E145: The Entrepre-Know-It-Alls

Opportunity: To provide customers in the automotive industry with a high capacity power storage medium that can be charged quickly

Market Background:

- Gasoline is becoming increasingly expensive causing an increasing demand for alternative energy in cars (proven through Prius, which is a temporary solution)
- The fundamental problem with pure electric vehicles now is their limited range; once the battery is dead, it can take hours to charge, whereas a gas powered vehicle can be refilled virtually anywhere in a matter of minutes.
- An electric vehicle that could be charged as quickly as a car can be filled with gas would make electric vehicles viable for a larger market.

The Product:

- The EEStor super-capacitor can hold enough energy for a small car to travel 500 miles on a 5 minute charge - even for larger vehicles this charge would reasonably last close to 300 miles.
- Unlike traditional batteries, capacitors do not degrade their storage capacity with charge/discharge cycles, so there is no issue of wearing out the capacitor in the long term.
- NB: A five minute charge is not something that can be accomplished with typical home wiring -- special high voltage infrastructure would be necessary.
- Manufacturing could be done through a current tech manufacturing company for a cost.

Competitors?

- EEstor offers what no other EV battery tech can: fast charge, no product deterioration, and unlimited resources.
- In addition, the product is worth the cost (~$3,000) and will pay back the consumer after 2 years of use (taking into consideration the cost of gas and average miles/year driven).
    - This provides possible auto partners something to offer its customers, making out product desirable to utilize.

The Infrastructure Challenge:

- Long term, a massive charging structure will be necessary, and if this were to replace gas in vehicles, that infrastructure would have to match that of today's gas station network.
    - There are several infrastructure options, they include:
        - Partner with retailers or fleet services (starbucks, barnes and noble, UPS, etc)
            - Offer up to retailers to install stations which are not offensive to their business and will pay back in two years (hypothetical).
            - They would want to see the big partnership with the cars, sign a non-binding contract to get Honda and retailers on board.
        - Determine benefits given by local governments by going green/ municipalities.

Initial Technology deployment:

- This would be a co-branded product (e.g Honda powered by Eestor), so we would market this as an energy storage device to car makers who already have the necessary electric motors as well as dealer distribution networks which lie far beyond our core competencies.
- It would be ideal to implement competition for partnering among car makers a la Steve Perlman.
- Cars would initially be sold in the specific region of infrastructure investment.

Mass market growth

- After making our own investment in infrastructure, and selling cars in a particular region, the technology can prove itself.
- Charging technology can be licensed at a nominal fee to grocery stores, coffee shops, retailers, etc. if there is a belief that these cars will sell.
- As the charging infrastructure expands, so can the region of vehicle sales.

Questions/Concerns:

- Will the cost/viability timeline of the EEstor capacitor be conducive to bringing this to market at a reasonable price any time soon?
- Since the super-capacitor is so large, how will car companies take it?
- How should we go about making partnerships for the infrastructure? Should we partner exclusively with one gas brand? Should they pay us for the infrastructure? Should we pay them for the space? Who gets the revenue from charges?