

## Twitter Thread by Kyle Vogt



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**1/ Interesting thing happening in the LIDAR industry right now. 5+ companies will soon or have SPAC'd. Their value is based on \*projected\* revenue that comes from \*entirely overlapping\* potential customers, with very little discount applied to future projections. Is this bad?**

2/ And how did we end up here? SPACs aren't subject to the same effective restrictions on future revenue projections as traditional IPOs. It's totally possible the numbers will be correct for one of these companies. But it's not possible for all to be correct.

3/ SPACs may be a good thing for pre-revenue companies or companies that have chosen to go public before they meet the more customary milestones for an IPO (\$100m in ARR, for example).

4/ If these companies were to be valued based on earnings today, they would be severely undervalued. But if you look at the market caps for each of these companies, they're each being valued as if they had already realized some of their ambitious future projections.

5/ Of course, it's certainly not unusual for startups to be valued based on future revenue projections, even in a highly competitive space. But I typically see private markets put a much larger discount on these future projections than what we see with these SPACs.

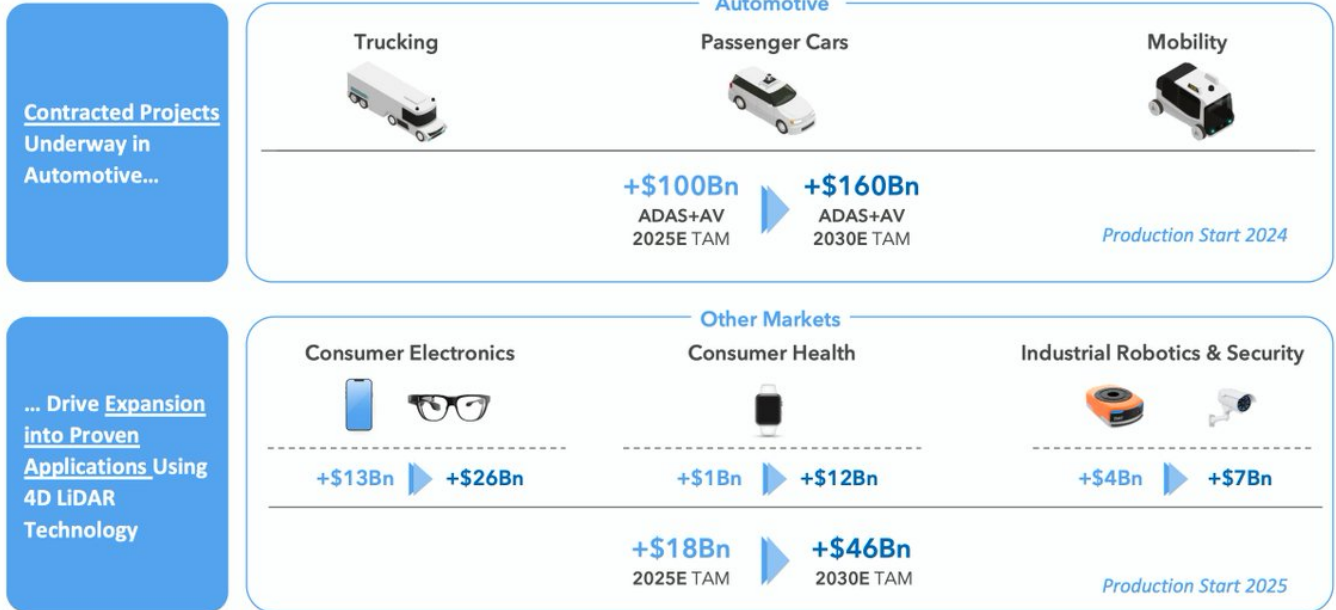
6/ Let's look at the overlap (from public pitches):

- \* All targeting ADAS or robotaxi market as the top of one of the top revenue sources
- \* All include value added software for perception
- \* All counting on today's nascent industry adoption of LIDAR to balloon

In no order:

