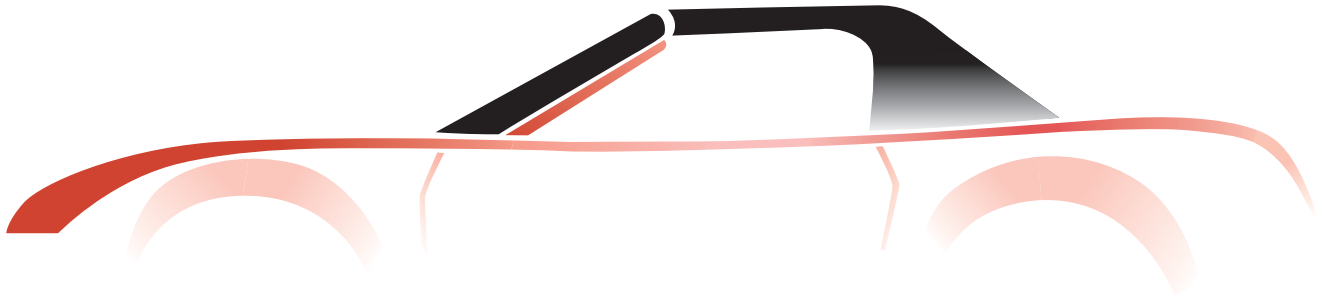


Japanese corporations are good at making things  
but not at creating value.

The keys are organizational capabilities and non-functional value.



### **I joined Mazda just for the love of cars.**

I have always liked cars. At university I joined the automobile club and took part in rallies. I was so crazy about driving that I even moved to a new location so I could be close to a good rally practice course.

My love of cars prompted me to join Mazda in the hopes of becoming a test driver. On one of the Mazda test courses, I turned in the best time of anyone except for the official test drivers themselves. But some of the test drivers made nothing of it, saying that it was no job for someone who had graduated from university, and in engineering to boot. So instead I asked to work on car underbody development, pleading that “Mazda makes good engines, but the chassis is no good. We can't have a local company make such cars.” I ended up being assigned to product planning. Even so, in the early 1980s, being able to plan and develop my own kind of car was the most enjoyable period of my life. I also had a chance to be involved in Mazda Roadster planning. As it turned out, I created cars I liked, but had a hard time creating cars that sold well.

This was around the time when companies were sending employees abroad for an MBA, and Mazda also had such a program. On the pretext that “creating a hit product requires study of business administration,” I was off to study in the MBA program at MIT, which is a top school for finance and business, not just technology. There I participated in an automotive industry research project and, along with a colleague, proposed the lean production method. I returned to Japan with my MBA in hand; but out of a desire to pursue automotive research more thoroughly, after a year I took leave from Mazda and studied for four more years at MIT for my doctorate.

### **The struggles of the electrical industry can be traced to “value capture” failure.**

Looking back at the past ten years of the automotive industry, it has really worked hard at value creation. Giving cultural value to the automobile has contributed to the industry's high business performance. That is, cus-

tomers realize value from the status of owning a car and from its stylish appearance. The industry has succeeded in creating value beyond just a means of transportation. It has achieved sales and profit growth outpacing the electrical products industry.

In the electrical and digital products fields, on the other hand, Japanese companies have a reputation for world-class manufacturing skills drawing on advanced technologies and R&D, but have for some reason had difficulty turning this into international competitiveness. It is a waste of talented human resources in those industries, which do not create sufficient value. At MIT, we were taught the importance of value creation and value capture. According to that thinking, Japanese firms are good at creating value through manufacturing excellence, but are unable to go beyond this to the point of making added value through value capture. My research for the past five years has been focusing on this problem.

Simply put, my research is aimed at understanding why Japanese companies with excellent capabilities at making things cannot create value. Society revolves around value. The world will not become a better place just because you are good at making things. If enterprises go about creating value properly, the companies, their customers, and their employees will all be happy. Tax revenues will also increase, helping to solve the country's financial woes. That requires a transformation from selling good things cheaply to the concept of building cheaply and selling at a good price. Creating products that customers will be glad to buy even if they are expensive is what it means to make value. Society suffers when companies fail to adequately fulfill their obligation of making value and paying their employees' salaries and their taxes from the created value.

