



# AUTOSENTINEL

AUTO SECURITY TO PREVENT/DETECT THEFTS AND BREAK-INS.

*A SMALL INVESTMENT FOR ETERNAL PEACE OF MIND*

## **ELPP Group 3:**

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What kind of situation do below three news headlines convey?

California lawmakers introduce bills to tackle catalytic converter thefts

S.F.'s new plan to curb car break-ins: offering tipsters \$100,000

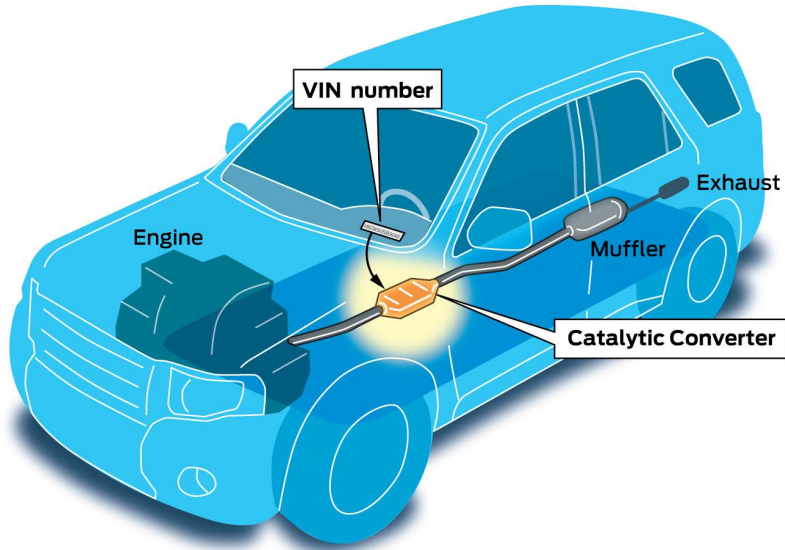
Tourists' plans include how to avoid auto break ins when visiting San Francisco

**Its a grave situation related to Auto Security**

# Auto burglaries and Catalytic Converter thefts ...A nationwide emergency



# PROBLEM WE ARE SOLVING: RAMPANT THEFTS TARGETING AUTOS



## Increasing theft of catalytic converters (CC):

- ❑ CC is a part of exhaust system
- ❑ It contains precious metals (such as Rh) and is target for theft
- ❑ Theft involves raising a parked car and cutting out CC
- ❑ Theft is hard to prevent

## Implications to the car owners:

- ❑ Expensive to replace (> 2,000)
- ❑ Car cannot be operated without one
- ❑ National back-order of CC's

## Epidemic of Auto burglaries

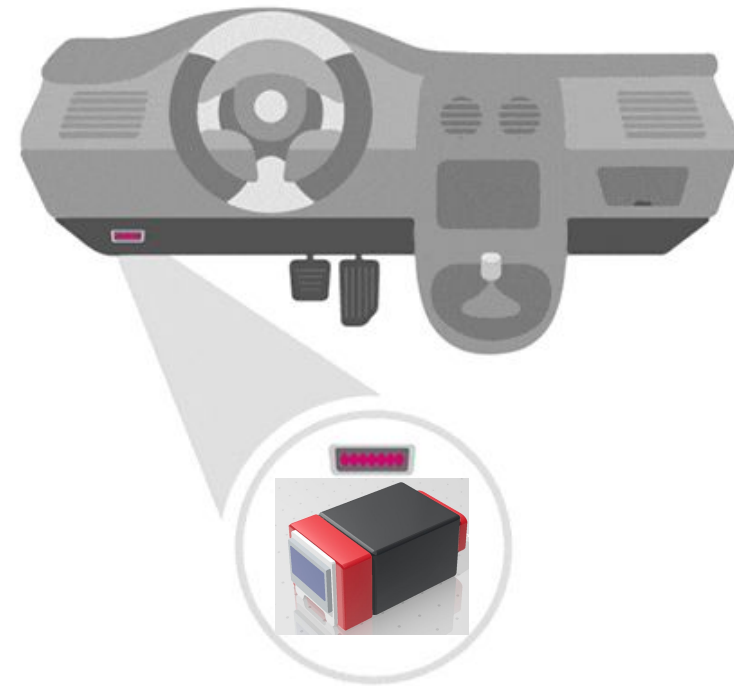
- ❑ Auto burglary is forcing entry into a locked automobile with the intent to steal property that is in the car
- ❑ The rate of these incidents is raising at alarming rates across the country

## Big trouble for car owners:

- ❑ Expensive belongings get stolen
- ❑ Sometimes it can even result into an identity theft
- ❑ The cars have to experience extensive downtime to get repaired








