

# Investigating the Role of MQB Platform in Volkswagen Group's Strategy and Automobile Industry

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## Abstract

The MQB platform is an automobile platform of the Volkswagen Group. The company's strategic program or plan of the business is known as "Strategy 2018" plus it is designed to produce the Volkswagen Group globally innovator in the 2018. By developing a standard, compatible list of parts from which to produce a number of automobiles, VW intends to reduce the overall time, which is normally taken to construct a car by 30%. One of the ways of judging the position of specific industry is evaluating by Porter five forces model. MQB will permit an enormous financial savings because of economic climates of scale as well as that the financial savings will permit the higher utilization of high - durability products in automobiles, which makes them less dangerous and well made.

**Keywords:** automobile industry, MQB platform, strategy, economy of scale, Porter

## Introduction

The Volkswagen Group is located in Germany and is particularly among the world's top automobile suppliers as well as the leading automobile company in the Europe. The Group comprises 10 brand names and every brand features its own character and functionality as a separate entity in the marketplace. The company's strategic program or plan of the business is known as "Strategy 2018" plus it is designed to produce the Volkswagen Group globally innovator in the 2018. Volkswagen is currently striving to improve and enhance its product sale to be able to produce over 10 million automobiles annually, as well as to boost the return on product sales prior to tax to a minimum of 8%. To attain these objectives, the MQB system will be having a huge role (Wiedemann, 2011).

## MQB Platform

The MQB platform is an automobile platform of the Volkswagen Group. It stands for "German Modularer Querbaukasten" which can be translated into "Modular Transverse Matrix", with which Volkswagen Group can design a wide variety of transverse, FWD drive models by using the same set of components. Usually, each automobile platform is designed specifically for a market segment and is shared between cars of similar size. Volkswagen, is now creating shared

modular platforms to serve the needs of its different divisions, thus the MQB platform is the most recent and will be used for vast market models with FWD cars (Wiedemann, 2011).

Together with the MQB platform the primary things regarding improvement is the dimension that needed to be fixed between the firewall and the axles. The wheelbase, track as well as rear overhangs along with width all can be developed as needed in the style. The MQB will handle various models of Volkswagen. For instance, it handles the following designs: Gold, Passats, Jetta, Scirocco, Beetle, and VW CC. In the foreseeable future, most of these versions could theoretically be manufactured about the same assembly line as well as it will eventually be achievable to create MQB designs of various brand names collectively. The primary new automobiles to be created would be in line with the MQB is definitely the successor towards the Golf as well as towards the next generation Audi A3 models (Wiedemann, 2011).

By developing a standard, compatible list of parts from which to produce a number of automobiles, VW intends to reduce the overall time, which is normally taken to construct a car by 30%. Normally, the vehicles by VW normally have 40kg weight, which is lighter in weight as compare to the today's counterparts. One of the most notable attribute from the MQB is the standard placement of all new types of engines, which are helping as well as accommodating the two new series of 4 cylinder based family series. The Group's engine as well as the gear package variations within the MQB system will probably be lowered simply by 90% due to the brand new engines, and also the MQB allows the same mounting placement for all present substitute drive ideas from propane and for hybrid designs (Wiedemann, 2011).

Working with a standard placement for all kinds of engines as well as transmissions is definitely a huge advantage. It could be a diesel-powered engine, electric powered motor; plug in hybrid arrangement or even gas based engines, all may be fit evenly which makes it much more suitable. An unequalled performance can also be purchased with this uniformity in engine and in transmission. The predicted quantity of automobiles in the future with this particular brand new platform is around 3.5 million which includes modest automobiles as well as normal sized sedans, also for the success of this project of VW will spend billions of dollars. Improving the automobile plants towards MQB system will certainly incur a large amount of price but concurrently it'll reduce the price of manufacturing by almost 20% and reduce the assemblage times by a remarkably 30%. (Horrell, 2011).

One of the ways of judging the position of specific industry is evaluating by Porter five forces model. According to this theory, there exist five major forces in industry that determines the overall profitability of that industry. Grundy (2006) stated that porter five forces model has boosted strategic management to the new horizon of management world (Grundy 2006).

### **New Entry Threat**

Throughout this automobile production business, this is certainly a minimal threat. Issues to look at in this threat contain all hurdles to accessibility in market. For example, advance investment capital, brand equity, regulation and state policies, and capability to deliver the

merchandise (Porter, 1996). As the Volkswagen is one of the leading and famous manufacturers of automobile, so they have no threat of entry of new company. They are already the biggest automobile manufacturers in Europe. Moreover, in case of automobiles, customers usually prefer their trusted brands and companies. Volkswagen is one of the leading automobile manufacturers so they have less threat of any new entry in the market. Moreover, they are continuously focusing on product innovation that is why they have less risk from any new company entering in market (Porter, 1996).

