

Electric Vehicles

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New business opportunities and product life cycle - Assessment 2

Table of Contents

Introduction	2
Product Life Cycle.....	2
Identify new and emerging business opportunities that the production and marketing of electric cars may present to entrepreneurs and business executives	4
Identify and critically assess other businesses currently linked to the global automotive industry that you think it may not be profitable in the long run to invest in.....	8
Porter's value chain.....	8
Conclusion.....	10
References.....	10

Introduction

The present study deals with various business possibilities that the automobile industry can offer to the clients at the time of expanding their business. Moreover, marketing is one of the most essential parts that need to be maintained at the time of expanding their business in the marketplace. Different strategies, process and the electric Car Company adopts models at the time of expanding its business are also demonstrated through this study. Furthermore, product life cycle and Porter's value chain model and its importance in this particular industry is discussed through this assessment.

The product life cycle

The life cycle assessment (LCA) is a means of rate , how the product's life linked to the environmental impact. This is the best framework for rate the environmental effects of the products. We can see the downstream and upstream on the diagram too, make more understandable the product's life in the lifetime . (Report, 2018)

It is also an important part that needs to be analysed by the car manufactures companies. There are various stages of product life cycle such as introduction, growth, maturity and decline. There is another stage known as product extension. All the stages are described in a detailed manner below.

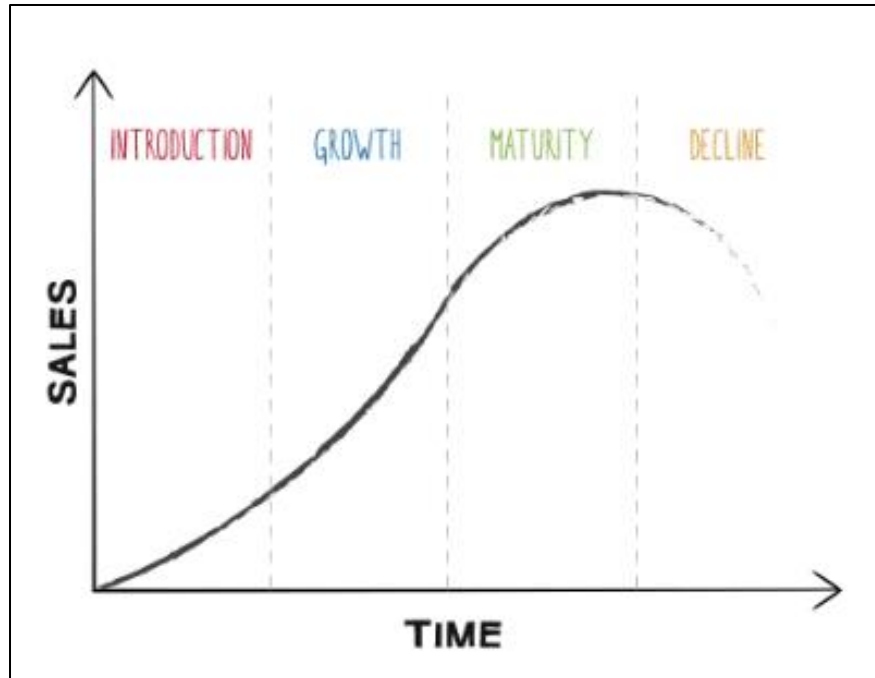


Figure 1: Product life cycle

(Source: Svahnet *al.*, 2017)

Introduction: In this stage, the car manufacturer companies build product consciousness and advance the idea of a new product. Moreover, in the case of automobile industry the sales are initially at zero.

Growth: Creation of brand image and constructing the brand preference of the car company is performed or developed in this stage.

Maturity: After applying proper promotional technique and share the details of the manufacturing process the management of the car companies tries to incorporate new ideas for grabbing the attention of the consumers. Competitors are also started their own pricing strategy for attracting consumer's attention.

