

Research on Volkswagen's Development Strategy During Covid-19

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ABSTRACT

The global outbreak of the new coronavirus at the end of 2019 brought a severe blow to the world's economic development. As a typical company in the automotive industry, Volkswagen's development has also been hit hard by the epidemic. In order to analyze the development of Volkswagen before and after the epidemic and the impact of its corporate development strategy in the post-epidemic era, this article uses SWOT analysis based on the actual development data of Volkswagen to analyze the advantages, disadvantages, opportunities and threats of the company in the business process to described the development of the company. Research shows that Volkswagen's operating profits have shown a significant decline due to the impact of the epidemic. Companies can use a variety of ways to deal with the impact of the epidemic to reduce the company's losses.

Keywords: *Volkswagen, SWOT, Strategy, COVID-19.*

1. INTRODUCTION

1.1. Research Background and Motivation

As a leading enterprise in auto industry, Volkswagen takes the dominant position for many years in the domain of automobile production and marketing. It's established in 1938 and the headquarters is in Wolfsburg, Germany. Within almost a century of development, Volkswagen has become the greatest automobile company in Europe and one of the most powerful transnational enterprise in the world, they invest to build controlled corporations and factories around the world, the business scope is diverse which includes production, sales, physical distribution, automobile insurance and so on, besides, Volkswagen also makes the capital injections in technical research and development, for example, the strategy of 2030 new auto is the proof that the company pays attention to the technology innovation of new energy. For a leading enterprise like Volkswagen, fierce competition has been a normalcy, even though it keeps regnant comparing to other auto companies based on its abundant strength, it falls short of monopoly, so that more and more intense competition is a critical problem that cannot be ignored for enterprise development. The fact might seem a little cruel, but this is actually the truth of the

market. If you desire to exist or occupy a space in the market, you must demonstrate convictive advantages comparing with your competitors. Brand portfolio is a significant method implemented by Volkswagen to stay competitive, since single brand can hardly keep long-term surviving in market competition at present, however, the acquisition of sub-brands can entrance the strength of themselves immediately and also eliminate potential competitors to consolidate their own dominant status. In order to explore how Volkswagen responded to COVID-19 and maintained the company's competitiveness in the market, we conducted research on the measures it used during the epidemic and the company's financial data.

1.2. Literature Review

This article has looked up some related literatures about the impact of COVID-19 on enterprise, and there are a few documents are particularly with respect to Volkswagen. The literatures make analysis surrounding the topic of COVID-19, the central themes are largely identical but with minor differences, they analyzed how the pandemic brought negative effects for enterprise operation but likely to ignore the truth that anything is two-sided. They put most effort in finance analyze, but

ignored some other aspects, such as management, social responsibility, goodwill, charity and so on. It is undoubted that the shock in finance is the most straightforward side under COVID- 19, however, what we care about is far more than how much they loss, how much their revenue decreased for, but also how they could keep stable during the pandemic, what policy their management level would set up, or what responsibility Volkswagen will undertaken as a successful company.

1.3. Research Contents and Framework

As a world-renowned enterprise, Volkswagen is worth to be comprehended and SWOT is an appropriate method. Based on the actual development data of Volkswagen, this article uses SWOT analysis to analyze the company's advantages, disadvantages, opportunities and threats in the business process and describe the company's development. The following framework arrangements for this article are as follows. The second part is the methodology, the third part is based on the analysis of the status quo of enterprise development in the context of the epidemic, the fourth part is the results and discussion, and finally the conclusion

