Analysis of Toyota's Operations to Maintain its Brand Position During the COVID-19 Pandemic

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Abstract. Toyota is a major multinational corporation dedicated to the manufacture of automobiles and transportation equipment, with sales ranked among the world's top and named a Number 1 Motor Vehicle Company on Fortune Magazine's 2020 "World's Most Admired" list 2020. The main purpose of this article is to analyze how the strategies implemented by Toyota during the COVID-19 pandemic period (late 2019-2022 in this article) have helped it regain its business viability as soon as possible and to assess the feasibility of these strategies for other automobile manufacturing companies through three aspects: actual cases, financial analysis, and SWOT analysis. According to the author's research, most business analysis articles only start from a company itself or give an appropriate opinion of this company, but this article wants to give an opinion to other car companies by analyzing Toyota's strategy to give an opportunity to the current trend of economic globalization.

Keywords: Toyota; SWOT analysis; COVID-19 pandemic; business analysis.

1. Introduction

Since the outbreak of the new crown epidemic in 2019, every major industry in the world has gone to a standstill, and it is the large-scale production industry that has been most affected. Toyota, one of the representatives of the mass production industry, received a considerable blow and sales fell wildly for a while. It is particularly important for the mass manufacturing industry to adapt and make strategic changes.

Recently, the crown virus has really hit Toyota hard, as can be seen through Toyota 2020's annual report. COVID-19 points out that the post-war Depression will have a further positive impact on the global economy, which is compared to the global financial crisis of 2008 and the Great Depression of 1930 [1]. Toyota's president Akira Onishi had this to say. And this has forced many of Toyota's plants around the world to shut down, while the size and production of the remaining plants continue to decline.

For the manufacturing industry, represented by Toyota, the main impact during the COVID-19 pandemic was the disrupted supply chain, the shutdown of manufacturing, liquidity, and the drop in vehicle sales [2]. In order to cope with these difficulties, companies need to first assess the risks of their supply chain companies and the needs of the market in order to further avoid risks and unnecessary inventories. On top of this, companies need to further strengthen the prevention of unnecessary contacts in production and consider multiple sales channels such as the Internet of Things to sell inventory. In such cases, cash is critical and companies should liaise with key banks and establish a priority payment model for crisis operations, as well as keep an eye on the financial situation of suppliers and distributors. But the biggest blow to car companies is falling car sales, which have hit their main business hard. It is difficult to go back to " as usual" or " as usual as before", so we have to develop different strategies to deal with the "new normal". The priority is to be prepared for independent production rather than joint production or mass production. It is possible to set up digital production sites, which ensure transparency of work and strictly enforce vaccination requirements based on efficient cooperation.

Furthermore, SWOT analysis plays an irreplaceable role in the internal analysis. It allows managers to analyze the current situation objectively. The SWOT analysis examines internal and external factors. In any case, once a company finds out, documenting and analyzing as many factors as possible will become clear the smartest thing a company can't do [3].

This article analyzes Toyota's response to various challenges and the current situation from three aspects: case description, financial analysis, and SWOT analysis, in order to help other large automotive companies to better cope with the COVID-19 pandemic.

2. Case description

Toyota Motor Corporation is a global Japanese automaker with its main offices in Toyota City, Aichi, Japan. Kiichiro Toyoda established Toyota, which became a legal entity on August 28, 1937. With an annual production of nearly 10 million vehicles, it is one of the biggest automakers in the world. Toyota's main line products are divided into three categories, Materials Handling Equipment, Automobile, and Textile Machinery. The Automobile includes Vehicles Engines; Car Air-Conditioning; Compressors Car Electronics; Battery; Stamping Dies [4]. And Toyota's automotive industry is the most developed chain of industries.

Since 2020 with the spread of COVID-19, Toyota's chain has received a significant trauma, with a significant decrease in total revenue for the second year in a row since 2019, which is the same time the symbol of the global manufacturing industry. As an international corporation, Toyota took some steps to deal with the reduction. Toyota's 2020-2022 plan statement which was published on its website, shows that the number of cars and transport equipment produced worldwide has been significantly reduced due to the epidemic, but the industry most affected by the epidemic is the production of semiconductors, which will be shut down for the whole of 2020, creating a significant obstacle to the development of high-tech products in all regions. In order to solve the global shortage of equipment, Toyota has prioritized the production of cars and slowed down the production of other equipment and parts, while thoroughly implementing actions related to the prevention of epidemics. This shows that Toyota is more concerned about the global market share and brand image of its automotive industry.