Decline: In this stage, with time price of the products drops. Sometimes, it has been observed that, companies are unable to manufacture new products, which affects the sales in the local and global marketplace.

Moreover, by changing over hot, unsafe fumes gases into innocuous substances car company previously found noticeable all around, it diminished the discharge of destructive contaminations by an amazing 90% contrasted and standard motors (Durisic and Berényi, 2019).

As more individuals and organizations procure electric vehicles (EVs), companies will have chances to lift their incomes not as it were by offering more electric control and charging foundation but moreover by giving administrations that bolster the charging of EVs. EV armadas speak to a especially promising section of the potential showcase for charging administrations, which can offer assistance armada administrators decrease their costs by securing and overseeing vitality in effective ways. Within the Joined together States, the showcase for fleet-charging administrations might sum to \$15 billion per year by 2030. In spite of the fact that this showcase is fragmented and undeveloped, it isn't as well early for companies to position themselves to compete in it. Companies ought to recognize that conveying these administrations will likely require unused commerce models—and get ready in like manner.(Rob Bland, Giulia Siccardo 1996-2020)

In the following ,I would like demonstrate , how the electric car business growing up in the present years , and what kind of development need to improve the sales .

Identify new and emerging business opportunities that the production and marketing of electric cars may present to entrepreneurs and business executives

In the present fast-moving technological era, the prime purpose or motive of the automobile industry is to manufacture or fabricate best quality automated cars for the consumers at a low cost. Furthermore, in this competitive world, making best cars in low cost is not at all easy; it needs proper ideation, strategy and techniques. Electric Car Company is creating a new history by making this possible. Previously the cars are not so advanced like now.

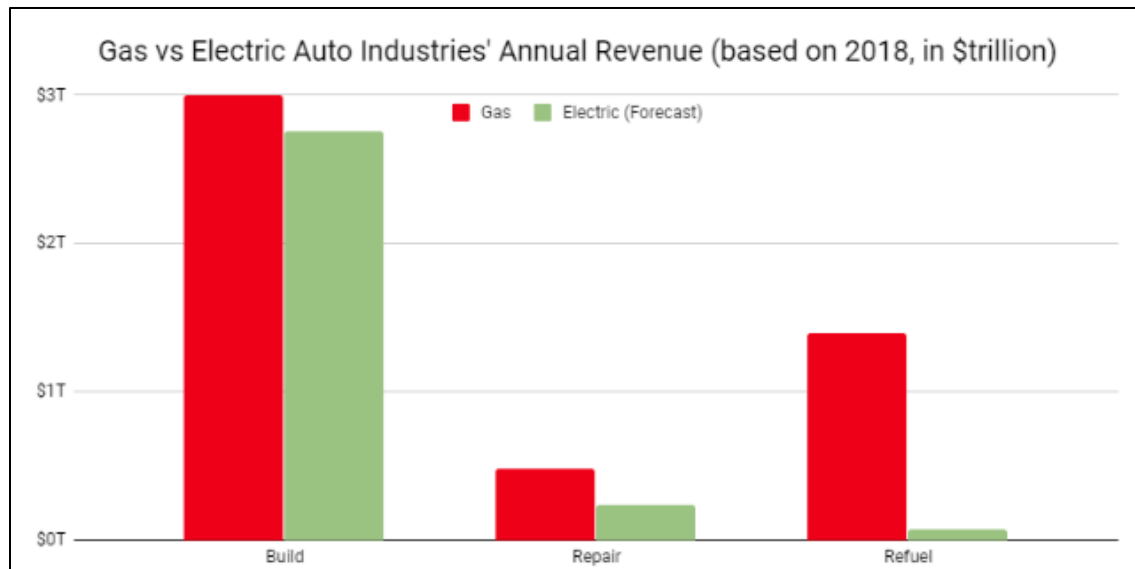


Figure 2: Gas vs. electric cars usage

(Source: Contributor, 2019)