7/ AEVA

# Massive Opportunity Across Multiple Large Markets

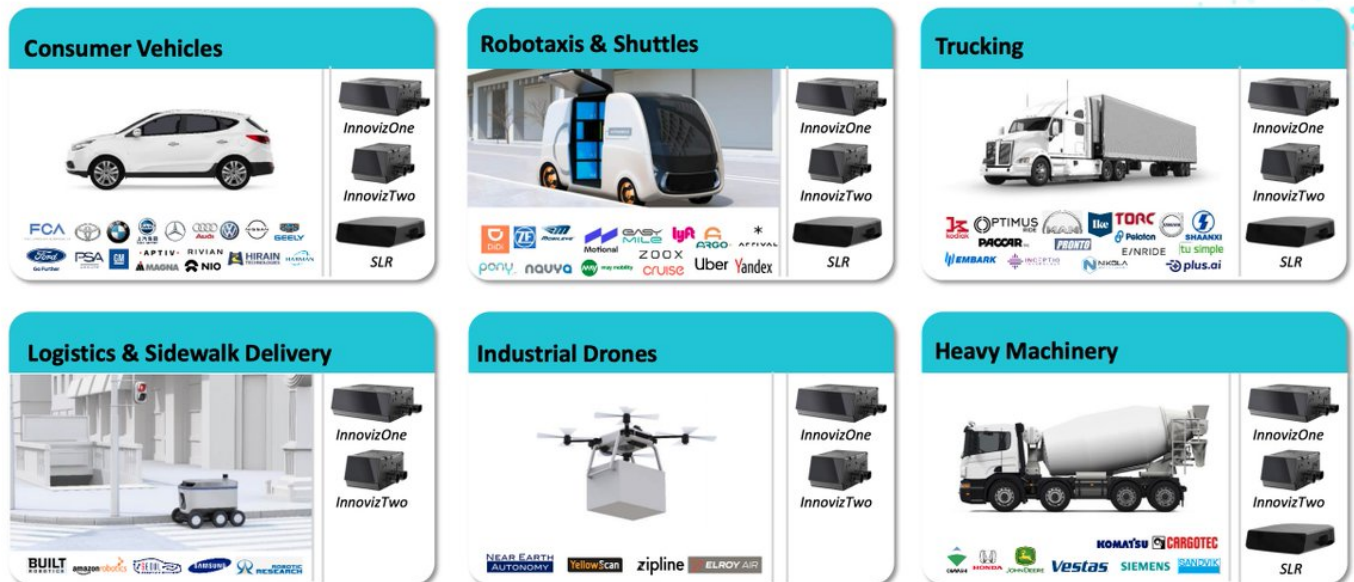


Sources: Gartner, IDC, Deloitte, IHS Markit, International Federation of Robotics, Aeva estimates

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8/ Innoviz

## Innoviz Product Portfolio Spans All Key LIDAR Markets



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9/ Ouster

# Flexible architecture opens applications across industries

### Simplified hardware platform

→ Product portfolio built on a single architecture with negligible incremental cost to customize by vertical

Wide-view digital lidar

Long-range digital lidar

True solid-state digital lidar

### Supported by integrated software

→ Software and developer tools speed time to market for customers and drive stickiness

Object classification

Object tracking

Feature extraction

Localization & mapping

#### Industrial

HITACHI

SANDVIK

XCMG

CAT

KONECRANES

CNH INDUSTRIAL

KOMATSU

JOHN DEERE

SAMSUNG HEAVY INDUSTRIES

SCANIA

#### Smart Infrastructure

Microsoft

TRANSCORE

verizon

iteris

TEXTRON

Google

Sandia National Laboratories

CISCO

SIEMENS

Qualcomm

MHCORBIN

#### Robotics

Postmates

VEENA robotics

Honeywell

amazonrobotics

NURO

nvidia

U.S. ARMY

NASA JPL

Ford

FedEx

TOYOTA RESEARCH INSTITUTE

Boston Dynamics

#### Automotive

BMW

NVIDIA

cruise

MAY

may mobility

Motional

VOLVO

WAYMO

DAIMLER

VW

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Note: logos represent the target ecosystem of each market.

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## Highly Diversified Projects Across Industries

### 165 Projects Could Potentially Yield a Total of ~8M Units Shipped by 2025

Number of Projects	
Advanced Driver Assistance Systems (ADAS)	58
Autonomous Vehicles (AV)	35
Delivery	11
Mapping	10
Robotics & Industrial	34
Shuttles	11
Smart City	6
<b>Total</b>	<b>165</b>

(Stages of projects shown in the above table vary from signed / awarded phase to pre-RFI phase)

(Chart represents sensor units)

The chart shows a significant upward trend in sensor units from 2020 to 2025. The industries contributing to the growth, from bottom to top in the stack, are: ADAS (red), AV (dark blue), Delivery (yellow), Robotics & Industrial (light blue), Mapping (green), Shuttles (purple), and Smart City (pink). The total units reach approximately 8 million by 2025.

Note: The chart above reflects a visual representation of how we believe the market is developing based on multi-year commercial demands that we currently see from customers and is not indicative of projected revenue or unit shipment. Signed and awarded contracts represent agreed terms and conditions of supply, but do not reflect firm orders unless and until purchase orders are received. To date, shipments under and revenue from these signed contracts have not been material. Based on data as of June 1, 2020.

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11/ Luminar

# LUMINAR'S CURRENT & TARGET PARTNER ECOSYSTEM



50 current commercial partners represent ~75% of target passenger vehicle, trucking and robo-taxi ecosystem

	PASSENGER VEHICLE	TRUCKING	ROBO-TAXI	ADJACENT MARKETS
LUMINAR Partners	7 of Top 10 OEMs	Most Major Programs	Most Major Programs	Diverse Cross-Section
Target Ecosystem	TOYOTA VOLVO DAIMLER AUDI VW FORD BMW SAIC HYUNDAI HONDA	IKE TORC/DAIMLER NIKOLA VOLVO TRUCKS KODIAK tu simple PACCAR EMBARK	TOYOTA RESEARCH INSTITUTE CRUISE MOBILEYE INTEL NVIDIA UBER ARGO AI MOTIONAL TIER IV WERIDE ZOOX	<b>Aerospace/Defense</b>  <b>Construction/Mining</b>  <b>Agriculture</b>  <b>Smart City</b>

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12/ What does this mean? First, I have great respect for all of these companies. They're each innovating in different ways, and competition is great for the industry. Robotaxis will have an enormous positive impact on society, so it's critical to see progress here.

13/ But we saw a consolidation / collapse of the robotaxi space over the last 24 months (down to a handful of players), and LIDAR is next. This probably means lower market caps for most of these co's, which sucks for everyone involved, but may the best product win!