

Supply Chain Management Benefits Enterprises from Different Social Economic Perspectives

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Abstract: Supply Chain Management has been used by many enterprises, and the benefits it brings are undeniable. However, many factors decide the implementation of Supply Chain Management results, from the legal provisions and market status at the macro aspect to the executive philosophy of the manager at the micro level. As a result, this essay will specifically study whether different Social and Economic Perspectives will influence the result of Supply Chain Management benefits enterprises. Although a variety of relevant researches have shown the advantages of applying Supply Chain Management for enterprises, there is still a bias that is easy to be ignored, which is from different Social and Economic perspectives. Therefore, the goal of this essay is to find whether companies using Supply Chain Finance from different Social Economic Perspectives will still be benefited. Based on literature analysis, the main research method of this essay is to analyze and compare the examples of using Supply Chain Management to bring results under a different social and economic market system. For different firms in different social and economic perspectives, Supply Chain Management has its existence significance. Although the implement Supply Chain Management will have some risks, its benefits are more meaningful for the enterprises and market operation.

Keywords: Supply Chain Management, social economic perspectives, policy, market, benefit

1. Introduction

The Definition of Supply Chain Management is to optimize a series of processes from product creation and raw material procurement to final delivery to customers. The goal is to streamline an enterprise's supply chain to gain benefits [1].

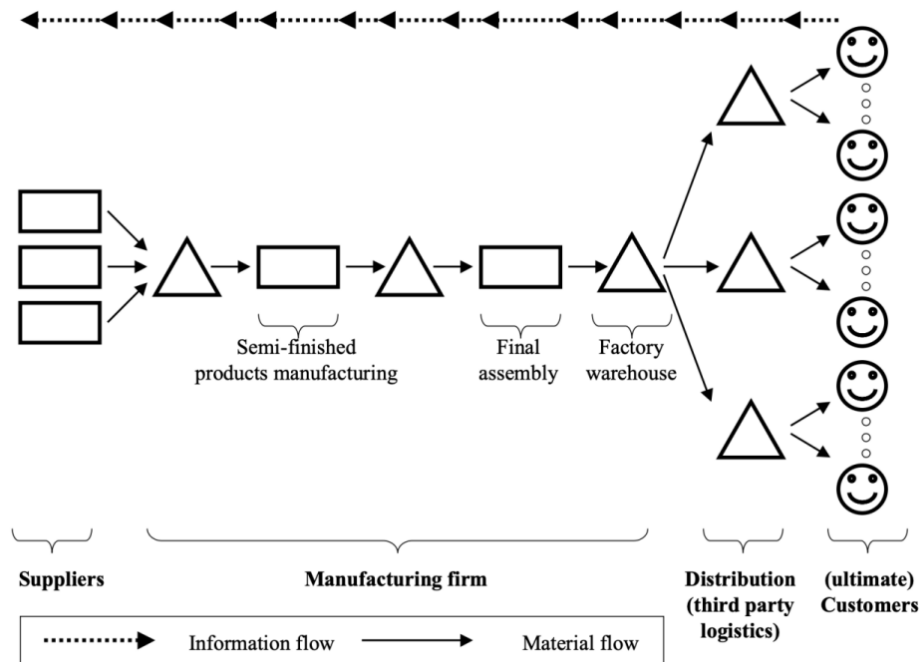


Figure 1: The definition of Supply Chain Management.

Based on the definition, it is reasonable to apply Supply Chain Management in the enterprise. However, there are various exogenous factors that can have effects on the execution of the method. For example, Fligstein [2] states “markets as politics” and uses this metaphor to observe the market phenomenon in different social institutions. Therefore, the main aim of this essay is to find out the results of using Supply Chain Management from different Social Economic Perspectives. This essay will firstly analyze various enterprises that use Supply Chain Management from the market management policies of two different countries, which are representatives of developed and developing countries. Then some criticisms of each result will be made. One of the countries is the United States mainly adopts the free model of the market economy. The other one is China, which is more inclined to take the national government as the leading intervention in the market. And then, comparing and summarizing whether the use of Supply Chain Management by enterprises in two countries with different market supervision systems will bring benefits. Finally, some limitations will be summarized in this research. Followed by putting forward corresponding improvement suggestions.

2. Background in the United State

Methods of promoting national economic development are hotly pursued by contemporary Americans, but the economic market is less accompanied by the word "nation" and more encourages free competition with each other [3]. This social economic perspective corresponds with the theory of Adam Smith. Smith [4] also believes that the market system does not require interventions by governments or other powerful institutions. This is because the interaction of self-interested individuals and market supply and demand drives natural changes in trade and prices. The underlying balance will eventually be found. In general, there is an invisible hand driving the free market economy forward, and the market in the United States does not require a lot of government control.

