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GEOSPATIAL WORLD FORUM

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Nichification & Backward Vertical Integration

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Nichification

There won't be a 2nd 'Planet Labs'.

Space Lasers from Space

LiDAR for precise ground and atmospheric measurements

What is it for?

Atmospheric Measurements

- Aerosol identification & concentration
- Wind direction & speed

Ground Measurements

- Very high resolution DEMs
- Asset monitoring & planning
(Forests, Infrastructure, Insurance, etc.)



Space Lasers from Space

LiDAR for precise ground and atmospheric measurements

Why did it take so long?

- Lasers are freakin' complex
(Space lasers even more!)
- High Size, Weight and Power (SWaP)
of the instrument
- High precision satellite platforms required



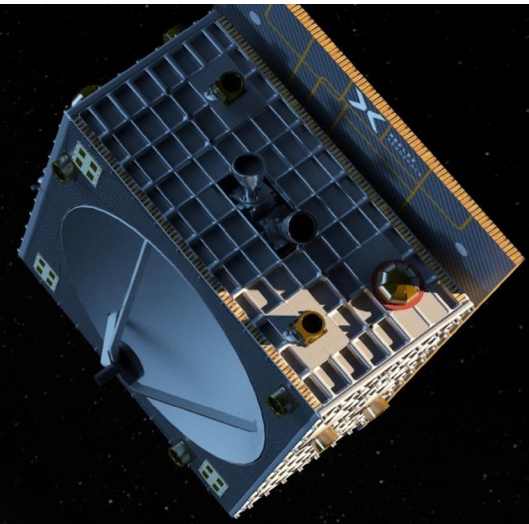
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Backward Vertical Integration

Two real-life examples of how to (re)gain control of your supply chain.

RF Localization & Identification



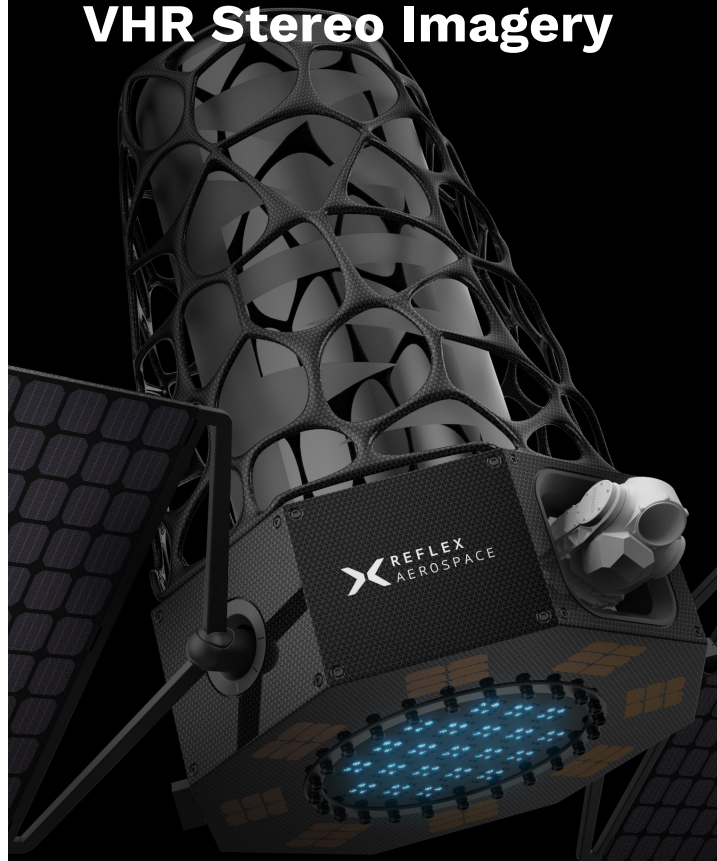
Challenge & Opportunity

- Immediate Business Opportunity
- Required data not available
- No Payload / Instrument available
- Very short time for implementation

Solution & Mission

- Support to evolve non-space H/W into space H/W
- Development of a tailored satellite in 18 months
- Launch & nominal operations

VHR Stereo Imagery



If suppliers are too slow, ...

simply indulge in your own constellation.

Background & Reasoning

- Capacity limitations with growing demand
- Unit economics bad

Challenges

- Switch from OpEx to CapEx financing
- Limited knowledge regarding space assets

Business Opportunity

- Lower costs / higher margins
- Penetrate new markets faster
- Positive spill-over effects

Conclusion

- „Soon, every company will be a space company.“
(Harvard Business Review, 11/2022)
- Latest developments driven by market demand & Laser-focused on specific use cases
- Recent advancements in other industries enable low cost & rapid deployment of space assets



Christian Williges

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**Don't sacrifice on
your Use Case.**



**Never compromise
on your Mission.**