Toyota wants to improve lives all over the world while paving the road for a mobile society that moves people in the safest and most responsible manner possible. They work to go above and beyond expectations and are rewarded with smiles thanks to their dedication to quality, never-ending innovation, and care for the environment. Toyota will meet difficult objectives by utilizing the skills and interests of those who are certain there is always a better way.

Toyota's "Tree Concept" is the core of Toyota's philosophy, which clearly delineates the hierarchy of Toyota's responsibilities, for example, in addition to the core manufacturing area, the branches and leaves of the tree represent some higher-level responsibilities, such as taking social responsibility and protecting the environment. Such a vivid concept leads a farther way to Toyota [5]

3. Financial Analysis of Toyota

3.1 Theory

Analyzed from the demand side, since the end of 2019, people have changed their consumption capacity, consumption habits, and consumption behavior due to the COVID-19 pandemic, because of the need to prevent and control infectious diseases, people have significantly reduced the frequency of going out, which led to Toyota's household car market received a huge blow. From the supply side, Toyota's global hierarchy received disruptions due to the COVID-19 pandemic, which directly led to a significant drop in global vehicle production, and the cost of building and improving digital production plants in line with the government's prevention and control policies, so this created a significant barrier to Toyota's production.

3.2 Specific data analysis

By analyzing Toyota's Income Statement for 2019-2022(Table 1), the authors found that Toyota's gross profit declined by 0.067% in the 2019 to 2020 vintage and by 10.6% in the 2020 to 2021 vintage on a year-over-year basis. But surprisingly, one year later, in 2022, Toyota's gross profit increased by

23% year-on-year, not quite back to the pre-COVID-19 pandemic level, but this is a more informative example of how the automotive industry has responded to COVID-19.

During the COVID-19 pandemic, the main problems faced by Toyota were the poor ability to recall problematic cars and declining profitability.

Table 1. Toyota's Income Statement for 2019-2022 (Data Source: https://finance.yahoo.com/quote/TM?p=TM&.tsrc=fin-srch)

(the figure is all $)	TTM	3/30/2022	3/30/2021	3/30/2020	3/30/2019
Total Revenue	233, 148, 828	219, 266, 816	190, 164, 146	209, 138, 213	211, 204, 364
Cost of Revenue	183,227,498	177,539,273	156,397,553	171,351,980	173,164,705
Gross profit	39,921,330	41,727,543	33,766,593	37,786,233	38,039,659
Operating Expense	21,915,294	20,794,877	18,409,653	20,716,491	20,797,491
Operating Income	18,006,036	20,934,629	15,356,940	17,069,743	17,242,168
Other Income Expense	6,571,232	5,582,413	3,044,845	-621,301	2,674,436.85

4. SWOT-based marketing analysis

SWOT analysis is a method for evaluating these four characteristics of an organization. SWOT stands for Strengths, Weaknesses, Opportunities, and Threats. SWOT analysis is a tool that examines the present state of the firm from both an internal and external perspective in order to help the organization determine additional external strategies. SWOT analysis can assist a corporation in identifying risky performance blind spots and challenging unsafe assumptions. If companies use it carefully and in partnership with others, it can give companies new insights into the state of their business today and help them develop the best strategy for any situation.

Table 2. SWOT analysis

Strengths	**Weaknesses**
1） Strong focus on research and development (R&D 2） The most valuable and one of the most recognizable automotive brands in the world 3） CSR 4） Strong stock performance	1） Recalls 2） Strikes (labor problems) 3） Global preserve limitation
Opportunities	**Threats**
1） Smart cars 2） Cloud and AI technology 3） Big Data 4） Nanomaterials	1） COVID-19 restriction 2） Economic crisis 3） Competition

In this investigation, Toyota's SWOT analysis has been tabulated by investigating Toyota's information. Table 2 will analyze in detail the role of its corresponding strategies for Toyota during the epidemic.

4.1 Strengths

Toyota's R&D research, in particular, its initiatives in relation to the development of environmentally friendly power technologies, safety, and information security of the vehicle provide more competitive strategies. Toyota’s focus on innovation has resulted in one of the highest automotive R&D spending, as shown in Fig.1.

