AUTODESK. UNIVERSITY

Democratization of Satellite and Aerial Imagery: A Catalyst for AEC Design

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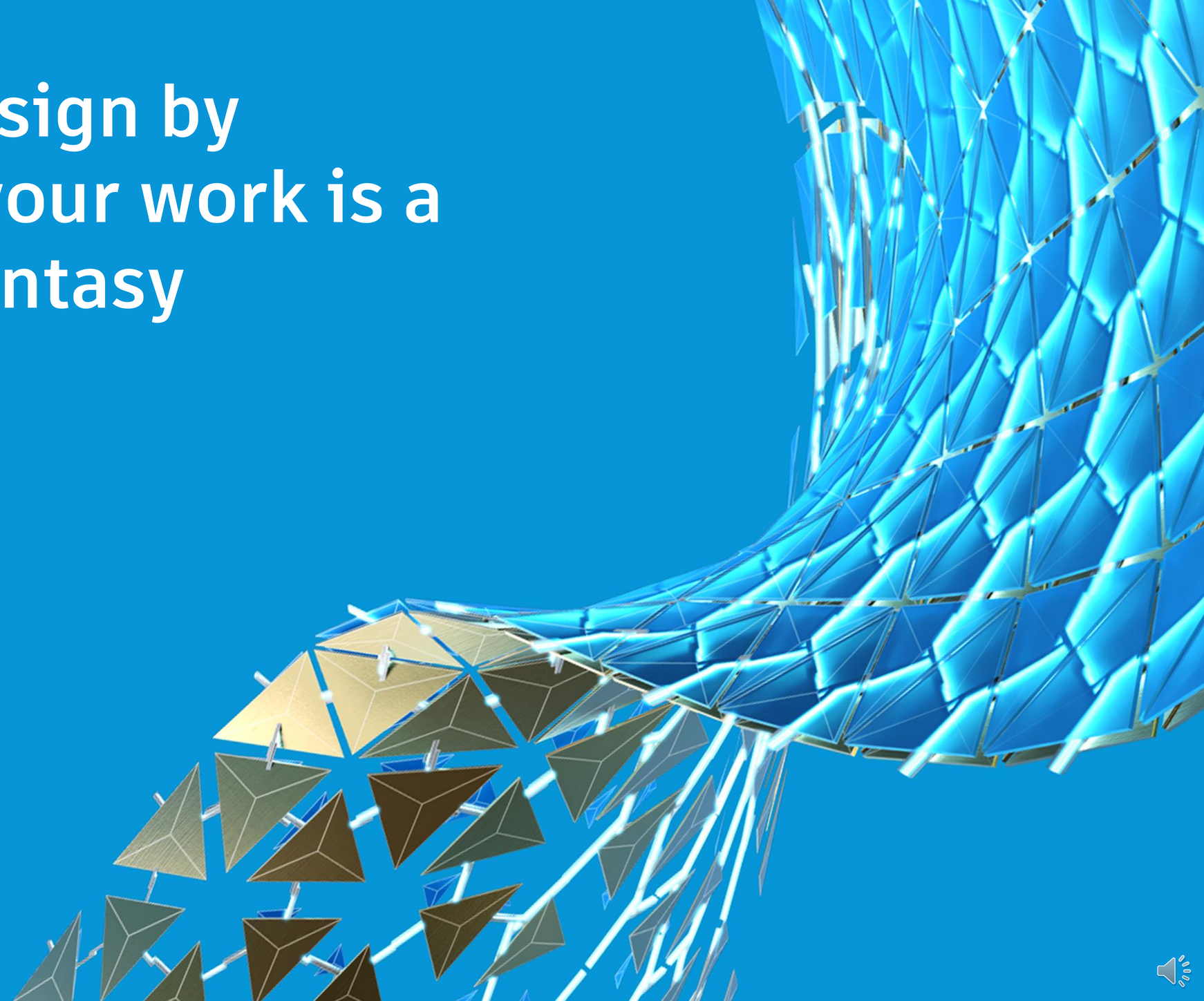
About the speaker

Lambros Kaliakatsos

Civil engineer, engineering software developer and CEO of Plexscape.

A decade of AEC experience taught me that missing or low-quality data, especially in the early stages of designing, can lead to significant delays, revisions, and costly reworks.