# Proposed Solution: AutoSentinel...*a small investment for eternal peace*

**AutoSentinel** – a simple solution to detect and prevent Catalytic Converter thefts, break ins and **much more..**



# Proposed Solution: AutoSentinel...*a small investment for eternal peace*

## This product comes packed with multiple features

Tilt Sensor	Detects tilt in the vehicle	
Acoustic Sensor	Detects specific sounds like shattering of glass	
Accelerometer	Detects change in acceleration	
Data services	Ability to send data over network	
Alarm	Trigger alarm on specific events	
LED Strobe Lights	Flash the lights on specific trigger	
USB Charging	Charge the battery in the product	

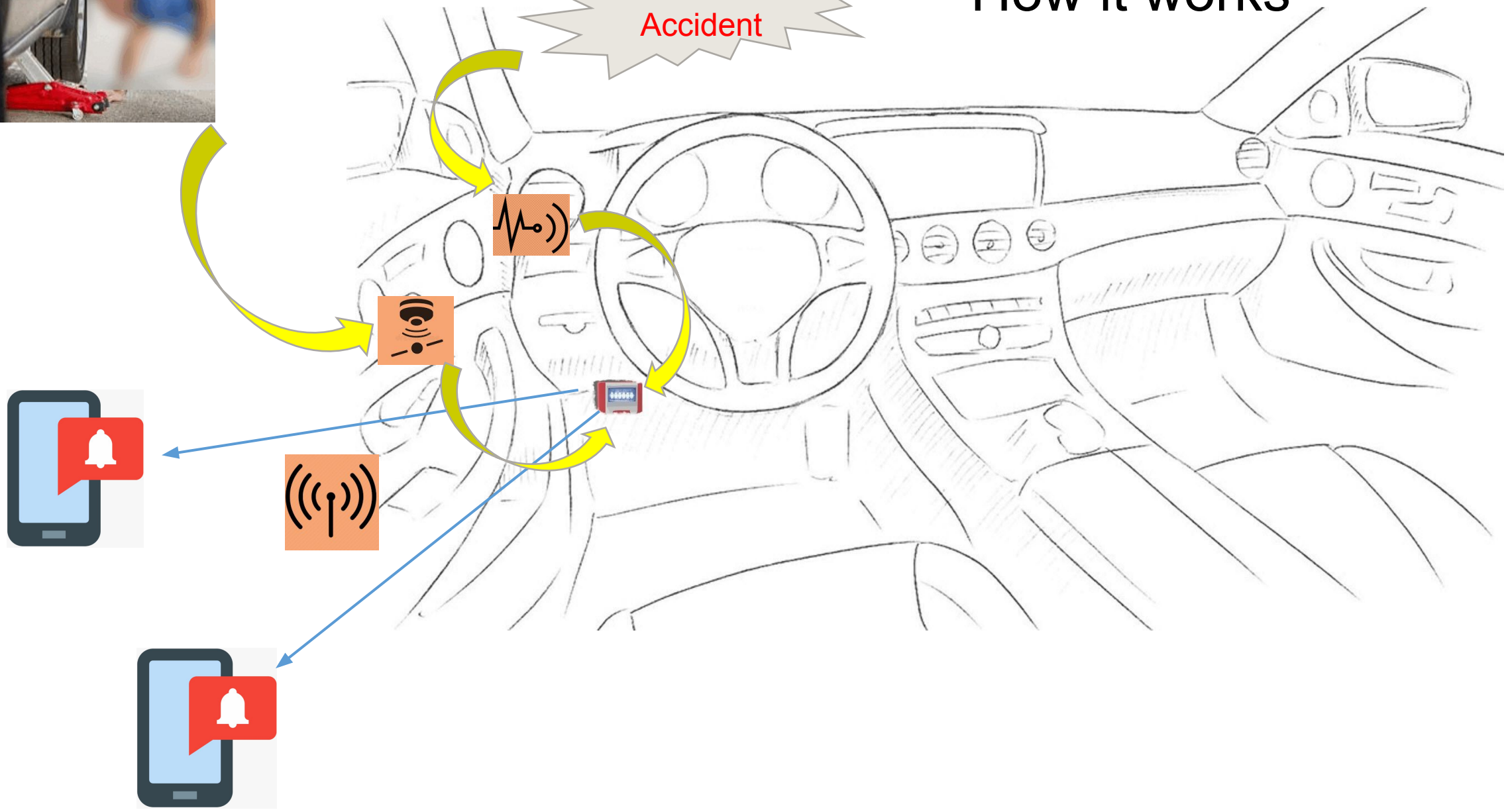




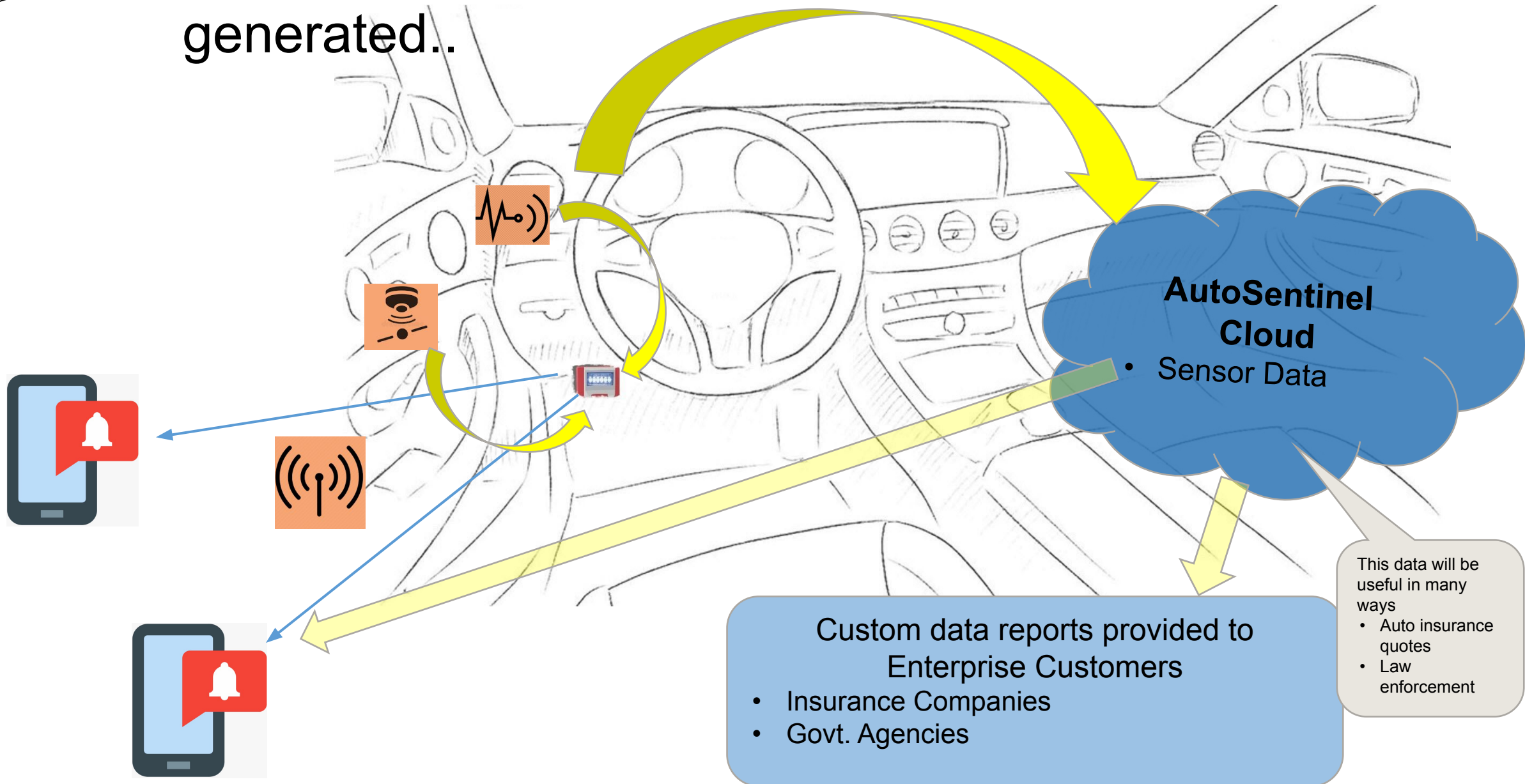
1) Vehicle tilted using a jack

Break-in / Accident

# How it works



# What we will do with the data that gets generated..

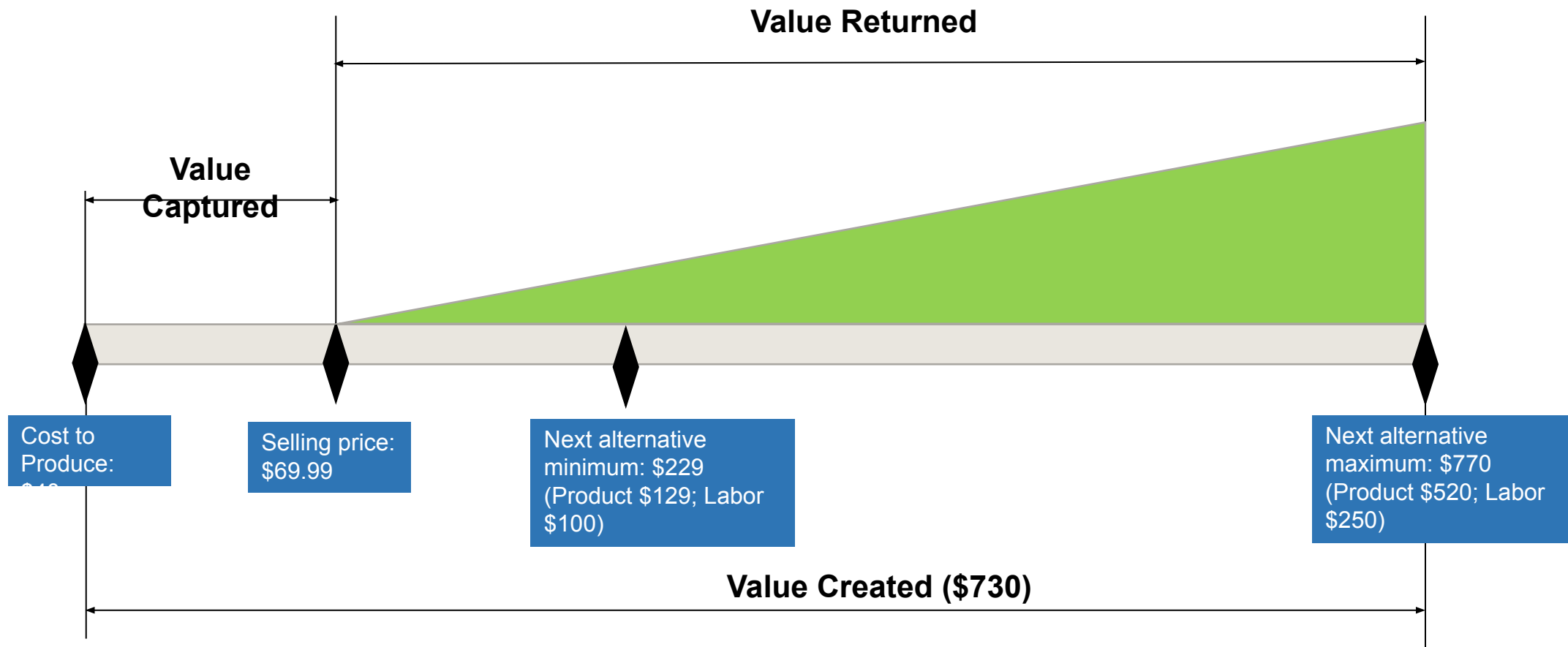




# VALUE PROPOSITION

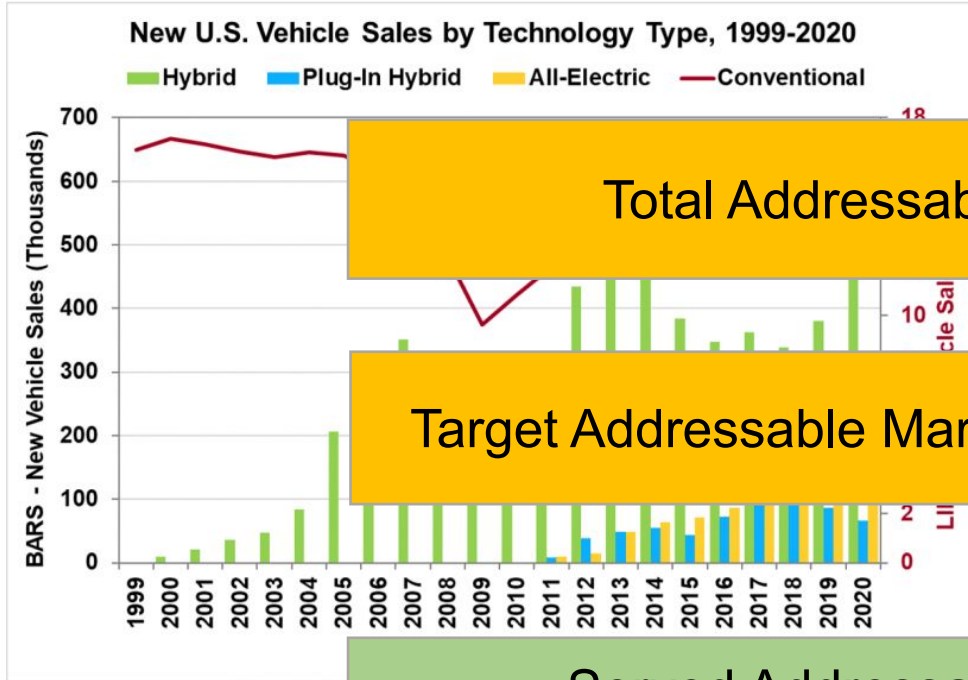
Comparison with other Catalytic Converter protection devices

- ❖ Easy to mount – no labor needed
- ❖ Portable across vehicle
- ❖ Loaded with multiple features
- ❖ *A small investment for eternal peace of mind*



# MARKET SIZE

## New Light-Duty Vehicle Sales | Department of Energy



□ Number of light duty vehicles (Conventional + Hybrid) in operation assuming **200 Million**

□ Total number of household in US ~ **128 Million**  
(CENSUS.GOV)

**Target Addressable Market: 96M x 1/10 = 9.6M vehicles**

vehicles per household ~ **1.88**  
not having a garage/carport

~ **40%** (ENERGY.GOV)

