

How Do Companies Effectively Manage Their Operations and Co-Ordinate Production Across Borders? in the Case of Toyota

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Abstract: In the process of economic globalization, the development of multinational corporations has also attracted more and more attention. Multinational corporations are facing many challenges in the field of global market. At the same time, the automobile industry is playing a more and more important role in the global economy. In order to study how multinational corporations operate reasonably, this paper takes Toyota, an automobile enterprise in Japan, as an example, and makes a critical discussion on the reasons for its success in the world, which provides a reference for relevant enterprises.

1. Introduction

Toyota is a multinational automobile manufacturer headquartered in Japan and founded in 1937. Its brands include Toyota, Lexus, Daihatsu and Hino. By the end of 2017, Toyota had 51 overseas manufacturing companies in 28 countries, sales in more than 170 countries, and it has a total workforce of 370,870 (Toyota 2020).

In the history of modern companies, Toyota went from a humble manufacturer of textile machinery to one of the world's largest companies (Toyota 2020a), which currently ranked 10th in the Fortune Global 500 (Fortune 2019). Thus, Toyota's success is an outstanding example of international management.

This paper aims to evaluate how Toyota group manage its operations and co-ordinate production across borders effectively. Initially, it will briefly introduce how to answer the questions, which includes the reasons for choosing Toyota, methods of searching for information, and pros and cons of these information. Next, it will present the data for the main findings and begins to explain. Thirdly, theories will be used to critically discussed findings. Finally, a short summary will be made.

2. How to Answer Questions

The automobile industry is one of the major industrial and economic forces in the world, its output has increased by 25%, compared with the past decade. By 2017, the global automobile production reached 73.4 million units, and the annual average turnover of the world's automobile industry exceeded 2.75 trillion, equivalent to 3.65% of the global GDP (Saber 2018).

Cars are one of the world's largest exports, in 2019, Japan exported 4.8 million vehicles (Statista

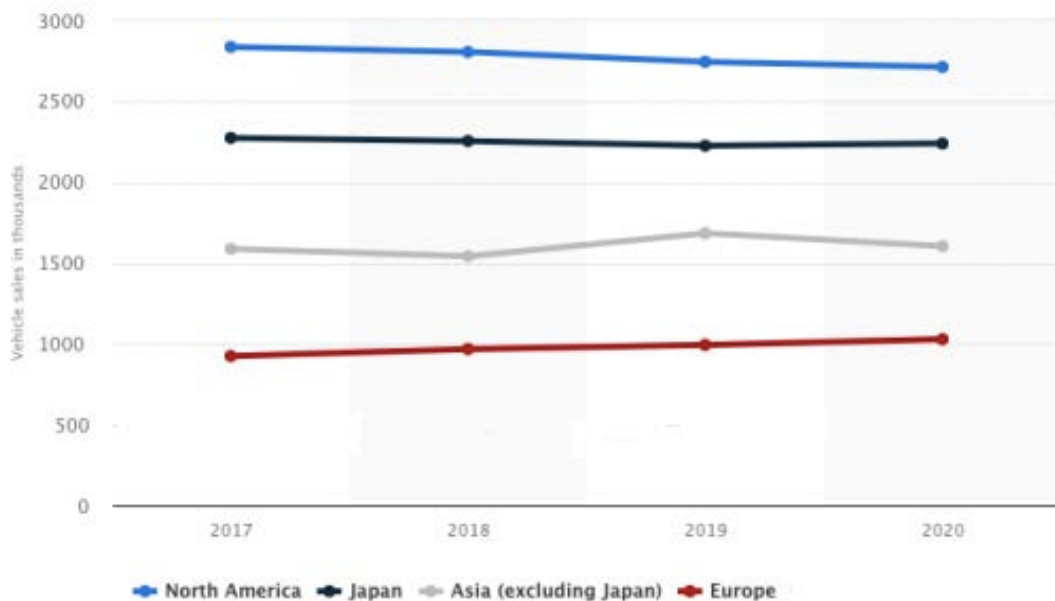
2020). Toyota is one of the most legendary automobile manufacturing companies in Japan, in terms of quality, reliability, productivity, cost reduction, sales and market share growth, and market capitalization, Toyota has repeatedly outperformed its competitors (Spear 2004). Additionally, Toyota is the global market leader in hybrid vehicle sales, and has research and development centers around the world (Toyota 2020).

The collection of information about Toyota focuses on these areas: the distribution of factories around the world, regional vehicle production, and regional sales, also include information about the company's global strategy and operations. The data comes mainly from Toyota's annual report, Toyota's official website and the Statista. The advantage of these information is that it has regular sources, is more reliable, and has a more intuitive geographical distribution. However, it can not make a direct comparison with other companies, annual report may be prefer to present information that benefits the company, and some research data may not be based on the most recent year.

3. Findings & Analysis



(Figure 1, Toyota's global distribution of factories, Toyota 2020b).



(Figure 2, Toyota's sales by region between 2017 and 2020, Statista 2020a).

North America 1,855,805 (20%)

Latin America 313,977 (3%)

Europe 776,886 (9%)

Asia 2,570,331 (28%)

Japan 3,415,864 (38%)

Australia — no data

Africa 120,654 (1%)

Worldwide production 9,053,517

(Figure 3, Toyota production by major region in 2019, Toyota 2019)

(1) Asian countries are close to Japan and have similar cultural backgrounds. Hence, outside Japan, Toyota has the largest number of subsidiaries in Asia, especially the manufacturing companies, with 10 in China, and also a concentration of manufacturing companies in Southeast Asia.