When you design by guesswork, your work is a product of fantasy





Dump site restoration & Sanitary landfill design

General layout, road and earthworks design of several such projects across Greece


The effect of guesswork survey
The northwestern part was substantially different than what we had in mind and designed for.
Image ©2020 Google
Google Earth

The Numbers are Real



TOTAL PROJECT



REDESIGN COST



DELAY



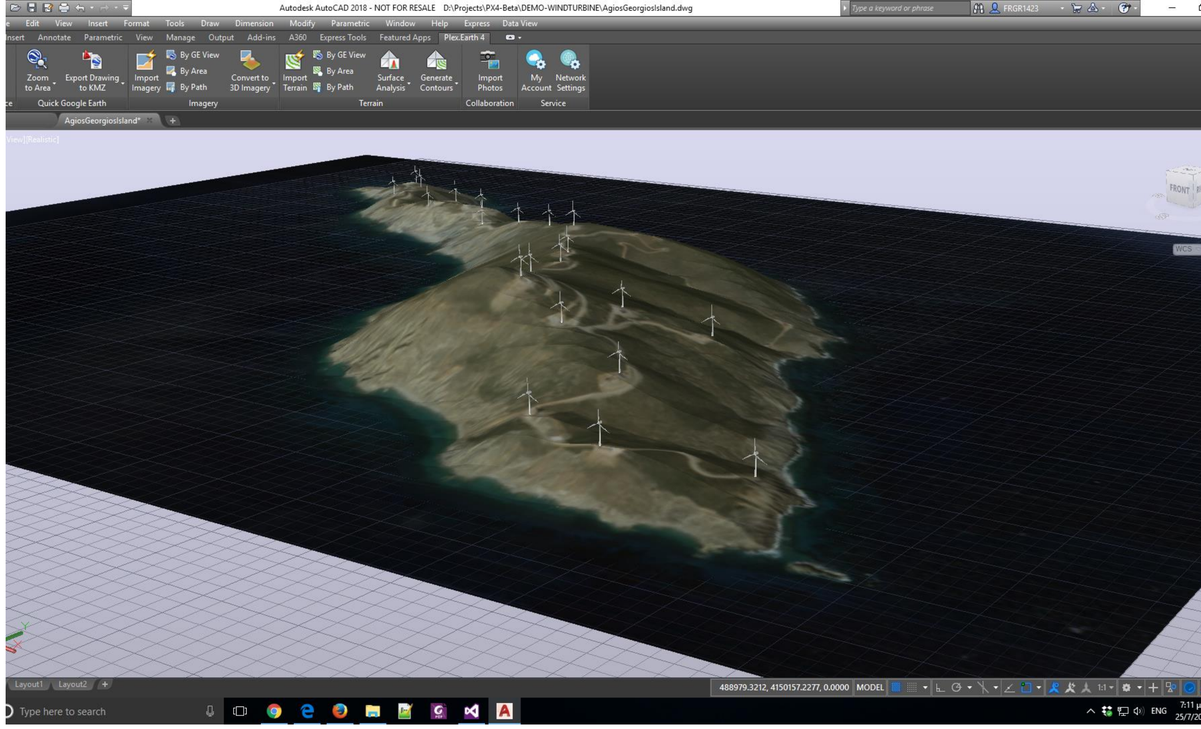
We needed to have a complete understanding of our project sites' existing conditions

Not just an obscure fuzzy view of the past

Plex-Earth’s birth!