□ Potential number of vehicles that could use the

**Served Addressable Market: 1.5M vehicles**  
(Vehicles in the 15K to 35K price range)

**96 Million vehicles**

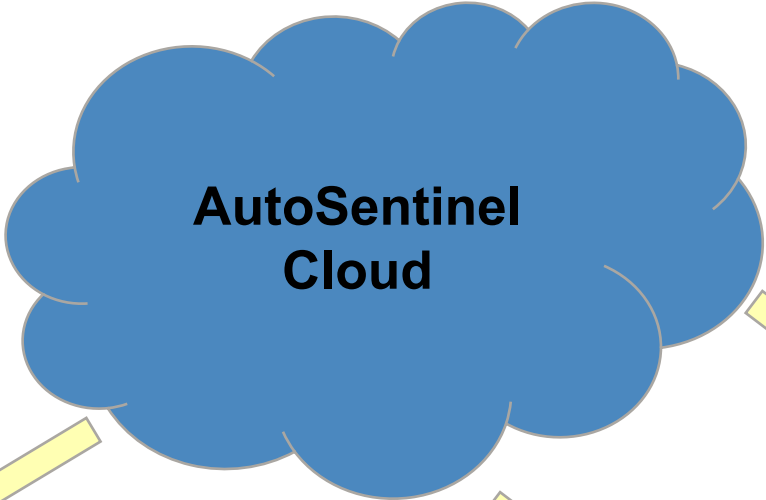
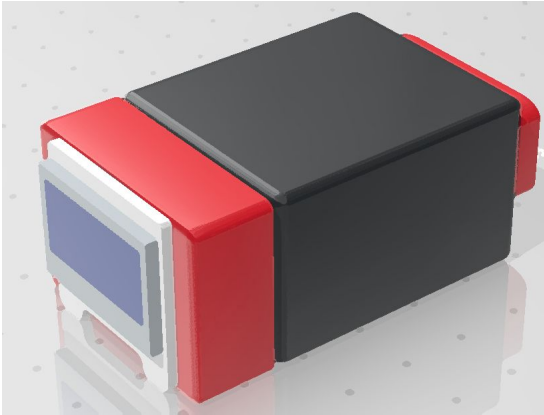
Hybrid-Electric, Plug-In

Bureau of Transportation Statistics (bts.gov)

Vehicle Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Hybrid electric (Thousands)	274.648	268.749	434.648	495.535	452.172	384.4	346.949	362.868	338.083	380.794	454.89
Plug-in hybrid-electric (Thousands)	0.326	7.671	38.584	49.008	55.357	42.959	72.885	91.188	123.883	85.791	66.157
Conventional (Millions)	9	11	13	13.5	14.5	15.5	16	16	15.5	14	11.5

# BUSINESS MODEL

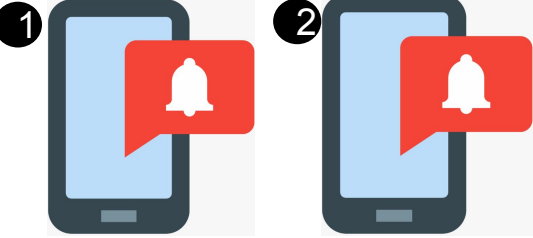
Product Cost  
\$69.99/unit



Later phase:  
**B2B**  
Subscription charges  
for Enterprise  
customers \$5000 to  
\$10000 per month



Subscription charges  
for consumers  
\$4.99/month



# GO TO MARKET



## Target Market

Plug-in hybrid electric



Hybrid electric

Conventional low-duty (e.g., sudans)



