For reasons that we will soon understand, one of the most important tools used to improve competitive advantage in the 1990s has been the concept of ‘time compression’ and a number of related concepts that could be seen as elaborations and extensions of the basic theme. Even if the pursuit of operational efficiency has been going on since the beginning of industrialization, it was previously not focused on to the same extent. In the early 1990s western industry realized that a number of Japanese companies had created substantial advantages in terms of efficiency.

It wasn’t that the area of operational efficiency had been neglected by companies before that. The whole field of organization theory has for a long time been looking at optimal ways of organizing a business, and a number of significant breakthroughs have been achieved in practice, such as the invention of mass production by Henry Ford, and a number of other radical innovations. This area of development, however, lacked a simple tool that could be used in all situations without compromising relevance and clarity.

In 1988 the consultant George Stalk published an article in *Harvard Business Review*. The title was ‘Time – The Next Source of Competitive Advantage’. In this article, and later in a book that was co-written with Thomas M. Hout, Stalk introduced to a wider audience the idea that time is closely related to cost and customer satisfaction. By reducing the time it takes for companies to complete a cycle from order to production and delivery, the cost of production and administration is reduced at the same time. He also described how the concept of time compression could be applied in product development. To show the power of time compression in product development, the article included an analysis of how Honda won a ‘war’ against Yamaha in the motorcycle.
market, by being able to develop products at a speed that was significantly higher than that of Yamaha. Honda won this war at great expense, but it showed Yamaha that its speed in product development was so much higher that Yamaha could not hope to win a war against Honda through advantages in product development or operational efficiency, because these were on Honda’s side. Stalk describes how Honda in 18 months, starting in 1981, introduced or replaced 113 models and turned over its product line twice. While both Honda and Yamaha had 60 models at the start of the ‘war’, Yamaha was only able to change 37 models in its product line during the 18 months. By being able to develop products more rapidly and at lower cost, using fewer resources, Honda could maintain and strengthen its leadership in the motorcycle industry. At the end of the ‘war’ the Yamaha motorcycles looked outdated compared with those of Honda and customers perceived Honda as the more innovative and exciting of the two companies.

In 1990 a team of researchers from Massachusetts Institute of Technology, MIT, published a report of a three-year research project about the advantages of Japanese companies in the auto industry. The title of the book was *The Machine That Changed the World* and the authors James P. Womack, Daniel T. Jones and Daniel Roos contributed to changing the business world.

The results of their study corroborated the findings of Stalk and other authors by concluding that the Japanese created significant competitive advantage by applying superior management practices in a number of operational fields. These fields comprised product development, production management, sales and supply chain management: Japanese car manufacturers, and primarily Toyota, were able to develop and produce cars much faster and at a lower cost than their American and European counterparts. This gave the Japanese manufacturers a substantial advantage over western companies. They could use their capital more efficiently, satisfy their customers by producing and delivering exactly what they wanted and when, and develop products that are modern when they arrive in the market.

With development cycles of six or seven years western car manufacturers sometimes produced cars for yesterday's market demands. When development cycles were reduced to between three and four years, as in the Japanese case, the time that elapsed from market study to finished product was much shorter, with a higher probability that the market was still interested. The Japanese also organized development projects in such a way that development teams received constant input from the market. This wasn’t normally the case at American and European com-