

University of Wales Trinity Saint David

Electric vehicles in Europe

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LCBB4005 *THE GLOBAL BUSINESS ENVIRONMENT*

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INTRODUCTION

Electric vehicles have a similar or smaller carbon footprint than their conventional counterparts. In other words, as compare to internal combustion engines Electric vehicles are less harmful. On the same side, they also have a lower cost of ownership as well. Present study will be based on Electric Vehicles which soon will be introduce in Europe by Volvo. The firm Volvo is car making company which is famous for producing luxury vehicles all over the world. Therefore, the report will further outline the information on Electric vehicles and explains the major forces which shaping the business environment.

This information will be explained by the help of supporting the business environment model PESTLE analysis. PESTEL analysis, is a concept in marketing principles. This concept is used as a tool to track the environment they are operating in or are planning to launch a new product or service etc. PESTLE is an abbreviation which in its expanded form denotes P for Political, E for Economic, S for Social, T for Technological, L for Legal and E for Environmental. It gives a bird's eye view of the whole environment from many different angles that one wants to check and keep a track of while contemplating on a certain project.

Likewise, in order to continue the research will also determine and critically examine the factors that are taken by the car industry in order to gain the competitive advantage. Apart from that, research also examine the new emerging business opportunities in order to support electric cars and will justify its importance for long term profit.

MAIN BODY

A) Recognising the major forces shaping the Global business environment in order to gain an understanding of the changing Global business environment

It has been analysed from the research that re-emergence of fundamental allowing for more efficient use of production capacity to generate profit at lower volumes (*Ariffin and Sahid, 2018*). In 2019, global business environment has been shifted from engine motors to electric motors that might affect the electricity demand, oil and demand for battery material. In modern times, auto makers invest highly in the electric vehicles despite still low demand.

Major forces shaping the business environment of car industry (PESTLE analysis)

Political: Political factors might affect the Automobile industry by influencing new policies, regulations and political corruptions. Due to political instability of the country Volvo cars would have been facing challenges in earning profitability. Sometimes, due to changing in foreign policies adopted by the United States in order to protect its local automobile company. Besides that, sometimes due to new policies and form which comes under the favour of the company it helps to gain higher opportunity growth in the market (*Bhattacharya and et.al., 2016*).

For example: in case of political stability in major markets can bring opportunities for Volvo. Also, governments need to support the electric car industry. For example: in the Netherlands the government provides a provision with basic supplies of charging points in the whole country (*Electric vehicles initiative, 2013*).

Economic: Economic forces reshaping the auto industries due to stiffening legislation or due to increased competition in the market. The main concern of economic factor that impact the organisation or industry is high competition and demand in the market to attract production facilities as well as the efforts to sustained current carbon footprint. In order to maintain its positioning value companies are moving further to new ways to build vehicles like Electric cars which is taken less carbon footprint (*Sölvell, 2015*). This opportunity can helpful to make

financial stability stronger. However, this force can be helpful to build the business environment in order to come up with new innovations in Europe market.

Social: In European market automobile transformation is not just only economic growth but it's for leisure and fun too. It has been found that 21% of the cars have been made in the European Union and that 12.1 million people in the region work either directly or indirectly in the automotive car industry (*Bostanci and et.al., 2017*). So, this is the opportunity for Volvo to develop or building an innovative electric car for the society. But on the other hand, Volvo should also aware from the fact that they need to contribute in green projects too to sustain the reputation in the European market. In social factor increasing the demand for self-driving vehicles is the opportunity for the Volvo.

Technological: Technological driving force is the powerful factor of the global business environment which enable to organisation to make the competitive environment with other rival brands. This factor analyse how technological forces can affect the firms and the remote macro environment as well into long term. For example, Electric cars are the new technological innovation that soon will be introduce in European market. This technological innovation is the opportunity for the company which helps to reshaping the competitive global business environment.