## Go To Market Strategy

- o Partner with auto insurance companies to get product to consumers

- Policy discounts



- Periodicals/mailers/magazines



- E-commerce fulfillment



- o Revenue through consumer subscription

- Notifications/reports



- o Revenue through sale of AUTOSENTINEL data to enterprise entities



KNOWLEDGE

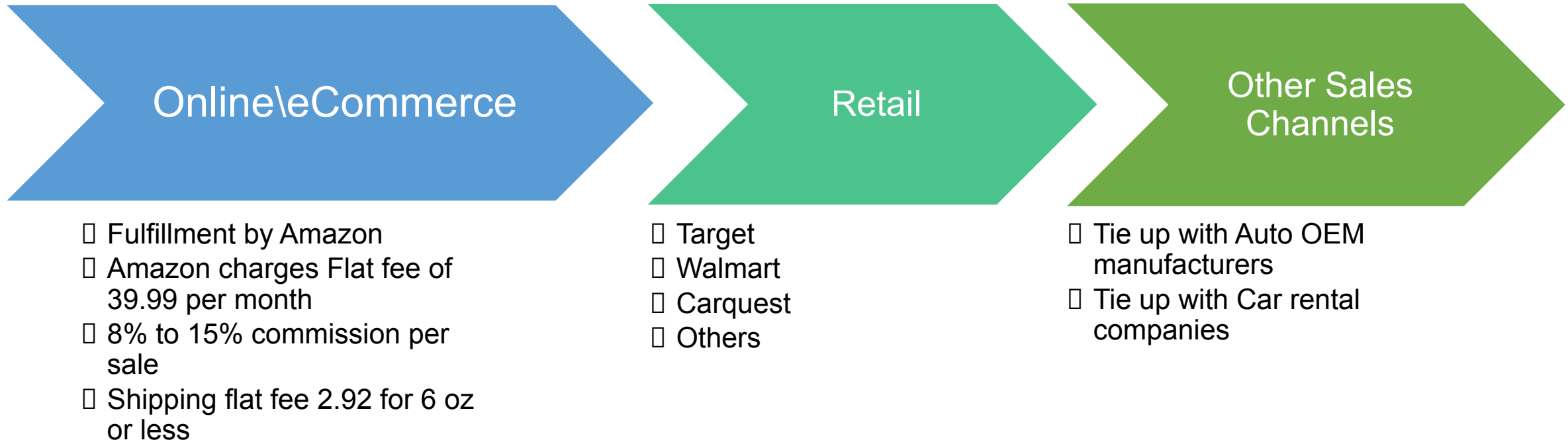


## Launch Market Team

Seek out networked talent with strong ties & influence with top-tier auto insurance companies












