

Paradigm change in the world automotive industry

Paradigm Shift in the Global Automotive Industry

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Two pieces of news were released last month. Toyota, the second most valuable brand in the world's automotive industry and the largest car manufacturer in the world, unveiled twenty-five electric concept car models. These models will be produced under the Toyota and Lexus brands. The second piece of news was the production of the world's most popular electric car by Mercedes-Benz, the third most valuable brand in the world's automotive industry and the oldest automaker in the world. The car will travel about 1,000 kilometers on a single charge, pushing the boundaries of electric car production. Mercedes-Benz has announced that in three years, half of its products will be electric cars, and by 2030, all of the company's products will be electric. Put these two pieces of news next to the activities of Tesla, the world's most valuable automotive brand, which has risen to the number one position in the world's most valuable automotive brand in the past two years and is today the world's most valuable automotive brand. But why would a company like Tesla, whose production of cars is about half a million units? It has become the most valuable automotive brand in the world, while Toyota, the largest and most popular automaker in the world, is in the next position with more than ten million vehicles produced per year? The answer is very short, a paradigm shift in the global automotive industry!

To understand this issue, we must first take a look at the

concept of the word paradigm. A paradigm or model is a dominant intellectual model that has formed a set of patterns and theories for a concept. Patterns that have become accustomed to it and have become a kind of reference frame. Frameworks for culture, techniques, etc. This concept, whose precise definition is in the field of sociology, are patterns that have existed since ancient times and, through the education of the environment to individuals, become an obvious framework for the individual or society or that field, and become a model for rejecting, confirming, and judging phenomena and issues in that field. Now, when we talk about paradigm shift, it means a fundamental change in these patterns and entering a new framework for measuring phenomena and rejecting and accepting them. Paradigm shift has always continued throughout history in all areas from culture and art to technology, military sciences, social and political sciences, and these fundamental changes in intellectual frameworks have led to the tremendous progress of human society. In the field of industry, these paradigm shifts have also developed since the Industrial Revolution and have intensified since the 1970s and the advent of the digital world. Now, after several decades of continuous changes in the digital and informatics world, it is time for a paradigm shift in the automotive industry, and this industry is transforming its patterns and entering a new paradigm. Perhaps the initial spark of these changes came from the 1970s and the start of the oil crisis and the several-fold increase in fuel prices, an issue that in the short term caused Japanese and German fuel-efficient cars to replace high-fuel American cars and capture their share of customers. However, in the medium and long term, the design and development of cars with alternative fuels was put on the agenda of the automotive industry. The 1980s and 1990s were the decade of the introduction of these prototype cars with alternative fuels such as electricity, electric-gasoline hybrids, and even hydrogen. However, the commercial entry of these cars into the global automotive markets was related to the early twenty-first century, and the

production and supply of the Toyota Prius to global markets as the world's first electric-gasoline hybrid car followed the Prius. Other Japanese automakers such as Nissan and Honda followed suit. And Mitsubishi also showed interest in producing this type of hybrid cars, and cars like the Nissan Leaf or the Mitsubishi Outlander Hybrid were born. General Motors also launched cars like the Chevrolet Volt to imitate the Prius, but German automakers saw the future of the automotive industry in hydrogen cars, and companies like Mercedes-Benz or BMW were investing in and developing hydrogen-powered concept cars. But at the same time, a company in Silicon Valley, California, home to the world's IT and informatics giants, entered the car production scene. Tesla, with its infrastructure for producing lithium batteries, was able to quickly introduce itself as a fully electric (non-hybrid) vehicle, and in the midst of producing gasoline-electric hybrid vehicles and developing hydrogen vehicles, it offered a new way to commercially produce fully electric vehicles to the world. Although small companies had produced fully electric vehicles before Tesla, most of them were small two-seater city cars with limited range and suitable for short distances, and were not comparable to Tesla, which is a complete family car with high performance and long range. Tesla's success can be summarized in three points: competitive price, extraordinary acceleration, and practicality. These three factors have made this car increasingly popular every day. Tesla, which entered the automotive industry by modeling itself on Apple's strategy to enter the mobile phone world and change the paradigm in this industry by producing smartphones, is now continuing its rapid growth by increasing its circulation and product portfolio. Today, Tesla produces cars in four different segments and will soon increase the diversity of its models.