### **Vendor's Bargaining Power**

The bargaining power of vendors is also a major factor. It means that exactly how strong could be the position of your vendor. Exactly how much the vendor has influence over raising the rates of products? Vendors tend to be stronger if vendors are focused as well as properly organized, a small number of alternatives available in the market to products, their particular goods is usually most reliable or distinctive and you are usually not a major client to Vendor. Whenever vendors possess extra control over products as well as its rates which segment is significantly less appealing. It is better approach to produce win-win relationship with vendors. It is wise decision to acquire multiple-options of supply (Avila, 2001). In the automobile industry, it is generally referred to the supplier of spare parts engine parts, car accessories etc. It also includes the auto-unions. The vendors can charge high prices for the supplies as the VW MQB platform is a new reform in automobile industry so suppliers can charge extra amount. In order to avoid this problem, the company has to look for multiple suppliers for their machinery and raw materials. Strong vendors can increase the rate of their products that eventually increases the cost of industry. In this competitive market, the high vendor bargaining power can cause some serious damages to the Volkswagen (Avila, 2001).

### **Alternative Products**

If customers can examine to the level of competition or some other similar products and services, and switch quickly there could possibly be a great danger of this particular force. Because of brand new motors, the particular switching cost is actually huge due to the fact a person will not be able to sell the brand new motor vehicle for the similar amount, he paid for it (Grundy A. N., 1997). The beginning of MQB is predicted to take the entire Volkswagen Group one single level nearer to their aim to become the particular world's number-one motor vehicle producer, overtaking Toyota as well as General Motors.

Therefore, Volkswagen group will face fewer chances that their customer will switch to some other cars. Innovation in products is the key element of Volkswagen success. Their new MQB platform will help Volkswagen to produce more innovative motor vehicles and they can save up to 25 percent cost. These cost effective innovative motor vehicles will persuade customers to buy the Volkswagen products (Grundy A. N., 1997).

## **Market Competition**

Market competition means the level of rivalry between the current competing firms already in the market. Level of competition relies upon on how many competing firms and their functionality. Market competition is higher when:

- ✓ Generally, there are usually number of limited or similar competing firms and significantly less whenever there is a definite industry leader.
- ✓ Buyers have less switching costs
- ✓ Market is developing
- ✓ Exit obstacles are higher and competitors stay and also remain competitive
- ✓ Fixed expenses are huge resulting massive manufacturing as well as decrease in prices

These types of scenarios create the grounds for advertising and marketing wars, improvements, price wars and eventually rates increase and it is challenging to remain competitive (Mahan & McGowan, 1998).

All top manufacturer of automobile faces that kind of problem. The automobile industry is growing rapidly in European countries and like all other car manufacturers, Volkswagen has to face tough competition in market from existing competitors. Volkswagen is facing a tough competition from General Motors and Toyota. Though Volkswagen is considered as the leading automobile manufacturer in Europe, it still faces intense competition from its rivals. The MQB will definitely enables the Group to create both high-quantity as well as niche versions at the maximum quality as well as incredibly competitive prices in the long run and also world wide-vehicles which are separately designed for the needs of extremely diversified industry like as America, China, Europe and also growing markets like India (Mahan & McGowan, 1998).

## **Negotiating Power of the customers**

Customers refer to the particular buyers who ultimately acquire the product or service or even the companies who deliver the particular industry's product or service to your final customers. Negotiating potential of customers refer to the actual ability of customers to cut down the price levels charged by companies in the market or raise the firms expense in the market by asking for improved quality as well as service of goods. Strong customers can get revenue from of a market by reducing the selling prices and raising the costs. They will buy in huge amounts. They have complete details regarding the product or service and the market. They will stress on high quality products and solutions. They pose credible threat of backward integration. In this way, they are regarded as a threat (Thurlby, 1998).

## Literature Review

In February, 2012, Volkswagen intends to make majority of their technology designs with its all-new MQB System and it is such a sensible decision, which will certainly provide enormous economic advantages to the company. Moreover, it is revealed that Audi as well as Skoda will be manufactured on the same platform; the initial product example of this platform is in fact Audi A3. On the other side, the next generation Skoda is coming in the market by the ends of 2013, which will be entirely based on the VW and MQB platform. Exactly the same platform may also be used by the near future versions of the additional VW Soda, Polo and VW Vento. On the other hand, VW Polo coming from MQB platform, the Skoda of 2014 will be having the same size however will provide an extended wheelbase, therefore enhancing the room interior. Furthermore, the Skoda Fabia, of 2014 will likely to have a gasoline engine alternative along with 80 BHP power as well as 1.2 Liter displacements ("Volkswagen group introducing," 2012).