# FULFILLMENT


















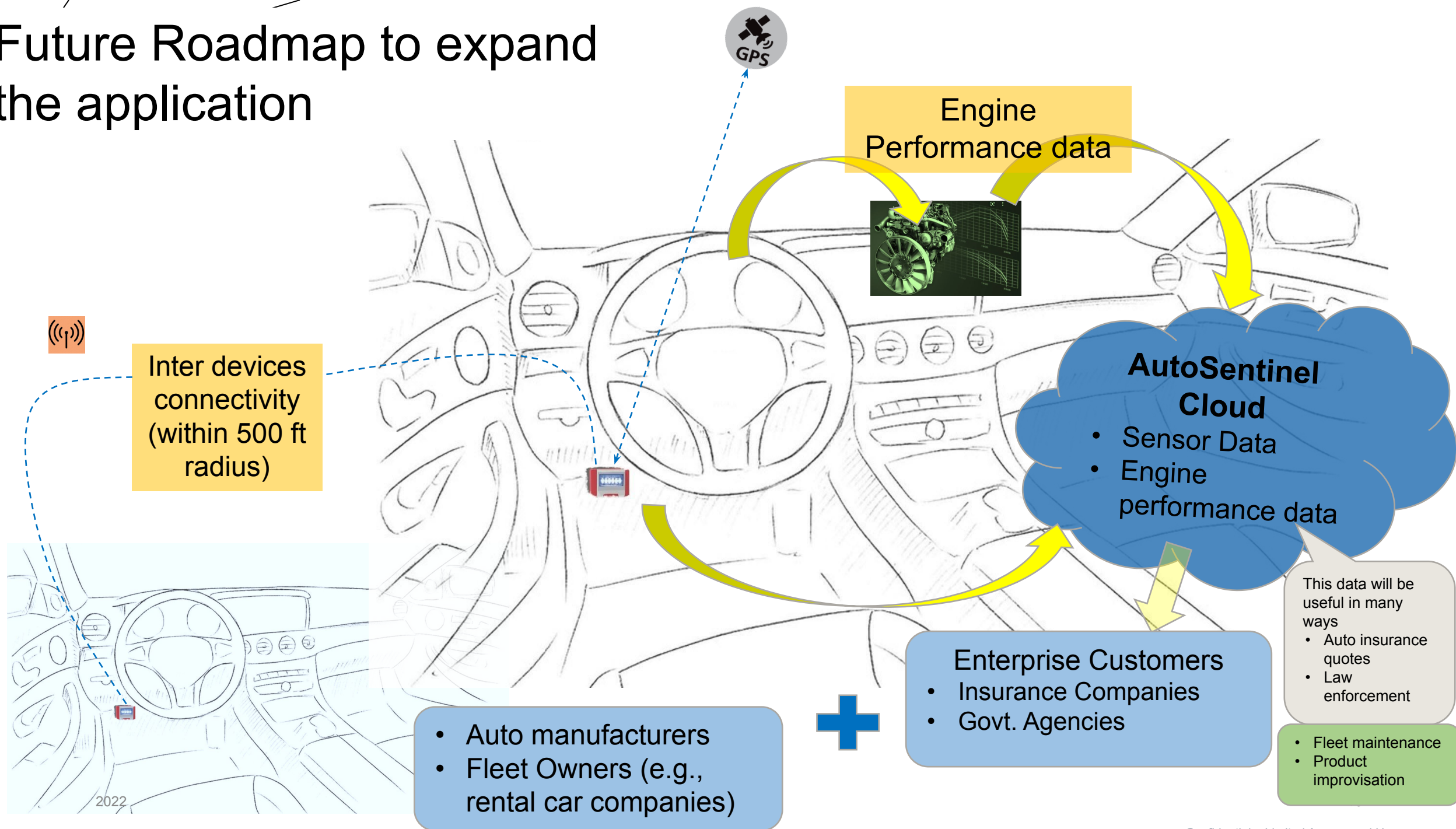
# COMPETITIVE LANDSCAPE – CATALYTIC CONVERTOR THEFT PREVENTION DEVICES

	<b>SENSOR</b>		<b>SHIELD</b>	<b>WIRE CAGES</b>	<b>STRAP</b>
	<b>AUTOSENTINEL</b> 	<b>CATEYE</b> 	<b>cat security™</b>   	 	 
<b>COST</b>	69.99	180 – 200	190 – 460	200 – 900	130 – 200
<b>INSTALL LABOR (IF PROFESSIONAL)</b>	0 (not required)	~150	~150	~50 - 100	~100
<b>PORTABILITY</b>					
<b>COMPATIBILITY</b>					
<b>RISKS</b>	<ul style="list-style-type: none"> <li>○ Versatility to high rise vehicles</li> <li>○ Manufacturing date &gt;2000</li> </ul>	<ul style="list-style-type: none"> <li>○ Fire risk</li> <li>○ Long-term reliability</li> <li>○ False triggering</li> </ul>	Limited market (7 vehicle types)	<ul style="list-style-type: none"> <li>○ Vehicle compatibility</li> <li>○ Parasitic rattling noises</li> </ul>	<ul style="list-style-type: none"> <li>○ Custom sizing required by consumer</li> <li>○ Voided part warranty</li> </ul>

# COMPETITIVE LANDSCAPE – OTHER FEATURES

	<b>NON-EXCLUSIVE PLUG-INS</b>	<b>CARRIER-EXCLUS IVE PLUG-INS</b>	<b>CONNECTED VEHICLE PLATFORMS</b>	
	<b>AUTOSENTINEL</b> 	    	   	  
<b>PRICE TO CONSUMER</b>	\$69.99 + \$4.99/mo.	\$59–\$77 + \$6–8/mo.	~\$100 + ~\$35–40 activation fee + hot-spot data plan	\$8–\$50/mo.
<b>NETWORK CONNECTIVITY</b>	Consumer dependent	Consumer dependent	Data plan dependent	Satellite coverage
<b>CC THEFT DETERRENCE</b>	Tilt sensing	No deterrence features	No deterrence features	No deterrence features (except Telsa)
<b>BREAK-IN DETERRENCE</b>	Acoustic & vibration sensing	Vibration sensing in some models	No deterrence features	No deterrence features (except Telsa)
<b>SELLABLE DATA GENERATION</b>	Sensor output, vehicle health	Sensor output, GPS, vehicle health	GPS, vehicle health	GPS, vehicle health
<b>VEHICLE SPECIFICITY</b>	No specification	No specification	No specification	Plug-in versions available

