

AUTONOMOUS DRIVING ROBOT

make any vehicle, autonomous

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PROBLEM

- * Autonomous vehicle development results in **expensive** product
- * Commonly implemented on **vehicles** with high **customizations**
- * Trivial vehicle issues cause the **asset** to stay **idle**; **loss** of **revenue**
- * Autonomy is possible only on designated vehicles; **no flexibility**

SOLUTION

- * Autonomous **driving robot** in the driver seat operates the controls
- * **Separate** from the vehicle; Can be **moved** to other vehicles
- * Has **contingency** modes to address the technology limitations

MISSION

We turn **any** standard **vehicle** into a **driver-less** vehicle,
as autonomous as other expensive commercial solutions

We help **increase** the **asset utilization**, by quickly shifting
our product to any other standard vehicle

WHY NOW?

- * **Social distancing** is the new normal
- * Autonomous vehicles help reduce physical contact
- * World **economy** is **down**: COVID-19
- * Expensive assets go out of commission for unrelated problems
- * Need solutions to quickly **redeploy assets**
 - * Zoomcar, Revv vehicle attachments from owners
 - * QuickRide ride sharing and paid vehicle pooling
 - * AirBnB postings and homestay portals

MARKET SIZE

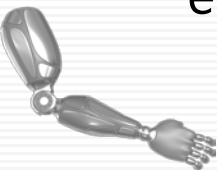
- * Indian passenger vehicle market grew at a CAGR of 6.2% (2013-19)
- * Addition of around **3.3 million vehicles** per year in India
- * Around **36 million** standard **vehicles** will be available for retro-fitting to autonomous mode in India
 - * Assuming an average car usage of 11 years
- * A 2% conversion rate with a US\$11,000 kit creates a market size of about **US\$ 8 billion** in India
 - * Users include **businesses** looking for better utilization of vehicles and **individual owners** choosing not to drive

PRODUCT

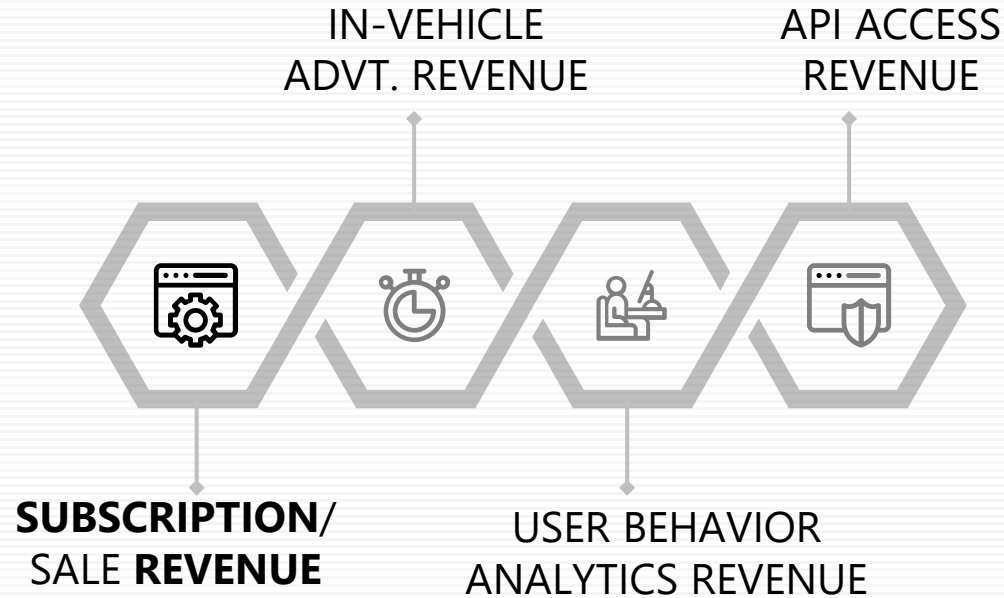
We will work on an **autonomous robot** placed in the vehicle, that **drives vehicles** using the human operable controls in the vehicle.

The driving robot's actuators will be specially designed to adapt to **any vehicle** of similar weight category. It can be **removed** from the vehicle and **quickly assembled** in a new vehicle.

Customized deep learning models, computational resources, and advanced control systems, backed by remote assistance system will enable the **driver-less** travel.



BUSINESS MODEL



*Break-even: 33,500 subscribers for 10 years

SWOT ANALYSIS



Seasoned
engineering
talent



Limitations of
technology
progress



No autonomy
solutions for
regular vehicles



Unknown
Govt. policies

PROPOSED TEAM

- * Selected few AEG Lead Engineers as core members

- * I am an **IITM** B.Tech+M.Tech graduate with **14+** years, 4 granted **patents**, and international conference **presentations**, and projects in variety of engineering fields

- * ABS, BMS, Haptic systems, Electric motors, Optimization and Embedded Systems

- * Projects related to **self-driving vehicle** technology

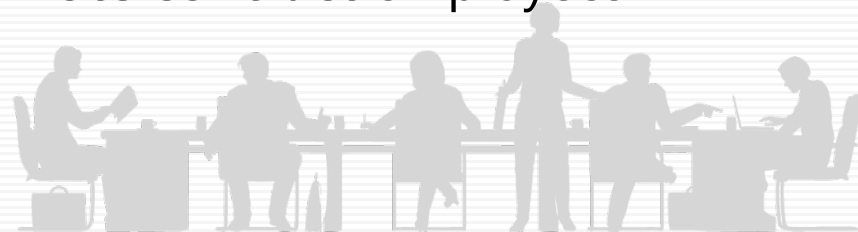
- * computer vision and feature extraction

- * deep learning for object classification

- * deep learning for behavioral cloning

- * Few more passionate and skilled members

- * Several long-term and short-term **remote contract** employees



WHY FUND THIS?

- * Multi-billion dollar revenue opportunity with **high profit margins**
- * **Long-term** business opportunity focused towards **future needs**
- * **International** market opportunities; everyone has **equal chance**
- * Requires **high** engineering **effort** and **time** for execution
- * **Early** starters have clear **advantage**

THANK YOU

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