

Ford motor co. and the electric car essay

[Business](#), [Industries](#)



The Ford Motor Company, along with two other automotive giants namely GM and Toyota, is up to launching its new models of trucks during the end of this year. But there is a drastic change in the US housing schemes due to which the prices of the existing homes has fallen down to 14%, which is for the first time in 11 years [Barbara Powell, Sep 28, 2006].

Now, the home residents are more inclined towards buying new and trendy cars instead of big pick up trucks. These trucks are now bought largely by builders and their employees only, due to a rise in home construction and their prices. This situation is of great concern to the Ford Motors and to me being its operation management consultant because my company has around 27% of total sales in the pick-up trucks. The high prices of fuel didn't affect the sales to this extent during the past few years, which shows that a decrease in housing has a direct effect on the sales of trucks.

Being an operation consultant, I have to keep my ears and eyes open to what analysts have to say about the present market trends. The situation which is taking shape has a lot to do with the external forces rather than the internal weakness of the company. It can be seen that the decline in the popularity of trucks is mainly due to the changing preferences of residents who do not want to sell their previous homes in order to buy new ones. During the past decades, the high home sale profits, refinancing and equity loans had boosted the sales of trucks and sports cars, as it left the consumers with more disposable income. Now, Ford Motor has to stir the enthusiasm among the people to attract them either towards their newly modeled trucks which are ready to be on display, or either offers a totally new vehicle which is less expensive and more compatible as compared to

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the present models. According to my studies, the loss Ford Motor has faced is substantial but it evened out with a carefully planned product and market mix. The profits the second quarter income statements show are far less than what the company earned during the last year in the same quarter. Few of the figures which I considered were that of the worldwide automotive sales of the company which decreased from \$38.

7 billion in the second quarter last year to \$37. 7 billion during this year's second quarter. Another important fact is that the total cash which lies with the company in the form of cash equivalents, marketable securities and loaned securities at June 30, 2006 was \$23.

6 billion down from \$23. 7 billion at the end of the first quarter [Financials Ford Motors, 2006]. These figures are critical to taking decisions on how the Ford Motors can compensate for the losses it have and are encountering due to the slowdown in the sales of trucks and sports vehicles. Keeping in view the above scenario, I first see what options company has in order to increase the market share for its trucks and sports cars. The thing which is of utmost importance is the incurring costs which tend to increase with remodeling the vehicles to consumers' choice. As the disposable income has decreased, people would like to have cars which are less expensive and look trendy too. In case of trucks, the studies show that one truck is sold between the price range of \$16000 to \$6000, generating a profit of \$10000 or more.

Actually the heavy duty batteries and powerful bodies of the vehicles cost the most. Keeping this in mind, I would like to suggest an option which not only cut down the operation costs of installing such heavy machinery and

batteries in the vehicles but also attract the prospective and retain the previously lost consumers. Now the challenge is to remodel the existing vehicles instead of manufacturing a totally new lot of cars for the prevailing consumer market. The option which I think is the most feasible for the company is that of transforming the existing range of new trucks and sports vehicles to Electric Cars. Of course, I have some logical reasoning to support my proposed option. If we see the history of Ford Motor, we come to know that in 1966, the company was the first one to give the very idea of introducing an electric car having an inexpensive high-energy battery for city driving.

Though the company didn't give the final date of the car's release but said that it would be out during the next decade. The battery promised to relieve the exhaustive air pollution and was supposed to be made of abundant materials such as ceramic, sodium and sulphur. Ford, at that time had actually built a rugged low-cost electric car motor which weigh only one-fourth of current car motors with equivalent power rating. The history shows that Ford Motor has backed away from many of its promises in the past; the electric car option was also one of them. Many other companies like GM and Honda also came up with similar options during those times, but couldn't bring these cars to market. The main reason behind this was that these electric cars do not require any oil and filters, and require far less repairs than the other cars.