2.1. Case Study of Dell

The first company to be mentioned in this essay to implement Supply Chain Management from a free social economic perspective in the United States is Dell. Dell mainly provides computers and related electronic products. It is interesting to note that Dell is known not only for its e-commerce, but also for its Supply Chain Management approach. The Supply Chain Management of Dell is to break the traditional supply and demand rationing between 'manufacturer' and 'supplier' and eliminate the role of the retailer, to directly communicate with the final customer [5]. For example, with the newly launched www.dell.com e-commerce function of Dell, after customers place an order for their products through the computer, the message will be directly sent to Dell's factory and delivered directly. Bypassing retailer's mediation allows customers to have direct access to all Dell products on the Internet. This management initiative not only brings convenience to customers, but also greatly saves the overhead cost of intermediates. The most important thing is that compared with the 30-40 days of other competitors, Dell's inventory cycle is usually only about 4 days. At the end of 1999, Dell's website was generating \$35 million a day in revenue and continued to grow [6].

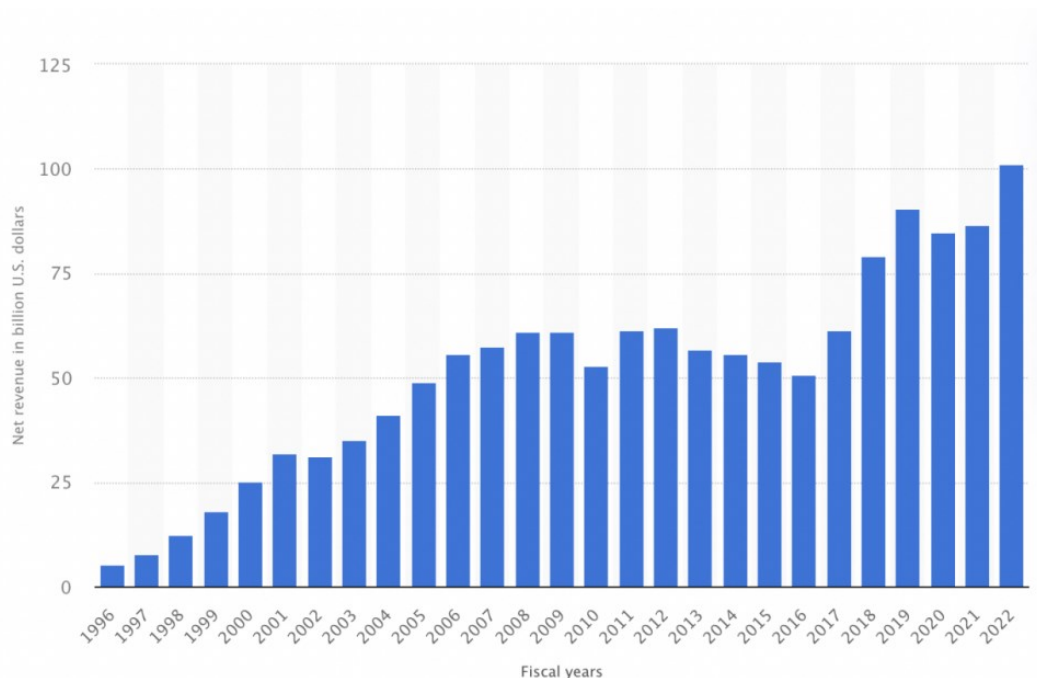


Figure 2: Net revenue in billion of Dell each year.

As a result, implementing Supply Chain Management effectively helps Dell maintain its global leadership in inventory turnover and plant utilization.

Moreover, consumers can rate the corresponding devices and give suggestions directly on Dell's website after receiving the products. Through this process, Dell directly collects the real feelings of a large number of users. However, Elrod et al. [7] state that in implementing Supply Chain Management the upfront cost in terms of time, money, and other resources is enormous. For instance, the production of the Internet trading platform in Dell is complex, which requires a lot of IT talents and constant capital investment. Therefore, this Supply Chain Management streamlining program has risks. Nevertheless, in the example of Dell mentioned in this essay, the final total revenue far exceeded all the costs of implementing the management plan and achieved very substantial profits. In conclusion, from the Social Economic Perspective of the United States, Dell greatly saves costs from

inventory control and retailers through its unique supply chain management. Dell also collects information about customer needs and improvements more comprehensively and quickly.