The evolution of cars is initiated in the year 2018 and is increasing day by day. According to the data of Woodmac.com, (2019), the usage of gas, vehicles are decreasing because it creates environmental pollution and affects the environment badly. Therefore, the automobile companies are trying to manufacture electric and battery used cars just to avoid the environmental pollutions. As per the norms set by the EU with the introduction of the 2020 package the main motives has been mainly three. The first is to cut emissions of greenhouse gases by at least 20 %, increase of EU energy as much as by 20 % and lastly to bring energy efficiency improvement by 20% (europa.eu, 2016). Electric vehicles can bring down these changes efficiently bringing considerable amount in the rate of pollution. ETS has been one of the key tools to bring down % target that has been set is almost the double in comparison to the 2010 norms (europa.eu, 2016). Automobile sector would be sharing at least 10 % of these shares with the innovation of electric cars, which is considered a low carbon technology.

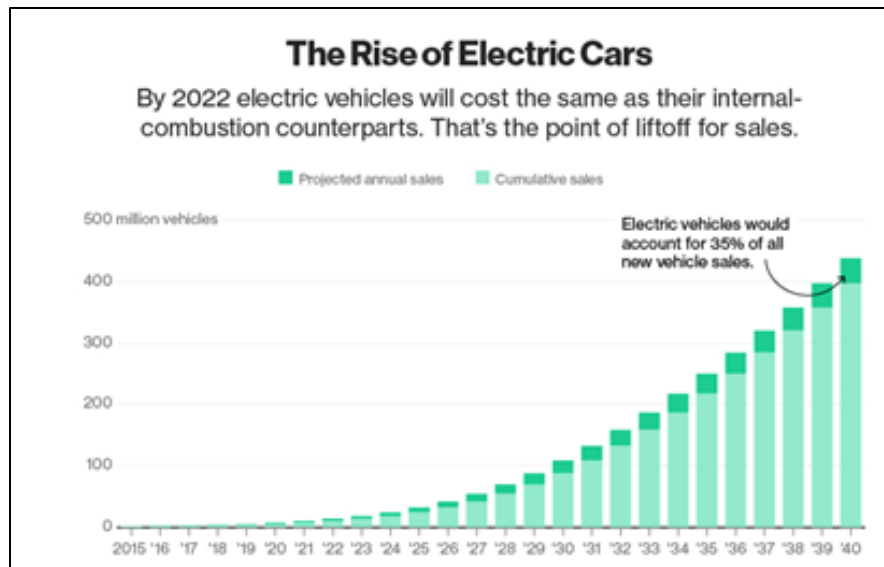


Figure 3: The rise of electric cars

(Source: Coren, 2019)

There are various strategies or processes that needs to incorporate for a better understanding of the car models and needs of the consumers. Here is the list of strategies:

Using integrated architecture: if the automobile companies are able to manufacture cars with integrated architecture then it will free up more spaces, other new ideations can be generated, and it will meet all the demands of the clients (BloombergNEF, 2017).

What would refuelling look like in an EV future? According to data on CleanTechnica (2019)

- Much littler as an industry since most charging is done at domestic and much cheaper than gas.
- Logistically easier (don't require chemical plants, systems of gas conveyance trucks or explosion-proof stations) = lower boundary to passage, more competition, lower costs (aka a genuine free showcase, not oil oligopolies)
- Refuelling stations will be more secure, littler and cheaper. Businesses are as of now contributing in chargers to draw in clients and workers. As the number of chargers proceeds to develop, it'll be less demanding to energize an EV than discover a gas station.
- Electricity is decentralized, giving you more flexibility and choice.

The EU framework can be efficiently useful in this integration by adopting the target of 2030 energy framework. Keeping these targets with the framework of 2030, the main targets can be achieved. The first is to cut carbon emissions by at least 40 % with increase in the share of renewable energy at least by 32 %. On the other hand, energy efficiency improvement is another key target that has to be achieved by at least by 32.5 %. Working with the EU commission the automobile sector can help in bringing massive changes following the norms and by increasing share of renewable sources of energy by minimum of 32 % (Woodmac.com. 2019).