2. METHODOLOGY

SWOT is the acronym standing for Strengths, Weakness, Opportunities and Threats. It is a type of analysis for a company to evaluate their overall operation based on their competition environments. SWOT is used to assess the internal strengths and weakness, external opportunities and threats by surveys, and then list them as a matrix from. The factors in SWOT will be analyzed further to help the company set up strategies for the future operations. Companies would find the favorable factors that should be carried forward and the adverse factors trying to avoided by this way, SWOT help them define the development directions and the methods to resolve existing problems. For Volkswagen, we did the surveys

in details by SWOT and the Strength is the part we care most. Here are three typical strengths we researched for: One is Brand Portfolio: Volkswagen has been more likely an enterprise group. Some familiar automobile brands we have heard, such as Audi, Skoda, Bentley, Bugatti and Porsche, all of them have been the acquisition of Volkswagen. Brand portfolio help company expand the market power and establish the dominant position, on the other hand, it eliminates a large portion of competitors; the second is Manufacturing Capacity: As of 2013, Volkswagen has built 106 production plants and factories around the world. They produced about 8.9 million automobiles last year and employed 662,600 staffs totally. Volkswagen has proved why it is the world-first-class automobile company by the large-scale production. The third is research and development: Volkswagen pays attention to technological innovations, they organize creationary experiments and applied research by utilizing human capital. In 2020, Volkswagen spent \$16.51 billion on R&D which was over the second top Toyota for 62%.

When Covid-19 broke out at the beginning of 2019, it had been destined that world commerce would be shocked enormously and may not be recovered in a short period, the impact refers to most transnational corporations, Volkswagen was one of them. Under the shock of pandemic, the sales volume decreased for 15.1% in last year, as how Volkswagen demonstrated their official report externally, the total sales value was 5.3 million which was less for almost 1 million than 2019. The sales revenue decreased for 11.78% on average, the worst affected region is Western Europe, it dropped for 23.4%. In general, there are different indicators to report a company's operating performance in the financial statement, however, we only pick up three items that can most demonstrate the operation in this case here, sales revenue, EBITDA and net Income, EBITDA is the abbreviation of "earnings before interests, taxes, depreciation and amortization".

Table 1. Volkswagen's financial operations from 2018 to 2021

	2018	2019	2020	2021
Net Sales	235,849	252,632	222,884	252,647
EBITDA	38,138	43,735	25,392	38,295
Operating profit (EBIT)	17,104	19,296	10,606	19,409
Operating Margin	7.25%	7.64%	4.76%	7.68%
Pre-Tax Profit (EBT)	15,643	18,356	11,667	20,566
Net income	11,827	13,346	8,824	14,645
Net margin	5.01%	5.28%	3.96%	5.80%
EPS	23.6	26.7	16.7	29.0
Dividend per Share	4.86	6.56	4.86	7.37

Table 1 is a summary table of Volkswagen's financial operations from 2018 to 2021. The three financial indicators of net sales, EBITDA and net income can more intuitively reflect the company's operations. Finding the growth trend and growth rate by listing the data from the past to the present will help predict the future profit and loss situation, which will help the company to develop better. It can be seen from Table 1 that from 2018 to 2019, sales revenue increased by 7.12%, EBITDA increased by 7.92%, and net profit increased by 12.84%. In 2020, due to the impact of COVID-19, there will be a downward trend. In 2019-2020, sales revenue fell by 11.78%, EBITDA fell by 15.53%, and net profit fell by 37.55%.

3. ANALYSIS OF THE STATUS QUO OF BUSINESS OPERATIONS OF THE EPIDEMIC SITUATION

With the progress of society, cars have become an indispensable part of people's daily lives. As a well-known global brand, Volkswagen is already familiar to many people, and its influence on society can be described as great. Because Volkswagen has low fuel consumption, low maintenance costs, and the power train matches the best among the citizens' dual-clutch models, Volkswagen has accumulated a good reputation and left a good impression in the minds of the people. What's more, Volkswagen's appearance is atmospheric, it has more texture when driving, and its safety is high. Most of the models are more suitable for ordinary consumers, so Volkswagen remains high on the hot sales list. According to data in 2019, the sales revenue of Volkswagen Group increased by 7.1% year-on-year to 252.6 billion euros; the sales revenue and operating profit of Volkswagen Group's car brands have increased; Volkswagen Group's car sales were 10.956 million vehicles, a year-on-year increase 0.5%. According to the financial report, the Volkswagen, Group's annual sales revenue reached 252.6 billion euros in fiscal year 2019, an increase of 7.1% over the previous year; in 2019, Volkswagen Group's operating profit without special item expenditures was 19.3 billion euros, an increase of 12.8% year-on-year, A record high; operating profit after deducting special project expenses reached 17 billion euros. The net cash flow of the automotive business increased to 10.8 billion Euros [1].