Had these cars been on the road, the multimillion-dollar industry of parts and services would have stifled. The oil companies' opposition to these cars was

also obvious as the car could collapse not only the most thriving industry of the world but could also shake the economy of the oil producing countries. Besides this, there were many other constraints, such as the seating capacity, and battery recharge which hindered in making these cars popular.

These cars were aimed for shorter distance traveling, and had slow speed as compared to other cars, but it was observed that people want to reach their destiny in short time and on a high speed even if they are traveling with in the same block or city. Though the concept of electric cars was discouraged before, not only by industries but also by the federal government, the very idea of it kept on evolving with automotive companies continually working on removing the hassles which keeps a consumer from buying it. Now, the technological advances in the automotive industry convinced me to put forward the option of the electric cars once again in front of the company.

The electric car which I have proposed is a dual mode car. Dual Mode means that the car can be run on the ground and also on the guide ways built specially for them. These guide ways are known as elevated monorail and the car has the capacity of four passengers with additional cargo space.

Electric cars are actually powered by a battery mule which is stored on the underbelly of the car while it is on the ground.

On the guide way, the in-built linear motor accelerates the speed of the car and the battery mule drops out of it. When the car reaches the ground again, it picks up the fully charges battery mule which helps it to drive on to the final destination. The three aspects which were kept in mind while designing such a vehicle were safety, convenience and feasibility. As these electric

cars are far lighter than the usual cars nowadays, it is assumed that they can get hit by other cars easily causing fatal injuries. The reason behind keeping the vehicle so light weight is because the strength is not in the heavy steel frame but in the outer honey comb shell. But the one outstanding feature of this car is that the speed is controlled by the manufacturing company and not by the car user. The speed is usually set to the standard of the 'Neighborhood Vehicle' which is of 25 mph. At this speed no one can get seriously injured while driving.

This speed can be increased by the company, as the customers get used to it and as per demand, because people want to reach their destination on time and don't want to waste their time in driving slowly on empty roads.

Secondly, when I go for the convenience standards of the car, I come to know that once on the guide way, the car is no more than half a mile away from any possible destination where a consumer wants to reach. In addition to this, when on guide ways, the car can move on a much faster speed which ensures that much of the commuting is done on high-speed guide ways without sticking up in the traffic.

Another inconvenience which people face is that of re-fueling which limits a cars range to travel for longer time period. As the distance which electric car covers on ground is shorter and you always get a fully charged battery mule once you are on the road, you get virtually infinite range and never have to stop for re-fueling. If Ford Motor designs a car which requires full days worth of power to commute, then the battery used will be incredibly large. Such cars eventually decrease in efficiency and incur larger costs to replace the

battery. In terms of feasibility which is the major issue for Ford Motor at the moment, these electric cars prove their mettle. The car doesn't require any new technology to be developed and is built with off-the-shelf parts using existing techniques. As the strength lies in the outer skin, the built is easy to make.

The manufacturing cost of such a car is obviously low even if we compare them with the traditional cars. The outstanding features of this car namely dual mode, ultra-light, high-speed and being a monorail vehicle actually revolutionize the personal transportation. The most important issue here to introduce such cars is to make a guide way for them where they can move easily. This electric car is also a guide way building machine and rolls a guide way at a rate of 3 mph and can be built in a couple of months. The cost of guide ways seemed to be a big hurdle before, but if seen through facts, these guide ways are far less expensive than what is assumed.

It will take about \$150, 000 per mile to build which is about 1/10th of the cost of building a highway. Keeping the above facts and feasibility scenario in mind, I can confidently propose my option to Ford Motor to design this Electric car. Though there are many misconceptions in people's minds related to the efficiency and environmental friendly features of the car, these can be eliminated with proper education about this vehicle. The advantages the people and environment will get from this vehicle are immense and so the Ford Motor should communicate them with the consumers. The company though has faced losses and wants to decrease its costs as well as remodel

its vehicles, it has to transform its cars from traditional to Electric models and also have to advertise and position it properly.