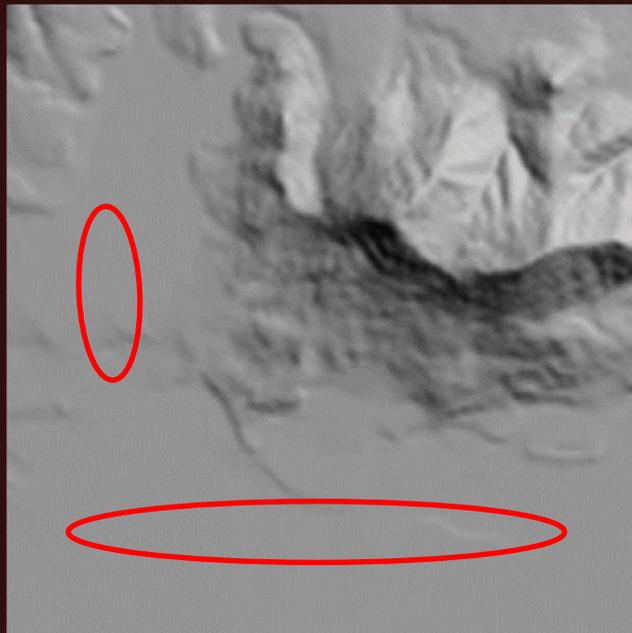


DATA ACQUISITION

- 1 airborne stereophotogrammetry
- 2 satellite radar interferometry
- 3 laser scanning (point cloud)
- 4 bathymetry (sonar)
- 5 topographic maps (contours)

- + enhanced quality (accuracy, details)
- + harmonised, compatible
- + reduced spatial big data
- + visual spatial metadata
- + scalability, usability

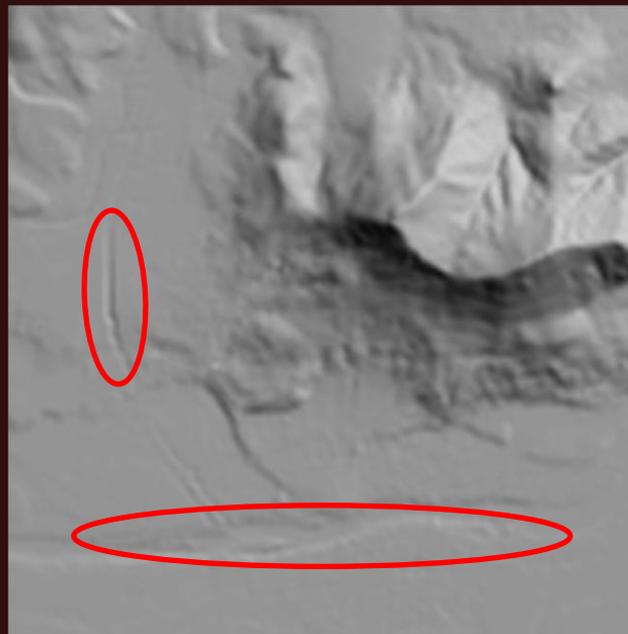
Result



~~DEM from single source~~



SEAMLESS DEM



DEM from 25 sources

Market potential

This **waterfall opportunity** cascades from country, government and commercial entities right down to end-user, education, research and training

Redefinition of the standard of DEM
and customer expectation

E.g., flood-risk management, Smart City, intelligent territories, natural disaster/hazard management, urban and regional planning, precision agriculture, landscape archaeology, mining industry, telecommunication industry, IoT, change detection

Expectation from the partnership

Accelerate development

form TRL 5 prototype to mature TRL 9 product & service

Needs

founder ... (long-term strategic) investor

s y m b i o s i s !