It is a pity that the good times are not long. The pace of the epidemic in early 2020 is quietly approaching. Many industries are facing suspension of production and production, and auto companies are no exception. Affected by the epidemic, more and more car companies have joined the ranks of suspension of work and production, and Volkswagen is no exception. According to a S&P report on Wednesday, February 5, Volkswagen has become the company most affected by the epidemic. The Volkswagen Group produces and sells nearly 40% of the cars in China, which is the most

important market for the entire Volkswagen Group in the world. It is likely to be "damaged" severely by the epidemic. The Volkswagen Group announced the 2020 global sales data: cumulative sales of 9.3 million new cars, a year-on-year decline of 15.2%. According to data, Volkswagen lost 1.49 billion euros in the first half of 2020, and group sales revenue fell 23.2% to 96.1 billion euros. Delivery volume decreased by 27.4% year-on-year to 3.9 million vehicles [2]. The main reason for the decline is that it has been dragged down by the epidemic. As the new crown pneumonia epidemic has achieved initial results, auto companies have accelerated the resumption of work and production and resumed their previous production operations. Although Volkswagen's overall sales have declined, their performance in the entire automotive industry is not inferior at all. During the recovery phase of the epidemic, Volkswagen incorporated future development into the development of the company, redistributed resources to support future development, and increased investment in electrification by reducing the output of fuel vehicles. The overall R&D and capital expenditure ratio of the group will also decrease, and the profitability of electric vehicles will exceed that of fuel vehicles within 2-3 years. In 2021, after the outbreak of the Volkswagen epidemic, the sales of Volkswagen Group's new energy models reached 196,800 units, a year-on-year increase of 82% [3]. Volkswagen has become the world's second largest new energy vehicle company. Volkswagen has great confidence in the adjustment of product structure. In order to adapt to market demand, Volkswagen has made efforts to adjust its product structure. The sales volume of entry-level products of Volkswagen has been declining, and the sales of mid-to-high-end products have increased. Therefore, Volkswagen has reduced its investment in entry-level products and increased its investment in mid-to-high-end products. Volkswagen's transformation after the epidemic is not only that, but Volkswagen has announced its plans for the future. Due to the personal mobile travel is still the main mode of transportation, accounting for 85% of the total mobile travel. Therefore, Volkswagen's future development goals for automobiles are sustainable, zero-emission, safe, comfortable and practical. This purpose is to reduce the negative attributes of automobiles in use, and people will have more demand for automobiles. By 2030, Volkswagen will reduce the carbon footprint of each car's entire life cycle by 30% compared with 2018, as promised in the Paris Agreement [4]. At the same time, the share of pure electric vehicles is expected to rise to 50%. By 2040, all new vehicles sold by the Volkswagen Group in major global markets will have close to zero emissions. By 2050 at the latest, the Volkswagen Group will achieve carbon neutrality. Not only that, Volkswagen will use the Scalable System Platform after 2026. Volkswagen will integrate the current Volkswagen's 3 fuel vehicle platforms and 2 pure electric vehicle platforms into this platform within 5 years.

Volkswagen plans to create a new software ecosystem to meet individual customer needs. This plan is not only in line with the concept of sustainable development of human society, but also economically will reduce the cost of Volkswagen and increase profits.

4. RESULTS AND DISCUSSION AND CONCLUSION

As the first batch of foreign-funded auto companies to enter China, in the past 40 years, Volkswagen Group has participated in and witnessed the tremendous development of China's auto industry, and has also achieved excellent results in the Chinese market. The outbreak of the new crown epidemic in 2020 will bring unpredictable disasters to the world [5]. As a member of the Chinese society and people's lives, Volkswagen Group (China) has undertaken its social responsibilities with a joint venture and jointly donated 120 million yuan to support the prevention and control of the new crown epidemic and help China survive the epidemic crisis. Senior executives within the group also spoke on social platforms to support the anti-epidemic action.