Adoption of industry 4.0: With the help of this technique, the manufacturers can locate or situate various relationship and data sharing through the entire venture. Good connection among the workers makes the entire process easy and save the communication, time creates endless opportunity for the workers. The global market has been evolving and with the emergence of new renewable sources of power, the industry aims to provide 300 million cars by the end of 2040. A detailed graph has been presented below to provide a clear picture for the future.

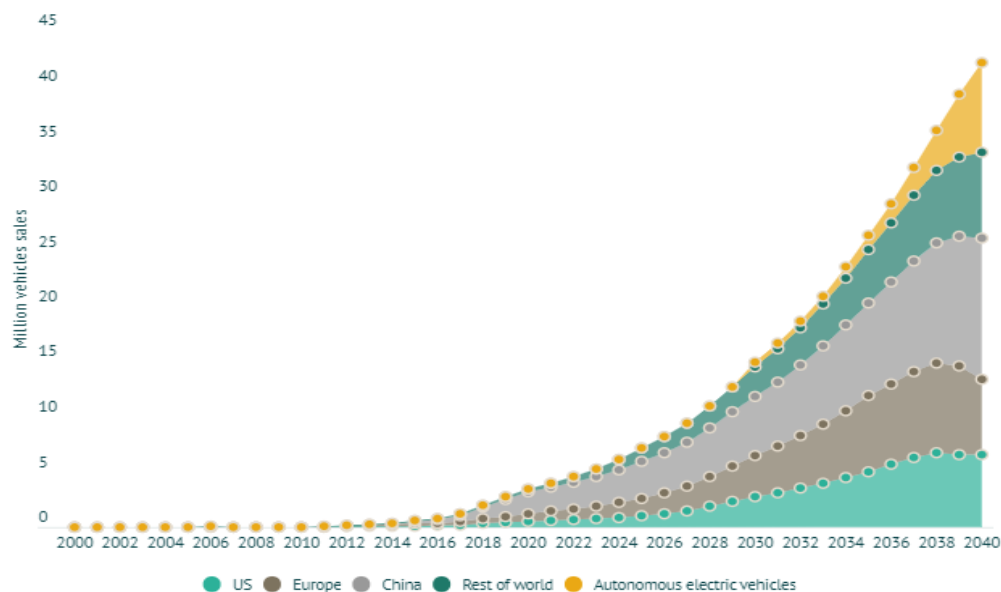


Figure 4: Predicted electric vehicle sales by 2040

(Source: Woodmac.com. 2019)

The traditional automobile market seems to be changing as business transitions are moving forward towards electric vehicles. This will result in transforming decision making with infrastructural changes of the energy market.

Identify and critically assess other businesses currently linked to the global automotive industry that you think it may not be profitable in the long run to invest in

There are various policies, theories and models, approaches are adopted for a better understanding the status of the entire automobile industry. Here is the list of theories and models for a better global automotive industry. There have been a huge set of changes that begun in the automobile sector in the year 2008. 80 billion invested by the US government was one such initiative to become more energy efficient. There have been many automobile companies that have been shrinking as the forecasted profit margin of electric vehicles is around to 5 % in comparison to 20 % of the gas vehicles (cleantechnica.com, 2019). However, there have been more commitments to bring down greenhouse gases as automobile companies like GM have committed to build 1 million electric vehicles by the end of 2026. A framework has been provided to critically assess the market considering the market risks.

Porter's value chain

Different components of value chain analysis are Inbound logistic, outbound logistic, operations, marketing and sales and services. Description and analysis of individual stages are discussed below:

Inbound logistics: There are many suppliers of the car company and in this stage, the car company owners usually received raw car materials from the suppliers, make a list and sort them according to the production list. As per the statement of All-staret *al.* (2019), from the suppliers the management workers receive and store it inside the business venture. Some of the parts are not available in the local nation; at that time, those products are import from the other nations.

