Twitter Thread by Sahara

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As promised, a thread on one of my largest holdings going into the new year...

Allow me to introduce Smart Eye, "the king of DMS"

A little background first

Driver monitoring systems (DMS) are a soon-to-be-introduced safety feature in cars.

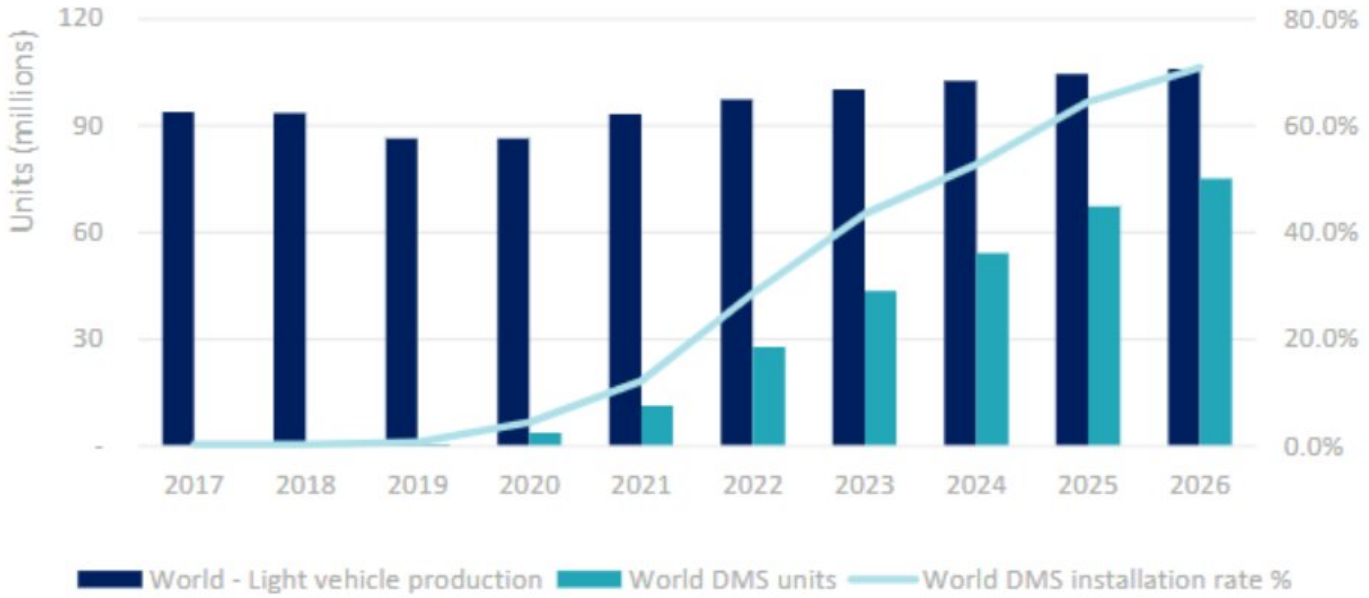
As the name suggests, they monitor drivers to ensure they are not tired or distracted while driving and gives them a nudge if they are.

This is going to be legally required to be in all new cars in Europe and North America by the middle of the decade.

As auto OEMs sell on a global basis, what happens in developed markets usually ends up in emerging markets as well.

As a result of this legislation, there is a pretty clear path for increased penetration of DMS in the auto industry.

The slide below shows industry forecasts of around 60% penetration in new cars sold globally by 2025.



Source: "ADAS Automotive IR Vision Driver Monitoring Systems" 2020 Edition, Semicast Research.

As a small aside, Volvo did a great ad for DMS last year. Just priming consumers for what's to come.

https://t.co/SHSGRoGpdk

The DMS system will have a few layers. The hardware is done by other players. We are interested in the software, as this is where Smart Eye operates.

I say software, but it is really an algorithm that sits on the hardware.

The way the industry works is an RFQ goes out, the OEM spends around a year deciding which solution to use, then the winner is designed into that model for its lifetime.

This is very sticky and a model usually lasts for ~14 years.

There are currently two main players on the software side: Smart Eye and Seeing Machines.

So far, Smart Eye has had 83 design wins from 12 different OEMS, while Seeing Machines has had 12 design wins from 6 OEMs.

The rivalry between the two companies' shareholders can actually get hilariously intense.

For the purposes of this thread I am focusing on Smart Eye. I'm sure Seeing will do well too. A rising tide lifts all boats.

There are a few smaller competitors, but for the impending legislation they are realistically too late.

The vast majority of the coming design wins will go to Smart Eye or Seeing Machines.

So, how do the economics look?

Smart Eye receives a fee of $5-10 for each car into which it is designed.

This comes at a 100% gross margin and requires minimal extra cost.

With this information, we can make some assumptions about the future.

In five years time, we can assume 50% DMS penetration, Smart Eye has 40% market share (currently 65% and management see 40% as a minimum) and $5 revenue per car.

This gets $100m of revenue.

Smart has about $15m of opex. Let's conservatively assume that grows at a 20% CAGR. That leaves us with roughly $40m of opex.

I believe every one of those assumptions is too conservative and it gets us to >$50m of EBIT.

Today Smart is valued at around $450m, so sub 10x an unrealistically conservative EBIT projection five years out, presuming the market grows as planned.

I think you can sketch out a pretty compelling IRR from here even though the shares have had a decent run.

On top of auto there is also aviation. Seeing Machines believe that this could be just as big as the auto opportunity (lower volume but higher ASP).

I don't know what that could be worth to Smart, but it's probably not zero.

The main risk in my view is that the legislation gets delayed. It's hard to gain complete confidence in this, but all the wheels are certainly in motion and the OEMs are picking their suppliers in preparation.

Oh - and if you think fully autonomous cars are coming in the next five to ten years then this probably isn't for you.

That's it. This is now my second biggest position and I see it as pretty compelling.

Shout outs to a few accounts that monitor the space closely and are worth a follow @T_I_M_P_P_A @lindqvest @Pelle23961901