# Future Roadmap to expand the application

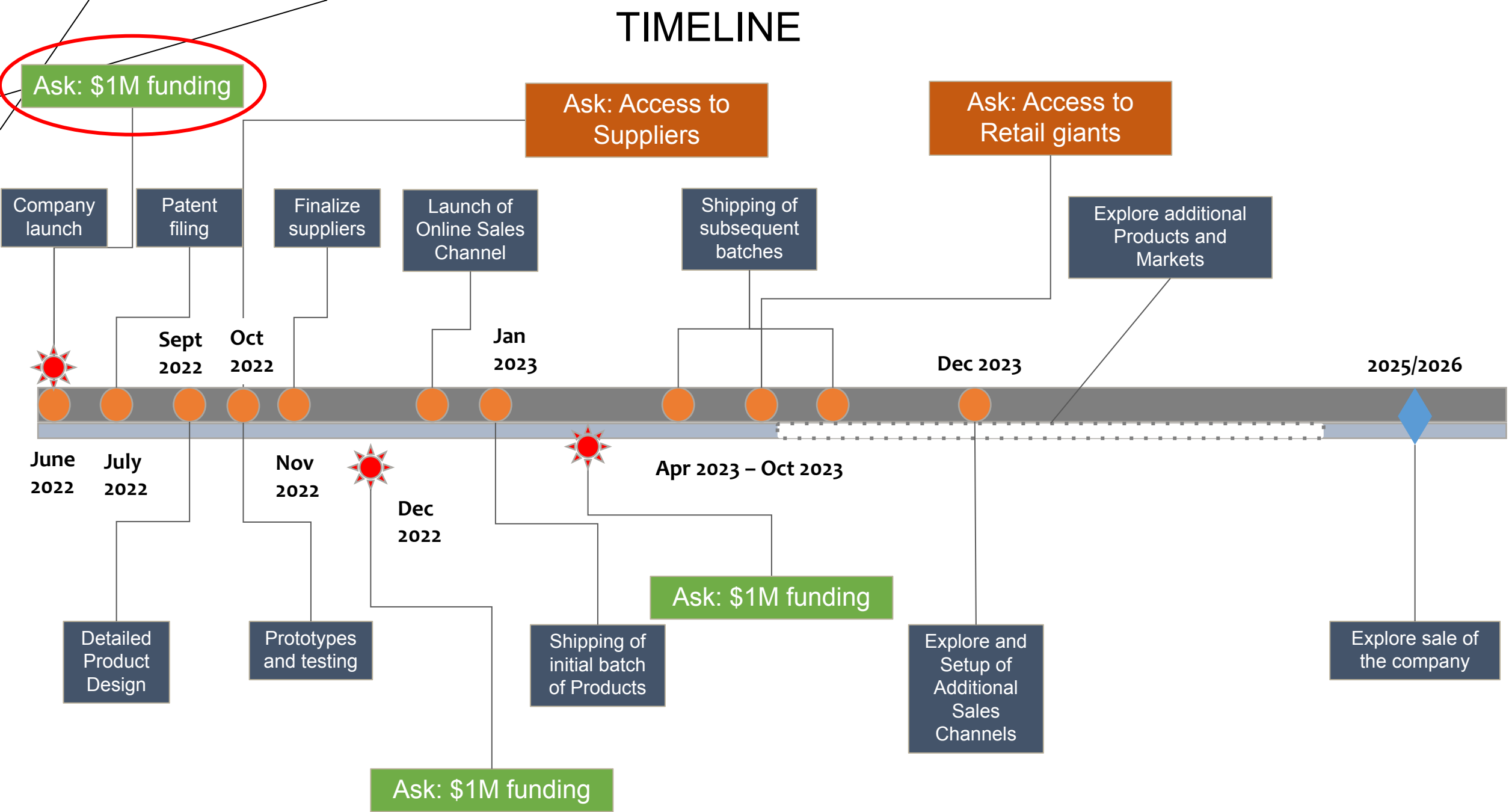


# REVENUES, COSTS, PROFIT

	Year One	Year Two	Year Three	Year Four	Year Five
Number of units sold	1200	30000	84000	126000	168000
Revenue from HW sale	\$83,988	\$2,099,700	\$5,879,160	\$8,818,740	\$11,758,320
Revenue from Subscription	\$114,950	\$1,825,086	\$6,072,796	\$13,334,986	\$23,542,136
<b>Total Revenue (A)</b>	<b>\$198,938</b>	<b>\$3,924,786</b>	<b>\$11,951,956</b>	<b>\$22,153,726</b>	<b>\$35,300,456</b>
Cost of Goods Sold (B)	\$54,250	\$1,439,250	\$4,510,500	\$7,791,750	\$11,703,000
Fixed Costs (C)	\$2,650,000	\$2,280,000	\$2,910,000	\$2,910,000	\$3,010,000
<b>Net Profit [A-(B+C)]</b>	<b>-\$2,505,312</b>	<b>-\$794,464</b>	<b>\$3,031,456</b>	<b>\$9,451,976</b>	<b>\$18,087,456</b>

**Break-even is between Years 2 & 3 when Net Profit goes from (-) to (+)**

# TIMELINE





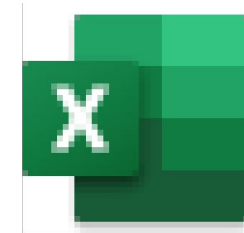
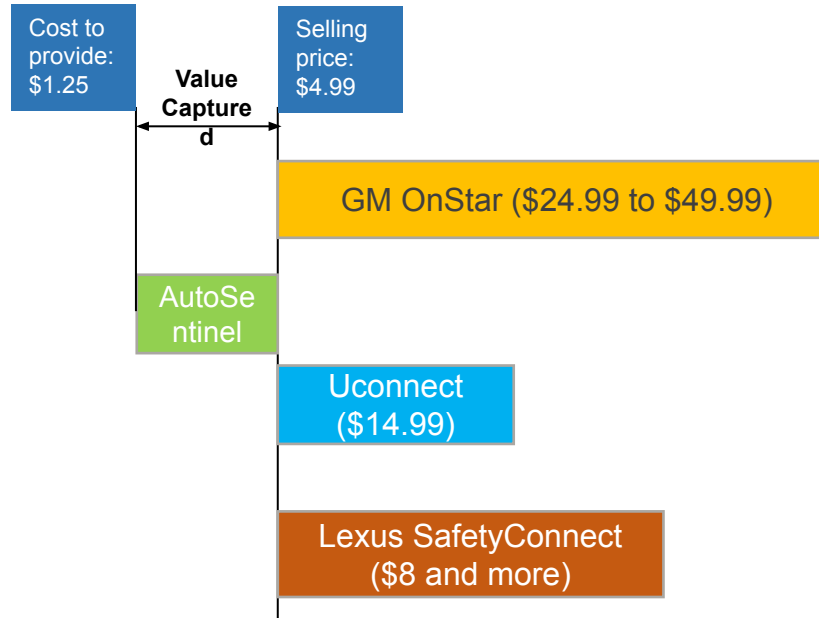
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# THANK YOU



# BACKUP

## Subscription pricing comparison



## AutoSentinel - Revenue, Costs and I