In addition, the group quickly adopted a series of internal prevention and control measures to ensure the safety of its employees in China and at the same time lay the foundation for the group to pass this difficult time smoothly. In order to tide over this crisis with various stakeholders such as sellers and customers and help the Chinese auto market return to normal as soon as possible, Volkswagen China adjusted its market expectations and strategic layout [6,7]. The uncertain market and the development of the epidemic have accelerated the digital transformation of Volkswagen Group (China) 's sales and marketing strategies. While providing live broadcast training courses for dealers, its brands Jetta VS7, Volkswagen Weiran and Tanyue GTE, etc. The cloud live broadcast of various models has also been successful, attracting millions of people across the country to watch online. Looking back on 2020, many of the measures and response strategies implemented by the Volkswagen Group have provided reference for other companies, and also provided experience for responding to emergencies in the future. 2019 was a successful year for the Volkswagen Group, in which the share of the Chinese market cannot be underestimated [8,9]. The huge test brought about by the outbreak of the epidemic has affected Volkswagen China's expectations of sales and revenue for the full year of 2020. In 2020, the epidemic continues the declining sales trend that has appeared in the Chinese auto market since 2018, and consumers' desire to buy is still declining. The epidemic has also caused many factories around the world, especially European factories, to face large-scale shutdowns. The group has experienced difficult times with offline distributors and customers.

After the outbreak, Volkswagen China established an emergency response team for epidemic prevention and control within the group as soon as possible, with members from safety management, medical consultants, real estate management in China/Asia, human resource management, international human resource management and internal communication Department[10]. In the subsequent stage of epidemic prevention and control, this team closely followed the development of the epidemic under the guidance of the board of directors, reported the latest news in a timely manner, and proposed a number of measures to ensure the efficient implementation of various tasks. Through timely and seamless communication, the emergency response team conveyed various important information during the epidemic to all employees. At the same time, the full cooperation between the various departments of the emergency response team provides a practical reference for the board's policy formulation [11,12].

Ensure the safety of employees. Chartered flights to send employees home is an important decision of the group after the outbreak. In order to comply with the epidemic management policies of various countries, many foreign colleagues and their families within the group are stranded outside of China. For this reason, Volkswagen Group decided to charter flights for employees to ensure their health and safety. Within 3 months, 15 Volkswagen Group companies from China to Europe, from headquarters to offices and production bases in various regions worked together [13]. More than 50 colleagues from four different countries and different brands worked together to organize 594 foreign colleagues [14]. He and his family returned to China smoothly on 9 charter flights from Frankfurt to Qingdao, Tianjin and Shenyang. In order to complete project, in the face of huge uncertainty, Volkswagen Group (China) Human Resources, Organizational Development and Information Technology Process Department set up a special working group [15,16]. Colleagues from the Human Resources Department, Public and Joint Venture Affairs Department, Finance Department, Purchasing Department, Security Management Department, and Medical Consulting Department worked closely across departments to overcome huge challenges-- ensure that staff are safe.

It is with these effective measures that Volkswagen China has guaranteed zero infections for more than 100,000 employees working in China and laid the foundation for the orderly resumption of work in the group's factories. After the COVID-19 outbreak, Volkswagen Group (China) launched online sales-related training in response to the large-scale home isolation and office work of employees, and it was difficult for customers to enter physical stores. In February 2020, the Volkswagen Training Academy launched an online live training course for the first time to help dealers improve their online service capabilities such as live broadcasting

and short video shooting. This is the only live training course provided by auto manufacturers for dealers during the fight against the epidemic. From the group of trainers to the entire network of Volkswagen brand dealers, Volkswagen China provides professional and systematic knowledge supplies for more front-line personnel in need [17,18]. Approximately 50,000 people participated in the training, and the video was watched by more than 500,000 people, covering about 90% of the dealer network of SAIC-Volkswagen, FAW-Volkswagen and Volkswagen imported cars. At the same time, Volkswagen China jointly introduced corresponding dealer decompression policies. Among them, FAW-Volkswagen has formulated five major dealer burden reduction measures in accordance with local conditions, and formulated a special support plan for Hubei dealers in Hubei Province to support local dealers in their anti-epidemic work [19]. SAIC Volkswagen suspends inspections, cancels part-time sales task assessment of dealers, and supports dealers through measures such as extending the interest-free period, pre-arranging stocks, and technical support. Imported cars also adapt the method of canceling sales, network and after-sales assessment. This series of measures help dealers quickly resume operations, and factory production has returned to normal levels during the same period. The market for high-end and mass-produced models has continued to recover, which has strengthened the Volkswagen Group's strength in subdivisions. At present, Volkswagen Group and joint ventures have completed the resumption of work.