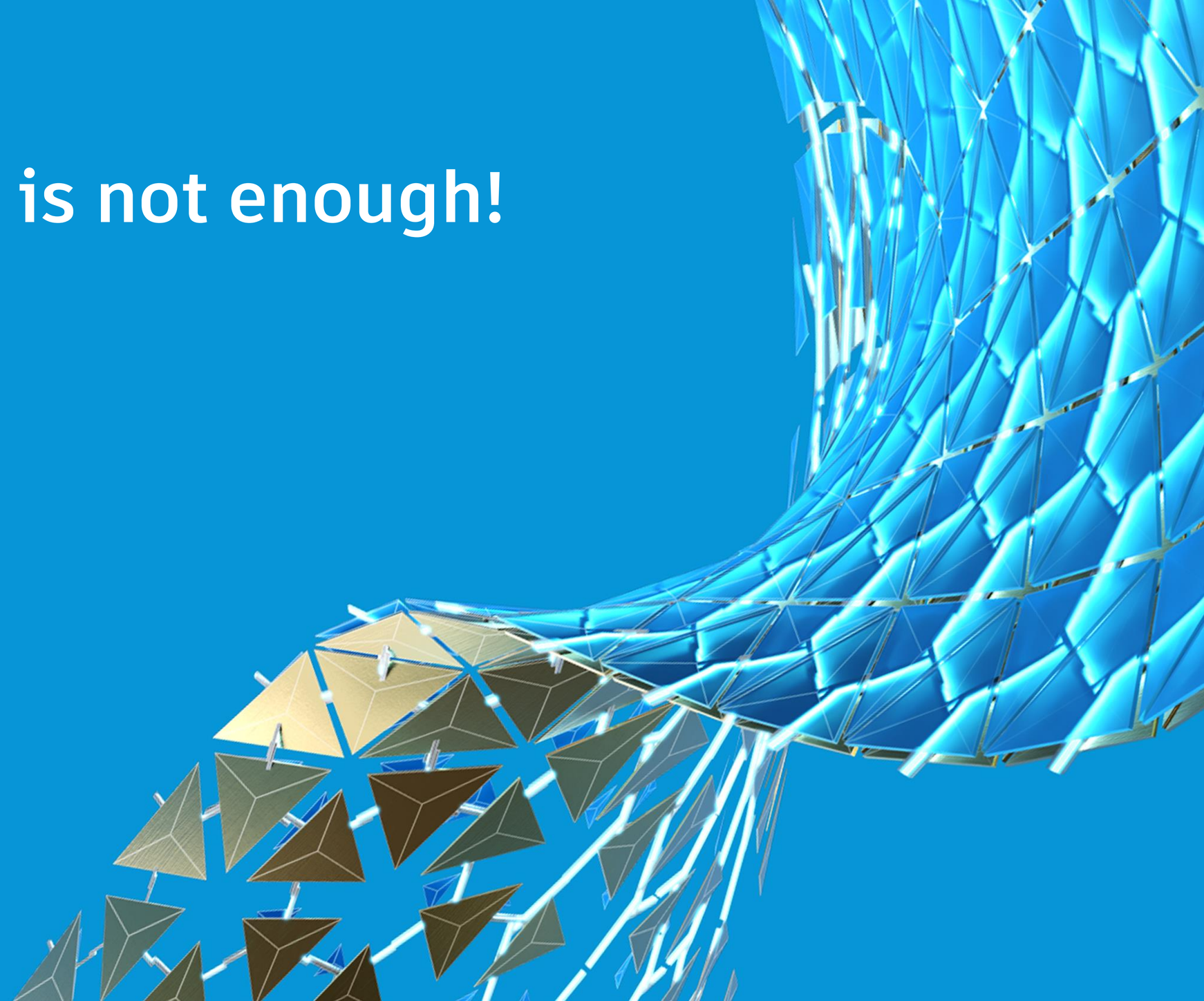
All about AutoCAD and Google Earth:

- **Import images**
  - Automatically georeferenced
- **Import terrain models**
  - Easy and quick earthwork estimates
- **Export 2D & 3D drawings to Google Earth**
  - Better communication between teams, shareholders and clients
- **Mosaicking operation as a game-changer**
  - From 5 days to just 30 minutes





Google Earth is not enough!



More than a piece of software

- **Mission**
  - Help engineers and architects make better designs, meet their deadlines and their budgets
- **Principles**
  - Actively help engineers and designers
  - Continuous improvement to meet new needs
  - For engineers, by engineers
- **More than 15,000 users since 2009**
  - Individual designers, small teams and big companies
  - Thousands of projects worldwide