Environmental: Environmental factor impact on car industry in different manner and through different ways. Ecological trends and changes can affect the company supply chain and availability of raw materials (*Crane and et.al., 2019*). However, in order to protect the business from such factor's Volvo should try to eliminate the harmful activities from the production process in order to protect the environment. On the same side, Volvo should also need to gain opportunity in terms of rising steps for saving air qualities effects of automotive industry.

Legal: Legal aspect of the business also determines how legal systems can influence the general motors and the automotive industry.

On the 12th June 2014 Tesla Motors, Inc. declared not to initiate patent lawsuits against anyone who, in good faith, wants to use their technology (*Tesla Motors, 2014*). Therefore, more competitions signify more players on an equal level and the partnerships can be build up and costs for research and development can be divided.

Laws and regulations impose requirements and limits on the businesses. The following legal external factors are remarkable in this external analysis of general motors. Volvo can take

opportunity from the legal aspects in order to expanding the regulations on automobile safety. Or if government-imposed emissions regulations (*Savitski and et.al., 2016*).

Porter's Five forces to gain Competitive Advantage

In order to gain competitive advantage from the market, it is necessary or beneficial for Volvo to identify the opportunities for Electric vehicle cars.

Competitive Rivalry (High)

The automotive industry is very competitive in Europe. Such as the main rivalry firms for Volvo are Mercedes-Benz including BMW, Audi, Lexus, Jaguar and Porsche. The majority of vehicles made by these brands all differ significantly in design, functions, luxuries (*Ferro and et.al., 2016*). However, to compete with those brands Volvo can promote their innovation strategies to launch new electric vehicle cars to generate new leads.

Threat of new Entrants (Low)

Threat of new entrants are low because of the brand equity level of the existing brands. There are some Asian brands that have tried to compete with the existing players but failed to grab a significant market share. In terms of that, it is not possible for new brands to come up in the market which has already very competitive and strong. Volvo can take advantage of this and always need to introduce new services or products for the buyers (*Holden, 2016*). Some of the other barriers are presents in the market which makes the business more relaxed like initial investment, extensive marketing and advertisement costs, strict government regulations and economies of scale etc. all such factors can help to reduce the threat for electric vehicle cars.

Bargaining Power of supplies (Low)

There are numerous suppliers to the car industry which belongs to the small market as compare to brands. So, it means bargaining power of supplies is low by the hand of supplier's side. Besides, in this case manufacturers are very concern and conscious about the material of raw material and only select the best suppliers who ready to comply with the possible requirements (*Jayakumar, Chalmers and Lie, 2017*). In order to make this company strength company has to choose the best electric motor raw material for producing the high-quality outputs.

Bargaining Power of Buyers (High)

In the context of bargaining power of buyers. So, its ratio is high because car motors have been produced by different brands with having distinct brands, qualities, performance and

appearance and price. In the context of buyer so before investing a huge amount they easily access to information through they will choose the best product or services. Car industry or the companies should always need to listen up the queries of customers. Customer are willing to pay extra for a certain brand.

Threat of substitute (Medium)

Substitute products in vehicles do not serve merely the purpose of transportation. Substitute products instead of high standard premium cars are low budgeted car, or any other transport such as bus train (*Lin and Ho, 2016*). There is a significant threat involved in this force that means Volvo can have better opportunity to launch the new vehicles base on according to which it also analyses the high effecting costing to better generate the cost-effective market.

B) Identifying the new and emerging business opportunities that the production and marketing of electric cars may present to entrepreneur

New opportunities for Electric Motors

Electric motors are the much better option than internal combustion engine in order to getting energy saving opportunities. By the help of introducing electric vehicles there are many growth opportunities that can be good or effective for the future development. However, the main purpose of using or adopting electric motors is to promote the growth of sustainable energy policies that super economic growth and environmental protection in a global context. It also helps to enable the transparency of international markers through collection and analysis of data. The main advantage taken by the company is high market value and brand equity in front of their competitors.