### **The difference between flat-screen TVs that failed at value creation and Wii®, which succeeded**

To summarize the difference between making things and creating value, the manufacturing craft consists of developing excellent technologies and products and pro-



ducing them. Creating value, on the other hand, consists of making products for which customers will gladly pay a price greater than the cost of development.

Take flat-panel TVs, for example. Japanese companies took advantage of their technological excellence to bring out TVs with advanced functions. Customers, however, preferred low-priced TVs so long as they delivered a certain level of quality. When customers are not willing to pay extra for technology and functionality, the inevitable result is to fall into price competition. Being unable to gain a meaningful advantage from your company's strengths and superiority is an example of failing at value creation.

Electrical products drop in price in such cases due to the advance of product standardization and modularization. Any company can come out with products easily, without needing advanced technology, by purchasing standardized components. Since even companies lacking in technological strength can enter the market readily, price competition is bound to heat up. That allows a company like VIZIO, which puts together TVs from such purchased components, to grab the biggest share of the US market (2007 to 2009). That's the modularization trap.

By contrast, the Apple iPod and iPhone, as well as Nintendo Wii®, are success stories in creating value rather than depending on advanced technologies and functions alone. Customers are willing to pay not just for functional value, such as advanced specifications and functions, but for the perceived meaningfulness of products that capture their fancy, or “non-functional” value. I should add that there is at least one example where Japanese companies have achieved success from pursuing their technical and functional advantages. That is the digital camera. Fortunately, their functional value at this point in time matches the non-functional premium value customers crave.

## The two elements necessary for creating value

What is needed in order to create value? I believe it comes down to two things: (1) making products that are highly original to your own company, and (2) giving the products some kind of value that customers will gladly pay for (non-functional value).

Continually making products with high originality specific to your company is something that requires organizational capabilities at deep layers of the company. That's because it is the result not of individual technologies or patents, but of long years of engineer learning and accumulation of capabilities through trial and error in developing technologies and products. Strengths that take a long time to build up cannot be imitated in a short time. In particular, the ability to get different parts of the company to function well together as an organization is essential for

merging diverse technologies in the company. It is vital to focus the company's strengths on value creation.

Still, unless customers can be persuaded to pay extra, there will be no advantage to having a corner on originality. This is where non-functional subjective value comes into play. Customers are becoming increasingly likely to pay for what they see as meaningful from their own subjective viewpoint rather than for technical specs and functions. This non-functional value is important even in the case of semiconductors or other production materials. Taiwan's MediaTek, for example, along with its chips provides solutions that will be useful to client companies in the process of embedding the chips in their products. This makes customers happy, giving rise to non-functional subjective value and thereby resulting in value creation.

Creating non-functional premium value requires first of all knowing your customers thoroughly. Customer value must be explored to identify not functional or other superficial values but the latent needs or solutions in the depths of customers' hearts. Non-functional value is then made by taking advantage of the organizational abilities accumulated in the deep layers of the company. This is what I call “deep-layer value creation.”

Companies that are good at making things have an obligation to society to carry out new value creation. Before taking the easy approach to strategy and marketing, they need to create value by putting their heart and soul into what they make. In that way they can contribute to society.



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After graduating from Osaka University with an Engineering degree in 1981, he joined Mazda Motor Corporation. He earned his PhD in Business Administration at the Sloan School of Management, Massachusetts Institute of Technology (MIT) in 1993. He served as Associate Professor and then Professor in the Kobe University Research Institute for Economics & Business Administration before becoming Professor in the Hitotsubashi University Institute of Innovation Research in 2008. His main publications include *Management of Technology* (Yuhikaku, in Japanese), *Knowledge of Product Development* (Nihonkeizai-shinbunsha, in Japanese), and *Thinking Beyond Lean: How Multi-Project Management Is Transforming Product Development at Toyota and Other Companies* (co-author, Free Press). *Multi-Project Strategy: Post-Lean Product Development Management* (Yuhikaku, in Japanese) was awarded the Nikkei Prize for Economic Books in 1997.