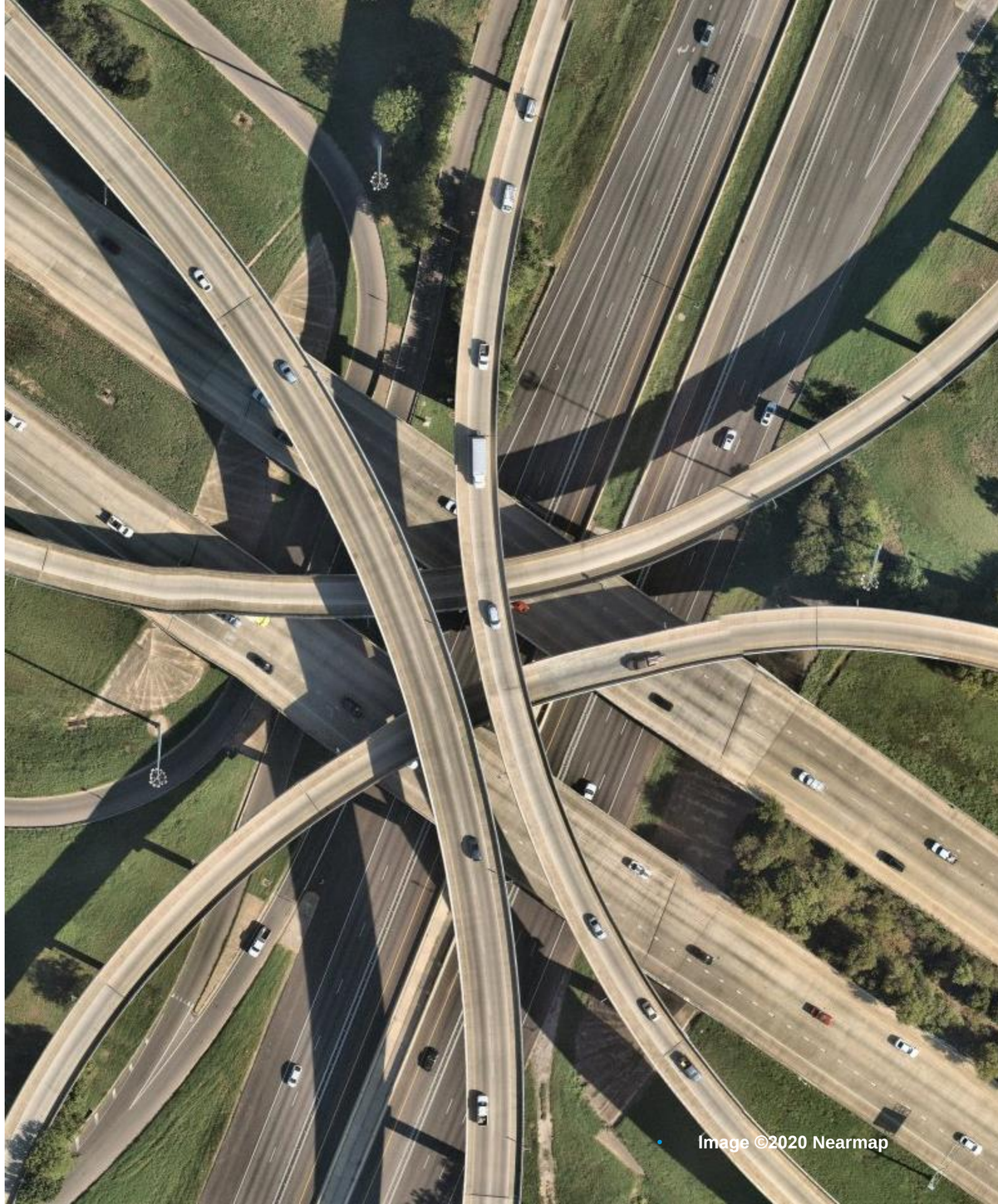


Geospatial Imaging Revolution

Leading qualities of the geospatial imagery products:

- **Big Advantages…**
  - High-Resolution
    - Satellite: 30cm
    - Aerial: down to 2.5cm
  - Historical datasets & frequency of data acquisition
  - Global coverage
  - Without leaving your desk