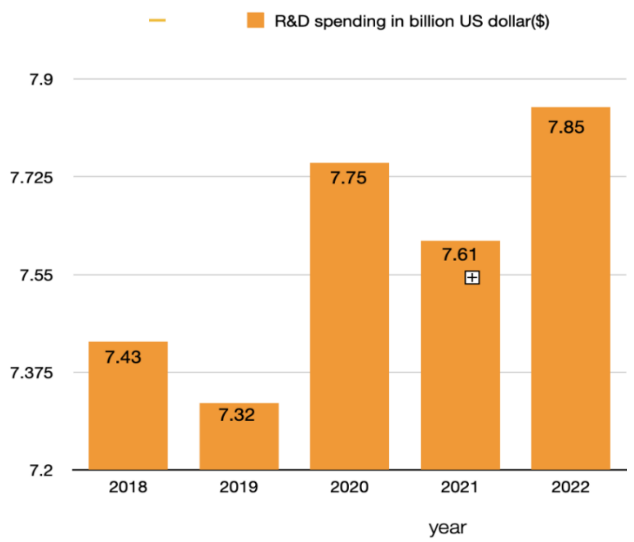

Fig 1. R&D spending in billion US dollars ($) (Photo credit: Original)

Although 2021 saw a 1.81% decrease in expenditure on R&D as a result of the epidemic, the graph below demonstrates that Toyota is still spending a sizeable amount of its investment in R&D. Toyota's brand is the second most valuable brand in the world, valued at $75.93 billion, according to Statista. Brand value is influenced by consumer diversity and brand repute. The corporation become one of the most recognized brands in the world thanks to its global advertising and R&D efforts. Toyota can offer items to the market more affordably and simply thanks to brand familiarity. Toyota has a competitive advantage over its rivals thanks to its brand.

Measured by the success of their actions, carmakers have been affected by new pneumonia. Still, Toyota's share price has held up better than most carmakers. The current price value is from the peak of 64%, while Toyota's price is only down 15% (in 2021). This is good for corporate resistance [6].

Toyota's CSR is mostly visible in its COVID-19 strategy. Toyota, a powerful global corporation, has assumed some social responsibility by advising people to use decent masks, limit their time outside, and receive immunizations as soon as possible. Toyota has also partnered with the appropriate medical departments to speed up the printing of over 500,000 masks and face shields for protection. The Toyota USA Foundation gave contributions totaling $2.5 million to numerous nonprofit groups around the nation in response to the rising demand for emergency assistance brought on by COVID-19. In metropolitan areas and numerous towns where Toyota operates, these contributions were used to meet urgent needs, including food aid. Additionally, funds totaling $3.3 million have been authorized by the Toyota USA Foundation to support e-learning for students in 13 states. More than 350,000 students will be able to access virtual learning thanks to these grants, which will assist pay for WiFi access points, mobile WiFi, devices, computers, and software licensing. As a result of Toyota's commitment to social responsibility, more consumers will choose Toyota out of trust.

4.2 Weaknesses

Toyota set quality control standards, but its design and production were flawed. Toyota recalled 700,000 vehicles earlier this year because of fuel pumps. That saps confidence in the brand and threatens to destroy a decades-old loan. For Toyota, which has not yet fully recovered its pre-epidemic sales levels, the negative impact is enormous.

Between 2020 and 2021, Toyota's phased plans have frequently included the phrase "limited production", which means that its global production numbers will be controlled due to the epidemic. Demanding strict quality assurance standards and maintaining high productivity and profitability can lead to differences between management and employees. In October 2021, workers at Toyota, an Indian plant, went on strike over the issue. These problems undermine the ability of companies to meet market demands [7].

As can be seen through Toyota's global tier, its main sales markets are the USA, Europe, Japan, and East Asia, so its sales in these regions are very strong. However, its sales in Africa, Central Asia, and South America are not comparable to those in the aforementioned regions. As a multinational company, the breadth of the market is very important and if Toyota wants to be a competitive global player, then it needs to focus on the needs of these regions.