Motor system also been used widely across the all sectors now mostly in residential and commercial sectors. Electric motor is been used in following products or equipment's like refrigerator compressors, extractor fans, computer hard drives etc (*Madonna, Giangrande and Galea, 2018*). there are different opportunities and growth that car manufacture would have been get like Reduce the cost, Beneficial in reducing taxes, reducing upfront cost, provide non-financial incentives, or also develop a utility rate discounts etc.

Strategies to reduce cost can be broken down into demand side and supply side strategies. Demand side strategies reducing the cost of purchasing a PEV. As compare to internal combustion vehicles PEVs are much cost effective for cars.

Somehow motor vehicles also beneficial in financial incentives in order to increasing the purchase price. Motor vehicles are generally rebate in taxes, income and relief in tax credits. Another opportunity which is undertaken by the organisation in reducing the upfront cost.

However, EV also charging infrastructure challenge which has not been yet been adequately addressed (*Nieuwenhuis, Vergragt and Wells, 2017*). In arranging the funds, PEV owners does not require any financial support as compare to combustion engine makers. In terms of that, new start-ups and new entrepreneur can take part in the development and develop their own opportunities and threats.

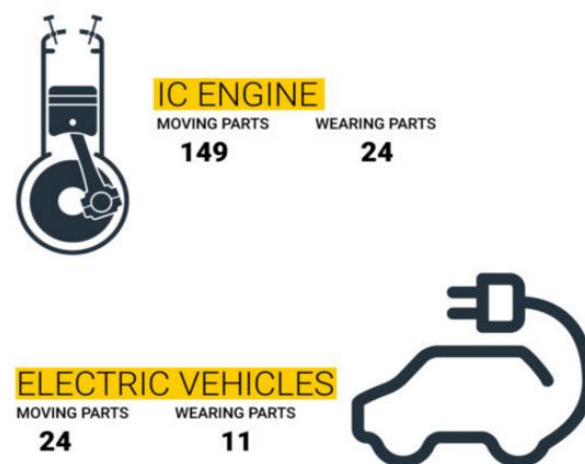


Illustration 1: EVs will have 80% less moving parts

Importance of Electric cars in global automotive industry

In terms of global context EV publications identifies and discusses the recent developments in electric mobility across the globe (*Sarlioglu and Morris, 2015*). It has been analysed from the data 2018 the ratio of electric cars fleet exceeded 5.1 million up to 2 million from the previous year and almost doubling the number of electric car sales. In other words, it generally most approaching for future sustainability as well. New entrepreneurs and new

business start-up should follow and develop a new business plan to promote the environment sustainability. It indirectly relief in tax and reducing the carbon footprint to bring down the negative impact of pollution which is generated by the engine combustion. However, the dynamic business outlook gives the positive deployment of electric vehicles and charging infrastructure. As according to the report of greenhouse gas projected emissions from EVs will continue producing the better results.

It has been observed that in automobile industry Electric motors are more important and far better than combustion engine (*Global EV Outlook*, 2019). For that, government also should need to convey and supporting to those entrepreneurs who are interested to develop the electric motors vehicles.

CONCLUSION

Based on above description, it has been found that, how business global environment can fulfil the company needs and or might be it is challenging for the company too. The electric car industry offers several possibilities for business models and that new entrants can, depending on their value proposition, find a niche in the heretofore not well-developed industry.

The conventional automobile manufacturers like Volvo have a big advantage through established brand image, dealer networks and loyal customers. Overall, study has been concluded about the driven factors and competitive advantage growth.

One of the main conclusions is that more competitions in electric car industry signify more players on an equal level and the partnerships can be build up and costs for research and development can be divided.

Therefore, study has been defined the business environment factors which might have been threatened to company functions. Study also implied the model of porter's five forces model in order to identify the company competitive advantage.

The electric car industry solves the two main problems of too high purchasing price and too short driving range it can make an interesting turn and the industry will be fast paced.

However, it has been found by the study that by launching the electric motor vehicles it will be prove more sustainable and effective in long term profit for the business's entrepreneurs.

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