- **…with Big Drawbacks:**
  - Cost & minimum order size
  - Tedious procedures



The Era of Drones

The dawn of an exciting new era comes with

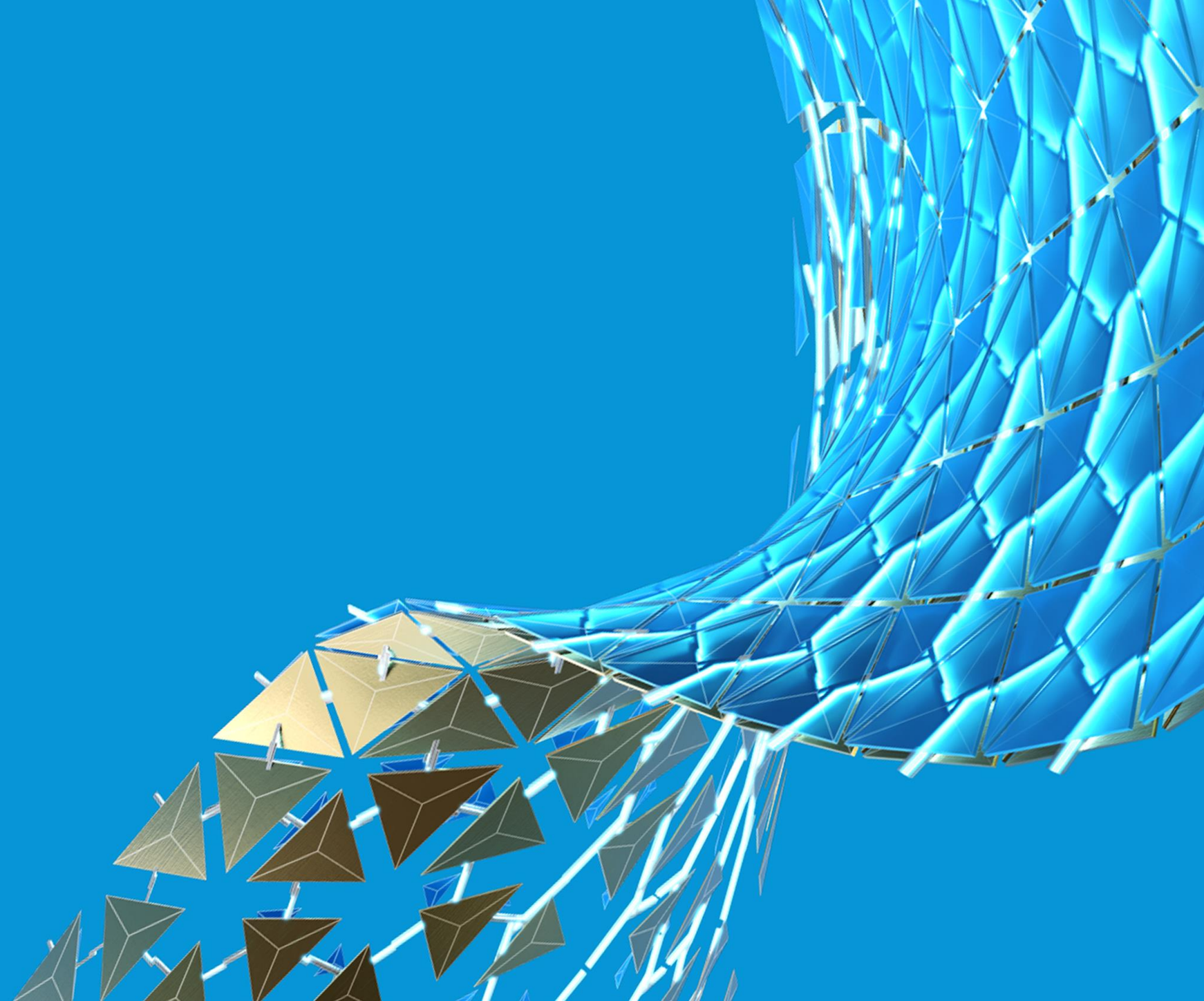
- **Big Advantages…**
  - Accuracy
  - Quality
  - Availability

- **…and Big Drawbacks**
  - Permits & insurance requirements
  - Skilled personnel and equipment cost
  - On-site visit – time

You simply don’t need a drone at early design stages!



Our Vision



To democratize access
to the very best available images and data
from the world's aerial and satellite providers,
giving the AEC industry
powerful advantages and insights,
in a simple, affordable way.

What does the “best available images and data” mean?

- Highest Resolution
- Most Up-to-Date
- Most Accurate
- Instantly, on-demand

plex earth

1. World’s Best Imagery

We have partnered with world’s leading satellite and aerial imagery providers:

AIRBUS MAXAR

nearmap HEXAGON

…and more to come, for every corner of the world!



2. Easy for Everyone

Every designer should be able to access premium satellite and aerial imagery, in a matter of seconds.

Without the need of special GIS skills!