Operations: After collecting all the materials, the responsibility of the research and development teams is to assemble them and initiate the entire process of manufacturing as per the needs of the clients. Manufacturing cars as per the design and ideations are performed in this stage.

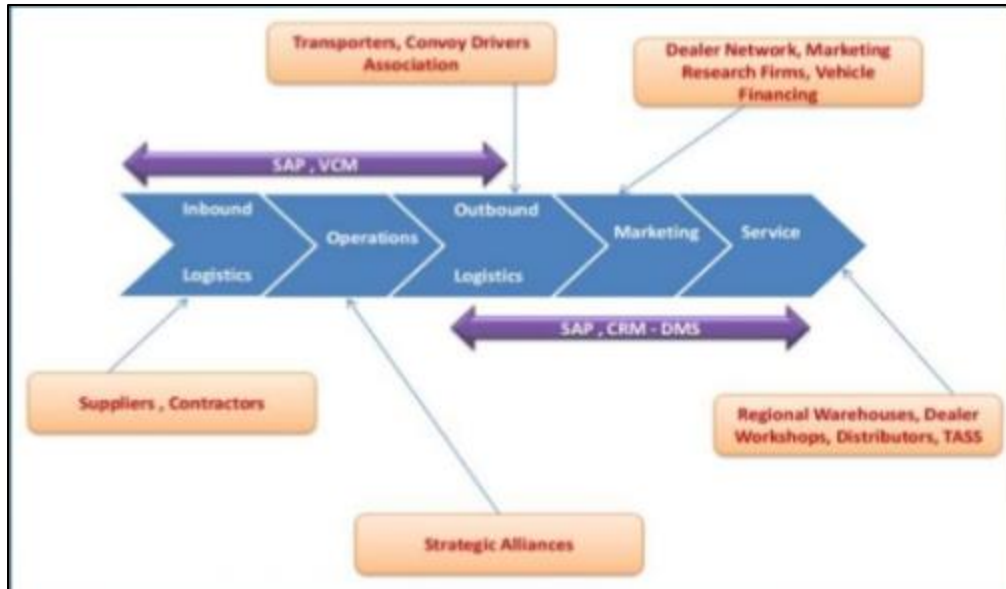


Figure 5: Porter's value chain

(Source: All-staret *al.*, 2019)

Outbound logistics: After completion of the entire process of product manufacturing and analysing the product features, business venture experts send those products to different outlets and some raw parts are supplied to various manufacturing units.

Marketing and sales: It is one of the most essential parts of the business technique. In this stage, the venture experts promote their manufactured products through magazines, newspapers, advertisements, SMM and many more (All-staret *al.*, 2019). So that people can easily be able to know about the new models that are launched by the companies. By the year, 2040 there has been estimation that electric vehicles would account as much as 33 % of all road vehicles (BloombergNEF. (2017).

Services: In this particular tier a wide range of networks of outlets are involved. Various services include, ultimate analysis, after delivery services, handling the complaint of the clients, services through phone call and others.

Conclusion

In a world where natural security and vitality preservation are developing concerns, the improvement of EV innovation has taken on an quickened pace to fulfill these needs. Concerning the environment, EVs can give emission-free urban transportation. Indeed taking into consideration the emanations from the control plants required to fuel the vehicles, the utilize of EVs can still altogether decrease worldwide discuss contamination. From the vitality viewpoint, EVs can offer a secure, will have the potential to have a incredible affect on vitality, environment and transportation as well as hi-tech advancement, unused industry creation, and financial development. In spite of the fact that the EV was around some time recently the turn of the 20th century, the cutting edge EV may be a totally unused machine that's completely distinctive from the classical EV. It isn't as it were a transportation vehicle, but too a unused sort of electric equipment. (C.C.Chan , 2002)

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