5. CONSLUSION

During the epidemic, customers became uneasy and fearful about the unknown, and their expectations for new products were more conservative. In this regard, Volkswagen Group adjusted its layout and provided sufficient relevant support. During the epidemic, Volkswagen provided services such as epidemic information push, 24-hour hotline and rescue, door-to-door pickup and delivery, zero-contact maintenance extension, card and coupon extension, comprehensive disinfection protection, online car viewing, replacement evaluation, etc. It needs of customers in extraordinary times. FAW-Volkswagen's three major brands, Volkswagen, Audi, and Jetta, have also taken corresponding measures in different regions to ensure safe travel for customers: Volkswagen brand North China launched a green ribbon campaign to provide branded taxis and online car-hailing with free in-cars Disinfection and sterilization services; Northeast, East China, and West regions provide year-round free basic maintenance of vehicles, free year-round disinfection of vehicles, free life-long road rescue, and life-long green quick repair channels for first-line medical personnel and car owners who are engaged in the anti-epidemic work in Hubei Province Serve [20]. The Audi

brand and the Jetta brand have launched a 7 × 24-hour worry-free rescue service to ensure users' travel during the epidemic period. The Jetta brand has also added a door-to-door pick-up and delivery service, and provides free air-conditioning cleaning services twice a year for front-line medical staff and car owners. In response to the situation of epidemic prevention and control, the Group promoted a series of innovative digital marketing models such as "Cloud Showroom", "Cloud Shopping" and "Cloud Service" to provide consumers with zero-contact online services [21]. The Volkswagen and Skoda brands under SAIC Volkswagen also launched brand care activities in time, providing free vehicle disinfection and discounts on PM2.5 air-conditioning filters, optimizing users' experience in car selection, car purchase, and use, while ensuring users' travel safety. At the same time, in order to alleviate the anxiety of customers during the epidemic, Volkswagen Finance China adjusted the repayment arrangements for personal credit customers between January 24 and February 17 [22]. Chinese users in provinces and other provinces, cities and regions are given 50 and 20 days of grace period for repayment, respectively.

With the joint efforts of all parties, Volkswagen's business in China continued to recover steadily. With the global epidemic hitting the economy severely, the Volkswagen Group (China) business has continued to recover steadily in 2020. Since April, the Volkswagen Group (China) business has continued to recover steadily. In the first ten months of 2020, the Group's vehicle delivery volume will exceed 3million vehicles, the market share increased year-on-year against the trend, helping China's social and economic recovery and orderly development [23,24]. In the future, Volkswagen Group remains confident in China's auto market.

AUTHORS' CONTRIBUTIONS

These authors contributed equally.

REFERENCES

- [1] VOLKSWAGEN Collins, Stephanie Published in The Philosophical quarterly, 2021-06-22
- [2]Social cognitive factors outweigh negative emotionality in predicting COVID-19 related safety behaviors Hein, Grit ; Gamer, Matthias ; Gall, Dominik ; Gründahl, Marthe ; Domschke, Katharina ; Andreatta, Marta ; Wieser, Matthias J ; Pauli, Paul, Preventive medicine reports, 2021-12
- [3]Volkswagen India Initiates New Safety Program Amid Covid-19 Pandemic Prakash, Arun. Motoroids; Mumbai (May 13, 2020)
- [4]Estimating PM2.5-associated mortality increase in California due to the Volkswagen emission control defeat device Wang, Tianyang ; Jerrett, Michael ;