The MQB system platform, referred to as "long term" structures, the working platform is adequately flexible to underpin automobiles like small Polo and for big sized Passat. Most importantly, it is being declared that these types of designs could - theoretically - be constructed on a single manufacturing range. This will likely allow Volkswagen to generate additional high - size along with market automobiles at lowered costs. The working platform may also be lighter in weight than present architectures and permit for standard installing of gasoline as well as diesel-powered engines (Volkswagen group introducing, 2012).

On 2nd February, 2012 it was declared that the brand new platform is placed to appear under each of the brand new Audi and VW versions in the future years, which is more likely to come in some more. We're able to anticipate probably a manufacturing edition of previous year's Cross Coupe idea (Colwell, 2012).

Volkswagen declares the platform of MQB simple as "long term" structures, made to manufacture products just like Polo, to a family automobile to as large as the Passat. Developed to be lighter in weight than each of the brand's present similar systems, the MQB will even provide diesel, petrol, as well as several renewable energy power locomotives. The very first versions to come out on the brand new platform would be the fresh 7th era Golf, as well as the latest Audi A3 with sedan (Colwell, 2012).

Also, on 26th march, 2012, on VW annual income headline, it was exposed that the business produced £9.3 billion throughout the year of 2011, up greater than 50%, Michal Macht, the panel fellow member responsible for group manufacturing, mentioned: "The following 2 to 3 years are great for all of us, and during this period we plan to maintain the technological innovation to ourselves. We don't want to reveal our superiority; however in the moderate to long-term we're able to promote the technological innovation. We might need to consider the possibilities and examine whether or not they made impression" (Colwell, 2012).

VW Group reports to create a lot more than 6 million vehicles to the platform throughout VW, Audi, Seat and Skoda brand names by way of 2018. The chief of Volkswagen, who was simply offered a £14.2 million reward for the company's achievement, recently, stated the investment decision within the MQB framework would start to pay back coming from 2014. Winterkorn predicted the fact that the VW has expended close to £50 billion dollars over 4 years inside the establishing and employing the MQB system (Holder, 2012).

“The brand new Golf has to be huge leap and much better than the vehicle it replaces,” he stated. “We have spent greatly in this particular technological innovation, however we're confident the advantages is going to be obvious for the business. Making the MQB system as well as organizing the production facilities to generate it needs spending in 2012 and also 2013, however from then on the repayment should begin to come” (Holder, 2012).

Additionally, there are many brand names, much more sections, plus more automobiles ever is probably no more apparent than inside the Volkswagen, along with its Ten marquees as well as more than 200 models throughout the world. VW is currently making shared lift-up systems to assist the requirements of its various subsidiaries. The most recent is known as MQB (Holder, 2012).

In future, the platform of MQB will help in almost everything through the small VW up to the giant Passat. Generally virtually any VW Group product which supports its engine sideways right in front from the cabin will probably be MQB, that's about 60 vehicles. Volkswagen intends to go ahead and take platform idea towards the extreme, even though it won't reveal particular minimal and optimum proportions, however to obtain a great idea of the array we could examine it to the present Passat (it isn't constructed using the MQB system platform, however its equally sized alternative will probably be) there is in fact a 15 inches of wheelbase spared, however the actual width varies up to the 8 inches between two, and also the size variation is more than 50 inches wide. Therefore, it's very diverse ("CarWale Team", 2012).

MQB can nearly be looked at as the best development of certain component sharing, instead of just one particular system. It really is flexible enough to allow for several elementary components to be made from lightweight aluminum through communizing all of the subsystems in the automobile (motors engines, headgear installation factors, as well as MIB, Volkswagen's flip-up infotainment technique, for instance), generation and growth can be more efficient and therefore revenue could be at the maximum.

Moreover, the platform MQB is based on a brand new system that signifies a lot more than the usual framework which can be modified to be used in the wide selection of products. Volkswagen referred to as it “the central source of light as well as safe automobiles”. It goes with supplying a chassis which can be extended or reduced to suit various automobiles, to just one that gives its electric cabling, motors, as well as air-conditioning devices, and transforming (Volkswagen is leading, 2012).

In the coming future, the development of MQB is anticipated to create the Volkswagen Group one stage nearer to its objective to become the world's leading auto producers. As outlined by Macht, the brand new MQB system platform will certainly make use of typical elements throughout Volkswagens various brand names as well as products however it will even standardize the production sequences throughout products along with worldwide production places. Even though identical strategies to standardization along with modularization are already implemented by rivals of Volkswagen, in the past the company has struggled hard to have control on the marketplace (Mike, 2012).

## **Findings**

The MQB system enables the VW group to create globally higher quantity as well as market versions at very competing price in the long run. The MQB makes use of synergies within key technology as well as enables higher financial systems of scales with the manufacturing line. This would be the groundbreaking part of the auto growth and manufacturing. By using MQB system, VW's development and progression could be efficient and income can be at the maximum. All automobiles depending on MQB tend to be 40kg lighter in weight compared to their quick predecessors, this leads to increasing the gas mileage coming from all MQB-based versions (Sathiyarayanan, 2012).