4.3 Opportunities

Toyota has been working on autonomous driving systems such as Guardian and Chauffeur since 2021 to date. The aim of these systems is to make driving safer and easier for those with less driving experience (Guardian) or those who are able to drive due to old age (Chauffeur) [8]. Although smart driving is now a very new and trendy fad, Toyota is still unsure how the market will react to its autonomous driving options. But with technology in every area moving towards convenience and ease, Toyota's plan for self-driving cars is a smart one.

Many sectors are merging cloud-based and artificial intelligence technologies to better serve their clients. The market for cloud-based automotive technology is anticipated to grow 19.88% faster than average and close to $70 billion by 2022. Toyota should therefore seek to maximize the opportunities provided by the cloud and AI.

Big data is actually a part of the cloud computing portion that was described in the section before. Big data enables mobile devices to track consumer preferences and driving patterns globally, enabling Toyota's R&D facilities to create more intelligent and compassionate smart car dynamics.

Toyota Sputnik is based on the nanotechnology market for a wide range of applications of nanomaterials, including lighter, stronger, more durable, more stable, cooler, safer, and safer vehicles. Toyota recently purchased new carbon compounds to help us with our automotive electronics. Until 2021, Toyota has been licensed to develop hybrid and electric vehicles with nanomaterials, which will be a good opportunity for Toyota to lead the world in the development of smart cars [9].

4.4 Threats

COVID-19 continues to be one of the major factors preventing normal production at Toyota. Regions such as Japan and the United States, which are Toyota's main sales areas, are being affected relatively severely, and this can seriously affect Toyota's sales in these regions. Unless the outbreak can be brought under control in time, Toyota's sales will receive a continued long-term impact.

Under COVID-19, Toyota's margins in 2022 have improved but have not yet returned to the level of the epidemic money. As can be expected from the severity of the epidemic situation in May, Toyota's economic crisis will still continue for some time.

5. Suggestion

Based on Toyota's current situation, the authors believe there are several recommendations that are informative for Toyota's future development.

Toyota should maintain its current strategy of limiting production for at least 1 year in the future out of compliance with the antiviral policy. In order to maintain its brand image, Fuji should maintain high-quality performance in a limited number of products to maintain its position in the minds of consumers. It is also important that Toyota should increase the wages of workers working at the plant during the epidemic or give subsidies (e.g., bonuses, free food, etc.), which, according to Maslow's pyramid [10] of needs, would, on the one hand, increase the motivation of workers and on the other hand attract some highly skilled workers to work and would also improve Toyota's global reputation.

In addition, Toyota should continue to follow its "Toyota Way" of being green and environmentally friendly. With global efforts to control carbon emissions, Toyota, as an international company, should take some social responsibility. At the same time, Toyota should also continue to invest in research, development, and improvement to gain an advantage over competitors such as Tesla and contribute to the future of automated driving and green mobility for mankind.

6. Conclusion

The author analyses the four theories and perspectives mentioned above to explain why Toyota's strategy allowed it to make up for its losses at a faster rate during the COVID-19 pandemic. We can conclude that Toyota's theories and objectives and its well-defined global hierarchy allowed it to implement its strategy with a high degree of efficiency for a large multinational company and that it did its best to maintain its image of good performance and affordability for the sake of its brand image. The next point is that Toyota has utilized a relatively efficient financial strategy by strategically reducing or shutting down production in some areas or financing facilities and land in some areas, which has allowed Toyota to have a more flexible cash flow at particular times to compensate for the fact that Toyota's profitability has declined. This is why Toyota's gross profit and cash flow have performed well.

The second point is that in the SWOT analysis, it was found that although a large part of Toyota's money and strategy is directed towards a rapid recovery of production levels, it is still following the trend of digitalization and is investing more in R&D, focusing on the production of engine technology related to autonomous driving and electric engine technology, in order to increase its competitiveness in digital production. In addition to this, Toyota is also taking its social responsibility seriously and is actively taking on social responsibility during the COVID-19 pandemic, helping to spread vaccines and donate protective materials, which will also increase consumer trust in Toyota.

But Toyota's approach is not worth appropriating for all types of car manufacturers. Firstly, Toyota, as an international multinational, has a very strong financial base and it has the sufficient cash flow to meet the immediate needs of production stoppages, so it is not appropriate for some small and medium-sized companies to directly appropriate Toyota's strategy, but it can serve as a reference.

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