

Hybrid Cars and Competitive Advantage in the Automobile Industry

Posted on October 28, 2019

Introduction

Competition forms a vital aspect of determining whether a company or organization succeeds or succumbs to failure. This is based on the fact that it can determine the appropriateness of the activities within the organization that contribute to its performance, such as the degree of innovations within the firm and the cohesive culture. Competition performs the task of regulating the balance between demand and supply, especially where there is a free flow of market information. Porter came up with some of the five forces that determine the rate of competitiveness in a market. These forces also play an important role in determining profits accrued by companies. Therefore, an adoption of these forces by a firm may be relatively important in determining the performance of a company. Competition in the market can be determined by employing PESTLE analysis to determine the external factors that determine the competitiveness of a firm.

This report aims to analyze the position of hybrid cars within the automobile industry while showing the competitive advantage they hold in the market. The market position of hybrid cars is analyzed using Porter's Five Forces and PESTLE frameworks. The hybrid car model used for this analysis is the Toyota Prius. (Porter, 1985)

Hybrid Car Overview

A hybrid car is an automobile that uses both technologies, with the motor powered by batteries and conventional gasoline engines. The main objective of integrating these two technologies is to give the car the maximum power so that it creates a fuel economy accompanied by low emissions. These two technologies complement each other in that one serves as the backup in some instances, for example, the battery charges when the hybrid car travels down the hills. In most hybrid cars, when the driver uses the brake system, there is a function to charge the battery of the car by the energy regenerated when using the brake. One advantage of these hybrid cars is that they are environmentally friendly by reducing the amount of fuel emissions and saving fuel because of the battery used to operate the car alternatively. Also, there is less pollution and emission of greenhouse gases. (U.S. Department of Energy, n.d.)

There are two kinds of hybrid vehicles, which are characterized by the way control is produced by the motors, exchanged to the wheels to push the vehicle forward and reverse. The primary kind is the parallel hybrid that has an interior ignition and an electric engine associated with it at the same time

to exchange energy to drive the wheels. Honda utilizes the parallel frameworks in its Insight, Civic, and Accord models. They are fit for regenerative braking vitality recuperation system that stores control for later utilization and are more proficient than non-half-breed vehicles. The other sort is the type that has an electric engine that is utilized to drive the auto forward, and the inside burning motor fills in as a generator to control the electric engine or to energize the batteries. The fundamental distinction with the parallel hybrid is that the parallel hybrid has a bigger ignition motor but a smaller battery pack.

Toyota is by a wide margin the biggest Japanese car producer and the world's third-largest maker of autos. It fabricates around 4.5 million vehicles every year. Toyota Prius is the primary mass-produced gas-electric hybrid auto and was propelled in 1995. It has a hybrid framework that joins and uses two power sources. These power sources are a blend of an oil motor and an electric engine that assigns the energy of each as per the driving conditions. Prius is a 5-entryway hatchback and falls under the fair-sized auto class.

Porter's Five Forces Model

Porter's five powers model is a straightforward yet effective device for understanding the intensity of a business situation and distinguishing the capability of the technique's gainfulness. By understanding the powers of the earth, a business can alter its procedure appropriately and exploit nature for its prosperity. The five powers of the doorman's models are aggressive contention, the purchaser's dealing power, the haggling energy of the providers, the danger of substitutes, and the dangers of new participants.

Competitive Contention

It is one of the most grounded powers that decide the opposition Toyota Prius gets from its rivals, for example, Honda Civic in the market. To succeed, Toyota needs to manage this solid focused power. This segment of the powers decide how firms in a similar industry influence each other making a focused competition. The principle donors of the outer variables to the opposition in the business are;

1. High forcefulness of the organizations
2. High assortment and separation of firms
3. Low number of extensive firms

The hostility among the organizations is controlled by the elements, for example, advancement and advertising, Toyota Prius has been developing since its commencement in 1995. There is rivalry with high assortment of firms, which separate through cost, hardware, fuel effectiveness, style, mark picture, and different factors. There are likewise other little firms yet Toyota contends with just few vast firms in assembling half and half autos. In this way, the organization needs to create far reaching systems to offer the Toyota Prius in the exceptionally focused market.

Bargaining Power Of Toyota's Customers

The purchasers specifically influence the business through incomes. It is the segment of the powers display that demonstrates the impact the purchasers has on business. The bartering energy of Toyota Prius client are dictated by:

1. Low switching cost
2. High-quality data
3. Moderate substitute accessibility

The switching cost decides the cost a customer needs to acquire to change from Toyota Prius to a contender's model, in the event that the shopper purchases another auto. Since the clients approach precise data, they can pick the best alternative of auto they require. Additionally, there are substitutes accessible are can now and again be superior to Prius. At the point when these components are joined, they give ta solid focused condition and in this way, Toyota ought to think about its clients inclinations and desire when producing Prius.