Labor is plentiful and cheap in Asia, which helps Toyota's manufacturing companies improve local productivity. Additionally, one of the crucial reasons for Toyota's surge in sales is that many developing countries in Asia are experiencing high economic growth rates, and the automobile market is largely expanding (Funaru 2010). However, for disadvantaged countries such as India, social sustainability might be a weapon to manage the market.

(2) Toyota has the largest sales and production in North America. Significantly, Toyota's design and R&D centers in North America are all concentrated in the United States, as are most manufacturing companies. American citizens lack a culture of 'domestic products', and have a preference for fuel-efficient car, so Toyota cars are relatively popular (Funaru 2010). Meanwhile, in North America, where the economy is strong, consumers may have higher demands for the latest and most advanced in-car technology. The high level of technology in the US can help Toyota to introduce digital innovation, cope with changing customer expectations, and gain technological advantages (Betancourt, Mooney & Ross 2018).

(3) Toyota has built manufacturing companies in several European countries and has design and R&D centers in Germany, France and Belgium. It can be found that Toyota has more manufacturing companies in Eastern Europe, an important reason is to make full use of lower wage costs, and to be closer to the flexible markets of the new EU member states, in order to strengthen Toyota's position in stable, safe and growing markets while remaining competitive (Barron, Pereda & Stacey 2017).

4. Discussion

4.1 IHRM

Schuler & Rogovsky (1998) indicate that international labour management needs to take into account cultural differences in values, expectations and behaviors. Therefore, Toyota realized that its manufacturing companies and subsidiaries in other region (e.g. Asia) could not be able to achieve its international penetration goals with low labor costs alone. Toyota's global supply chain

system must also be capable of producing and delivering products that meet international standards, which may depend on the deepening of the role played by local employees at Toyota plants and subsidiaries (Petison & Johri 2007). For instance, Toyota's management philosophy in Thailand is that its subsidiaries are managed more by Thais than by Japanese employees (Petison & Johri 2006). Throughout Southeast Asia, Toyota has adopted a humanized approach to human resource management: showing respect, building trust, cooperating, and finding solutions, to promote the working tacit understanding between foreign employees and domestic employees.

4.2 Emerging Markets

The development of international business in emerging markets has become a new source of competition. However, there are often differences between emerging and advanced markets, and customising strategic approaches to suit each economy is necessary (Wright *et al.* 2005). In North America and Western Europe, the automobile industry is fiercely competitive and some of its markets are stagnant, so Toyota turned to Eastern Europe. Nonetheless, emerging economies such as Poland and the Czech Republic are new and less well known to Toyota than Western Europe, thus uncertainty may lead to higher costs (Ando 2005). Moreover, the high sensitivity of local consumers to price and the differences in preferences and purchasing behaviors require a change in strategy. Therefore, Toyota opted for a joint venture with Citroen to develop new modern cars that are safe, fuel-efficient and environmentally friendly. At the same time, in response to changing market demands, they also introduced brand new small-sized car at low prices (Ichijo & Kohlbacher 2017).

4.3 Innovation

Throughout Toyota's history, the idea of bottom-up incremental improvement has led to various innovations in manufacturing processes and vehicle technology, but with the advent of the digital economy in the early 2000s, Toyota needed to rethink its innovative approach, especially in areas with advanced technology. As a result, Toyota's North American marketing division intends to innovate its products, by using technology to provide exceptional customer experiences (Betancourt, Mooney & Ross 2018). For example, bar-code type applications enable customers to e-mail themselves with drawings of interested cars and car specifications. Such technologies also bring in more revenue.

(4)CSR

For a foreign subsidiary, engaging in CSR is conducive to the expectation of host country stakeholders on its behavior, and it is beneficial to the local reputation of the multinational company (Aguilera-Caracuel & Guerrero-Villegas 2018). In developing countries, people are more concerned about whether their quality of life could be improved. Toyota has factories in many of Asia's economically backward countries, its foreign subsidiaries had been running CSR activities long before the government mandated it. For example, in India, Toyota has built rural sanitation programs, installed water purification units, and built public toilets for children (Toyota 2018). Toyota's behaviors have also strengthened its brand image in India, which also led to an increase in sales in the same year, and Toyota's focus for the next few years will be to increase its share of hybrid cars in India.

5. Conclusion

Based on the above findings, analysis and discussion, it can be concluded that the major markets of Toyota internationalization are Asia, Europe and North America. First of all, in Southeast Asia,

Toyota relies on cheap labor to produce, and adopts humanized human resource management to make its products more in line with the demands of the international market. Secondly, Toyota has changed its strategy in emerging markets in Eastern Europe, opting for a joint venture with Citroen. Thirdly, Toyota's North American operations have taken advantage of technology, to develop digital innovations. The last, in the economically backward countries of Asia, Toyota's subsidiaries practice CSR to enhance their brand reputation.

Overall, the key reason for Toyota's success is its proper management and operation and coordination of production in various international markets. Toyota has taken full advantage of the each region's strengths, as well as targeted adjustment of business approaches for different regions.

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