2.2. Case Study of Texas Instruments

The second introduced enterprise is a famous global semiconductor company, which is Texas Instruments. Founded in 1930, Texas Instruments has a very long history and a variety of experiences. However, since the 1990s, due to the gradual globalization of the market, it is difficult for the supply chain of products made from different Social Economic Perspectives to reach a unified standard. This is because of the particularity of semiconductors, which is the complex manufacturing process and a large number of parts and equipment. The end result was a long, expensive process that failed to meet regional standards and even led to a large increase in inventory. Under the increasing popularity of globalization and pressure from more competitors to enter the industry, after careful analysis, the Texas Instruments developed a new Supply Chain Management plan --developing and implementing supply chain partnerships [8]. The partner procured by Texas Instruments is Meishang Zhijia Technology Company, and the supply chain management they deploy together mainly has two aspects. On the one hand, support for multiple currency transactions when purchasing gives the firm the ability to purchase from multiple suppliers at the same time. On the other hand, in terms of inventory reduction and shelf life management, by notifying customers' requirements directly to various suppliers. One order is split into multiple delivery notes, so that different suppliers can directly deliver corresponding products to buyers. The result of this Supply Chain Management is optimistic. According to the data, Texas Instruments' sales revenue in 2002 was \$8.4 billion, and the company's revenue increased to \$9.83 billion in 2004. In addition, the total Revenue of Texas Instruments has been on the rise in the short term.

Revenue history for Texas Instruments from 2001 to 2022

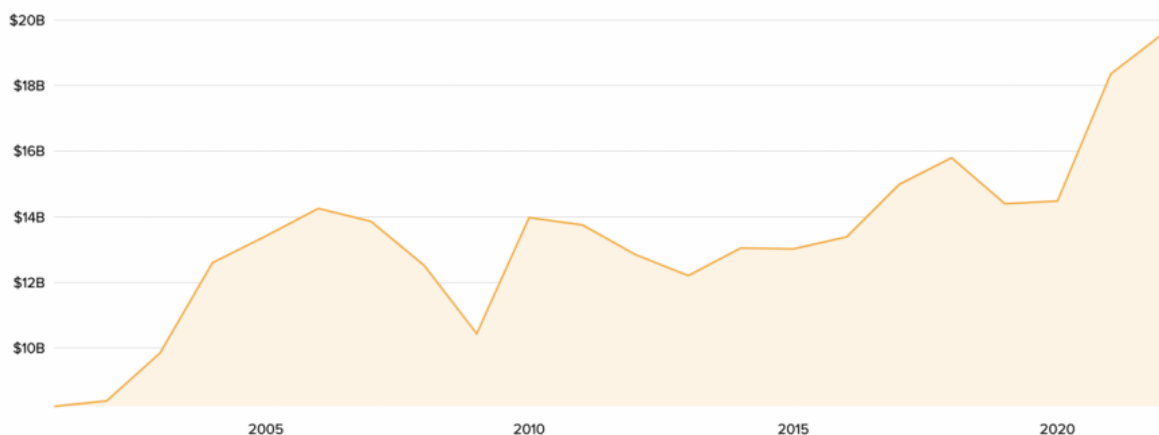


Figure 3: Revenue for texas instruments from 2001 to 2002.

The effect of this Supply Chain Management is consistent with the argument of Ferguson. Ferguson [9] points out that the supply chain partnerships can greatly improve the cost efficiency of globalization. It also leads to greater business results than either partner can achieve alone. Elrod et al. [7] also agree that a collaborative approach leads to greater power and a shared vision of market opportunities. However, choosing trusted partners is also a daunting risk. Because the signing of this cooperation will be a long-term negotiation between the two sides. Any conflict of interests or inconsistency of goals can lead to a bad situation. Fortunately, Texas Instruments' choice has led to further increases in international competitiveness and market share. This is due to a thorough

comparative analysis of Texas Instruments' search for partners. Therefore, this risk can be effectively avoided.

3. Background in China

China's Social Economic Perspective is diametrically opposed to that of the US. Li et al. [10] claim that the Chinese government dominates the market economy and has been implementing "macro-control" policies on the market. A related explanation holds that China's goal since the reform and opening up has been to become a socialist country. The government of China does not want to make capitalism too strong and give rise to a series of monopoly phenomena in the market, leading to a large gap between the rich and the poor [11]. Therefore, any commerce will be affected by government policies. This essay will find out whether it is convenient and beneficial to use Supply Chain Management under such background.