The Dealing Energy Of Toyota's Providers

It is the communication between the organizations and their providers which means to enhance the business. The outside elements that add to the dealing energy of providers are:

1. Moderate populace of providers
2. High general supply
3. Low forward mix of providers

The restricted populace of providers around the globe makes a direct power that impacts Toyota. Toyota has high number of providers that debilitates its supply control. Additionally for the organizations like Toyota, a large portion of its providers don't have the forward coordinate and control the stream and dissemination of material. This power tends to the simplicity with which the organizations address the providers' haggling power.

Threat Of Substitutes

It influences the opposition of Prius in the market with whatever remains of half breed autos, and demonstrates the impacts of a substitute on the Prius. The outside elements in the car business condition that add to the risk of substitution are:

1. Low exchanging beds
2. Moderate accessibility of substitutes
3. Low accommodation in utilizing substitutes

It is normally simple to change from Toyota Prius to its substitutes in light of the shoddy cost of exchanging. Be that as it may, these substitutes are just respectably accessible and as a rule are less advantageous than utilizing Toyota Prius. This power gives knowledge into the risk of substitution and the system for Toyota to utilize to make their makers more available, moderate, and helpful.

Threat Of New Entrants

New contestants are new rivals in the market and this power is utilized to depict the potential impact of new passage in the market. The variables that add to danger of new contestants are:

1. High capital cost
2. High cost of brand improvement
3. High inventory network cost

Toyota Prius faces the threat of new entry into the market. The entry barriers that affect the entry of new entries are the high cost of establishing, maintaining, and growing a new firm in the automobile industry. However, this force is weaker than the competition and the bargaining power of customers on the Toyota Prius business. However, this is part of the porter's five forces that shows the threat of new entry into the market.

PESTLE Analysis

PESTLE examination is an idea in showcasing standards. It is an idea that is utilized as an apparatus by organizations to track nature they are working in or are intending to dispatch another venture, administrations, or item. It is a memory helper that when extended indicates

P-Political

E-Economic

S-Social

L-Legal

E-Environment

This apparatus causes a firm to get the entire perspective of its condition from alternate points of view that it needs to check and monitor entire thinking about on a specific thought or plan. Every one of these parts of nature are key for Toyota Prius. Other than show the structure of the market, it frames the reason for key administration of an organization. It characterizes the activities of the organization and furthermore represent the association's objectives and systems strung to them.

I. Political And Lawful

A few political variables impact and make openings or dangers for the Indian vehicle industry. The lawful system is chosen by the political party in control. Thus, governments enact on issues like wages, administrative compensation, wellbeing and security at work, value checks, import-trade arrangements, permitting strategy, passage of multinationals and so forth. Other imperative lawful issues, for example, the principles of rivalry and trademark rights in India are likewise set around the legislature. The strategies confined the administration, considers a few elements, for example,

1. Research and Development in the car area for steady innovation redesign and solid rivalry;
2. Promotion of Alternative Fuel Vehicles (AFVs) like the Prius;
3. Emphasis on vehicle advancements supporting less emanation

II. Economic

Monetary factors, for example, Interest rates, expansion rates, shopper spending power, net national item (GDP), joblessness rates and credit accessibility influence the car business. The execution of the car area can be ascribed to the execution of the country's economy which relies on the GDP development, foundation improvement, accessibility of back in the market (to support the client's discretionary cashflow) and lessening of extract obligation on vehicles. Fuel costs additionally assume a critical part in the car division. The changes in the unrefined petroleum costs all around influence the fuel organizations in India, along these lines influencing the car area.

III. Social And Environmental

The social components influencing the showcasing condition include the states of mind and ways of life of individuals in the social condition, which thus are subject to the socioeconomics and instructive molding. Like different factors in the earth, social components experience a persistent change. As the ways of life and convictions change, so does the interest for vehicles.

Key social market drivers are as per the following:

1. Growth in urbanization
2. Increase in the customer discretionary cashflow
3. Easy accessibility of fund at low financing costs which means more noteworthy reasonableness

The world is seeing a country buyer blast as a few governments design gigantic development changes for this division. The interest for autos in the rustic territories is on an expansion and is required to demonstrate noteworthy development in the coming years. Additionally, the infiltration of media into this division has made a repressed interest for way of life items and cars. The urban populace represents a little level of the aggregate total populace. There is an expanding pattern of natural

cognizance among the shoppers and this improvement will bring about the expansion the interest for half breed autos.

IV. Technological

Innovative variables feature key openings and dangers that should be considered while formulating a promotion plan. There is a quick update in innovation, and new developments and changes in autos are winding up a significant normal element in the vehicle showcase. A portion of the variables influencing the auto advertising are:

1. Increase in innovative work organizations
2. World-famous IT abilities with master car area information
3. Government's advancement of bio powers and fuel-effective innovation

In conclusion, Metro Bank has made significant strides towards ensuring it provides healthy competitiveness in the market and maintains profitability.

References

U.S. Department of Energy. (n.d.). Hybrid and plug-in electric vehicles.
https://afdc.energy.gov/vehicles/electric_basics_hev.html

Porter, M. E. (1985). Competitive advantage: Creating and sustaining superior performance. Free Press. <https://www.hbs.edu/faculty/Pages/item.aspx?num=193>