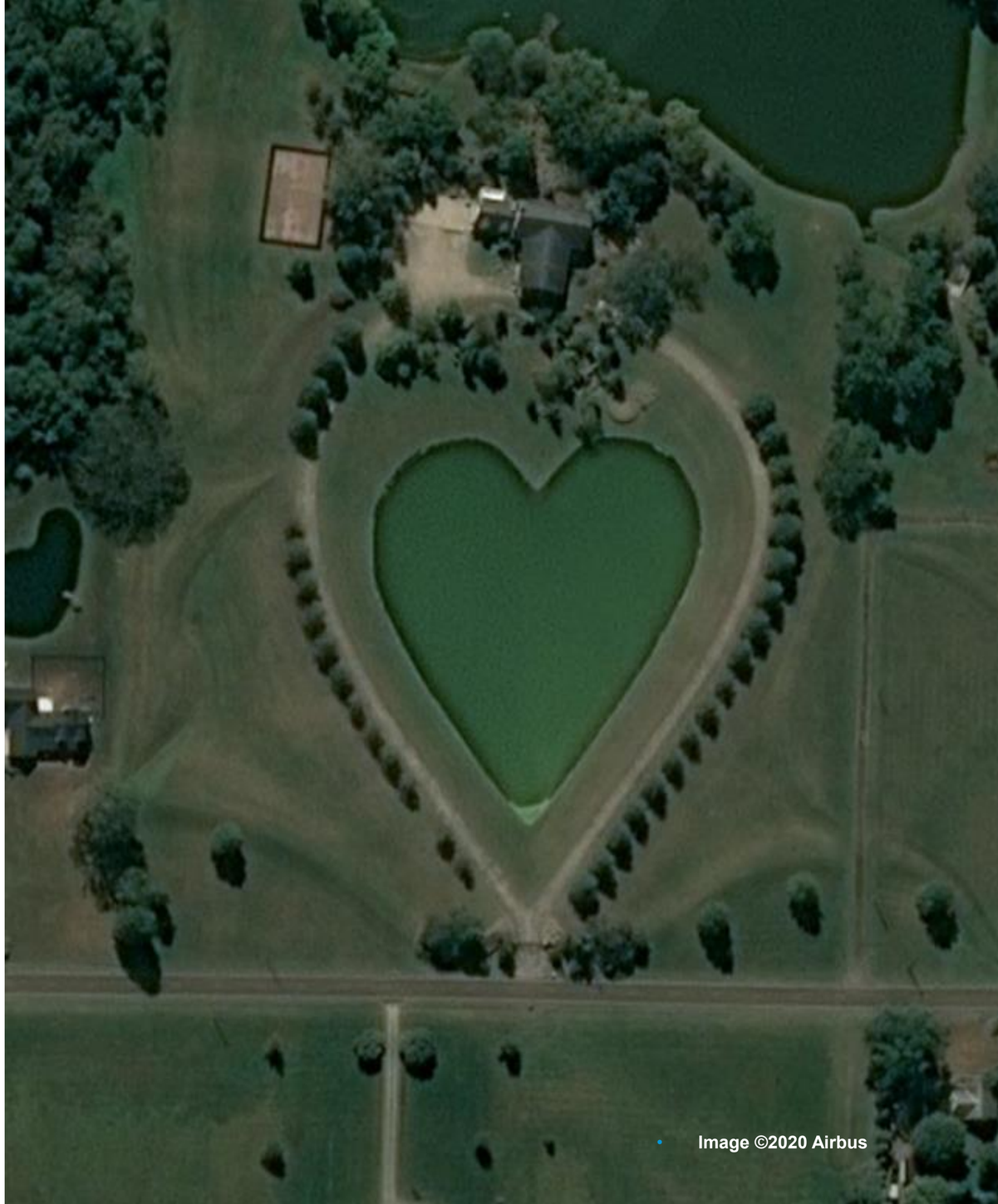


3. More than Affordable

Can you:

- Budget your software costs, with no surprises?
- Get unlimited views included in a single low-cost subscription?

We made it possible for you and every designer in the world!



Join the future of imagery in AutoCAD today!

- **Are you an AEC professional looking to become a design superhero?**
  - Start a free trial at plexearth.com

- **Or do you create real-world data? Don't miss the opportunity to become part of the Plex-Earth platform now!**
  - Get in touch with us at partners@plexscape.com

Or email me at lk@plexscape.com

See you in our virtual booth at Autodesk University 2020!

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Authorized Developer





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