3.1. Case Study of Haier

In order to achieve the maximum capital efficiency of zero inventory, in 2008 Haier CEO Zhang announced a change to the traditional definition of the warehouse. Specifically, the warehouse is no longer treated as a "reservoir" but merely as a place to temporarily store materials for the next process of distribution. Zhang highlighted a discipline that does not allow more than a day's production in the factory's storage space and ensures a seamless flow of products from the factory to the customer [12]. To achieve the efficient state of continuous operation of the warehouse, Haier has introduced the world's most advanced laser guided unmanned transport and powerful information flow for synchronous data transmission. Even late at night when the warehouse is empty, there are still machines working. Finally, Haier Group transformed the rigid supply chain into a dynamic business process. After implementing this special Supply Chain Management, according to the survey data of Cohen and Roussel [12], 150.9 billion yuan (\$23.3 billion) is the total revenue of Haier in 2011 fiscal year. It has also been the world's top home appliance brand for three consecutive years since 2011. It is notable that the earnings of Haier still present an upward trend until now.

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■Haier Smart Home A (SSE) 23.61 ■MA700 24.04



Figure 4: The earning of Haier from 2019 to 2022.

However, some obvious issues will also be debated. For example, the continuous operation of machines will cost a great deal of electricity. Moreover, the operation of the supply chain using the

whole machine is complex, and it requires to train a group of knowledgeable staff to operate properly in the background. But Haier has closed redundant warehouses, leaving only one with fully mechanized supply chain management. At the same time, it is hard to justify paying an entire employees in the warehouse will less than the electricity needed to run the machines. And it is easy to explain that for complex electrical products, the error rate of machine supply chain operation is much lower than that of manual operation, which will also greatly improve efficiency. Hence, the Supply Chain Management of Haier is successful. For the Chinese government, as a developing country, it is necessary to make scientific and technological innovation a new development engine. Haier's leading position in the world is undoubtedly an important part of promoting China's technological innovation and transformation and upgrading. Therefore, Haier will even get strong support from the government in China's Social Economic Perspective.

3.2. Case Study of FAW-Volkswagen

Volkswagen is a leader in China's passenger car industry. Since its inception, FAW-Volkswagen has created a good foundation for cooperation with Volkswagen AG. In order to improve their competitive ability together with Volkswagen choice put forward a new supply chain management strategy. Because there are many varieties in the automobile industry but the purchase quantity is small, if the new Supply Chain Management is not adopted, the delivery time will be too long and the product inventory will increase. Therefore, FAW-Volkswagen took the lead in introducing SAP's R/3, which is a complete set of ERP system for inventory management. Xu and Yang [13] state that the company distinguishes between upstream and downstream of the supply chain. After that, the upper limit of inventory is strictly controlled by the R/3 system. Once the inventory reaches the upper limit, the goods cannot enter the warehouse again. On the contrary, if there are materials, the system will also remind the staff to replenish them in time. After adopting such Supply Chain Management, the maximum four warehouses that could be counted every day can now be completed in ten minutes, which undoubtedly greatly improves efficiency. The result also corresponds to the argument of Elrod et al. [7] that the correct use of Supply Chain Management could save a lot of costs. Relevant data show that before the implementation of the new supply chain plan, FAW-Volkswagen's inventory capital is seriously occupied. The capital occupation of domestic parts alone is as high as 120 million RMB, but it is reduced to about 40 million RMB after the use of R/3 system. However, this Supply Chain Management also has some risks. For instance, competitors may copy FAW-Volkswagen's supply chain strategy. Nevertheless, every company has its characteristics and different needs, and a good Supply Chain Management is not suitable for every enterprises. Therefore, the probability of being completely copied is not high. More importantly, FAW-Volkswagen is in line with China's efforts to develop a new data-based business model, and getting more Chinese people to use Chinese manufacturing has been one of the government's goals. In China's Social Economic Perspective, FAW-Volkswagen is also a recognized and encouraged brand.

4. Conclusion

There are some limitations to this essay. First, the sample size of the research is not large enough that only four examples were analyzed. In the future, more research on the development of Supply Chain Management enterprises can be conducted. The second limitation is that the enterprises analyzed are not in the same industry under different policy systems and markets will lead to some biases. Hence, it is effective to compare the same industries in a future study. The last one is that there are not only two different Social Economic Perspectives, Enterprise Supply Chain Management in other market systems may have different results. In general, it is better to find more examples on a larger scale from Social Economic Perspectives. In conclusion, by comparing the

implement of Supply Chain Management in two different Social Economic Perspectives, it is obvious that Supply Chain Management will not be prohibited if its purpose is to promote social progress and better development of the country as well as benefit. Moreover, through comparing and analyzing examples in two different countries, it can be concluded that applying Supply Chain Management in enterprises will benefits for enterprises. Some drawbacks and risks are undeniable, however, they can be effectively avoided by deeper considerations and rigorous analysis. In summary, the benefits of Supply Chain Management to companies and society are obvious and are worthy of the implement.

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