The recent MQB idea is having a main architectural benefit for VW's within the worldwide auto business, letting it to decrease the price and become more competing on costs. With this way it may gain share of the market from (TM) Toyota Motors and (GM) General Motors to turn into the world's biggest auto producer. Due to the MQB system, versions additionally gain in performance and satisfaction. MQB enables the VW Group to create both higher volume as well as specialized niche products with the best quality and very competing prices in the long run and throughout the world (Bidsar, 2012).

MQB will permit an enormous financial savings because of economic climates of scale as well as that the financial savings will permit the higher utilization of high - durability products in automobiles, which makes them less dangerous and well made. The standardization will even lessen the price of production of elements and offers capability of sourcing. The decrease in the price of procuring signifies that Volkswagen can offer functions and products of high quality vehicles in low budget automobiles. The MQB system based automobiles will probably be both competitively priced and also with the price at the same time. Furthermore, it will likewise be packed with functions compared to the different brands coming in the market (Bidsar, 2012).

## **References**

Avila, E. A. (2001). Competitive forces that drive engiengineer recruitment and retention. *Leadership and Management in Engineering* , 17-23.

Gresoi, S. (2011). Managementul și gestiunea calității, Prouniversitaria Publishing House, ISBN 978-973-129-981-5, Bucharest.

Grundy, A. N. (1997). Strategy mix and the industry mind-set. *Journal of General Management*, 16-30.

Grundy, T. (2006). Rethinking and reinventing Michael Porter's five forces model. *Strategic Change*, 213–229 .

Mahan, J. F., & McGowan, R. A. (1998). Modelling industry political dynamics. . *Business and Society* , 390-414.

Porter, M. E. (1996). What Is Strategy? *Harvard Business Review*, 61-7.

Thurlby, B. (1998). Competitor forces are also subject to change. . *Management Decision* , 19-25.

Wiedemann, K. (2011). Volkswagen adopts new compact platform. *ptc.com*, Retrieved from <http://blogs.ptc.com/2011/11/08/volkswagen-adopts-new-compact-platform/>

Horrell, P. (2011). Volkswagen's mqb platform: From vw bulli to audi a3 sedan read more. *motortrend.com*, Retrieved from [http://www.motortrend.com/future/future\\_vehicles/1106\\_volkswagen\\_mqb\\_platform\\_from\\_vw\\_bulli\\_to\\_audi\\_a3\\_sedan/viewall.html](http://www.motortrend.com/future/future_vehicles/1106_volkswagen_mqb_platform_from_vw_bulli_to_audi_a3_sedan/viewall.html)

(2012). Volkswagen group introducing modular transverse matrix this year; new engine families, \_\_Lighter weight construction, powertrain flexibility. *greencarcongress.com*. Retrieved from <http://www.greencarcongress.com/2012/02/mqb-20120201.html>

Bidsar, K. (2012). 2014 skoda fabia based on volkswagen mqb flexible platform. *carbologindia.com*, Retrieved from <http://www.carblogindia.com/2014-skodafabia-based-on-mqb-platform>

Sathiyarayanan, N. K. (2012). Volkswagen MQB platform - all in one. *navcom.dogsindia.info*, Retrieved from [http://navcom.dogsindia.info/index.php?option=com\\_k2&view=item&id=283:volkswagen-mqb-platform-all-in-one&Itemid=63](http://navcom.dogsindia.info/index.php?option=com_k2&view=item&id=283:volkswagen-mqb-platform-all-in-one&Itemid=63)

(2012). Volkswagen is leading auto innovation with the mqb platform. *seekingalpha.com*, Retrieved from <http://seekingalpha.com/article/438251-volkswagen-is-leading-auto-innovation-with-the-mqb-platform>

Holder, J. (2012). Vw could sell £50bn mqb platform. *autocar.co.uk*, Retrieved from <http://www.autocar.co.uk/News/NewsArticle/AllCars/261970/>



Colwell, K. C. (2012, February 12). [Web log message]. Retrieved from <http://blog.caranddriver.com/a-look-at-volkswagen's-new-mqb-platform-for-front-wheel-drive-cars/>.

Mike, S. (2012, February 02). *Volkswagen wheels out new mqb platform, new small engines*. Retrieved from <http://www.themotorreport.com.au/53433/volkswagen-wheels-out-newmqb-platform-new-small-engines>

"CarWale Team". (2012, February 03). *VW showcases the new mqb platform*. Retrieved from <http://www.carwale.com/news/8656-vw-showcases-the-new-mqb-platform.html>