- Sinsheimer, Peter ; Zhu, Yifang Atmospheric environment (1994), 2016-11
- [5]Yuchi Yansong, Gu Wen. Design and Implementation of A New Model [J]; journal of Beijing University of Technology (Natural Science edition); 2006-03 Family car; 10, 2018.
- [6]ZangQin;; Research on The Marketing Strategy of Telecom Industry [J]; Journal of Beijing University of Technology; 2004-04 Private science and technology; 08, 2015
- [7]A Study on the Influence of Automobile Industry [J]; Journal of Anhui University of Technology (Natural Science edition); 2006-01 Operator (Automotive Business Review); 01, 2019
- [8]Li Chongsen; Design and Implementation of New Manufacturing Technology for FaW-Volkswagen [J]; journal of Anhui Agricultural Sciences; 2006-01 Vehicle observation; 01, 2019
- [9] Zhai kylie. Faw-volkswagen share ratio change behind Audi will become the biggest winner. [J]; Journal of Nanjing University of Technology (Natural Science edition); 2006-01 China Mechanical and Electrical Industry; 11, 2019
- [10]Sales Volume of FAW-Volkswagen From January to August exceeded 1 million [J]; Journal of Nanjing University of Technology; 2006-01 Car maintenance; 10, 2018
- [11]Cheng Rui. Design and Implementation of New Energy Electric Vehicle [J]; Journal of Nanjing University of Technology (Natural Science edition); 2006-06 Automotive industry research; 06, 2019
- [12]JuJing; Huber. Brilliant 20 years, enterprising win the future [J]; Journal of Shanghai Jiao Tong University ; Automotive and Driving Repair (Automotive Edition); 11, 2018
- [13]Li Chongsen; A Study on the Relationship between FaW and Volkswagen [J]; Journal of Anhui University of Technology (Natural Science edition); 2006-01 Vehicle observation; 02, 2019
- [14]Huber.A Review of the International Conference on Industrial Cooperation and Development [J]; International Conference on Industrial Cooperation and Development.2019, 03
- [15]Sunny liu; From a new student to industry benchmark, what has FAW-Volkswagen experienced? [J]; Operator (Automotive Business Review); 12, 2018
- [16]Ching lee; A New Model of "Full Value Chain Co-creation" in China [J]; Journal of Beijing University of Technology (Natural Science edition); 2010 Operator (Automotive Business Review); 02, 2019
- [17]Song Fei; Liu; Yuan Xiaoye;; A Study on the Influence of FaW-Volkswagen on the Development of Automobile Industry [J]; Journal of Beijing University of Technology (Natural Science edition); 2010-06 Automotive and Driving Repair (Automotive Edition); 12, 2020
- [18]Song Fei; Liu;; [J]; Journal of Shanghai Jiao Tong University (Natural Science edition); 2011 Automotive and Driving Repair (Automotive Edition); 11, 2020
- [19]Ren Li Zhi; Faw-volkswagen South China Base To Start a New Journey [J]; Enterprise research; 2019, 07
- [20]Wu Jiaqi; A Study on the Relationship between FaW and Volkswagen Service Franchisees [J]; Journal of Beijing University of Technology (Natural Science edition); 2014 Automotive and Driving Repair (Automotive Edition); 11, 202-
- [21]Faw-volkswagen: We guarantee high quality Cars [J]; Journal of Anhui Agricultural Sciences; 2006-01 Automotive and Driving Repair (Automotive Edition); 01, 2019
- [22]Wu Jiaqi; Study on the Quality of Life of FaW-Volkswagen [J]; Journal of Beijing University of Technology (Natural Science edition); 2006-01 Automotive and Driving Repair (Automotive Edition); 08, 2019
- [23]Wu Jiaqi. Research progress on The Development of China [J]; Journal of Anhui Normal University (Natural Science edition); 2006-01 Automotive and Driving Repair (Automotive Edition); 10, 2020
- [24]White sails, XiaoJun. Design and Implementation of VOLKSWAGEN C-Trek System [J]; Journal of Shanghai Jiaotong University (Natural Science edition); 1999-04 Automotive and Driving Repair (Automotive Edition); 12, 2019.