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**The New, Improved Keiretsu**

Some of Japan’s most dominant companies owe their success not only to technology and process expertise but also to an often-overlooked factor: During the past decade, they’ve been quietly turning their supplier relationships into a tool for innovating faster while radically cutting costs. Welcome to the new *keiretsu*—a modern version of the country’s traditional supply system.

During its heyday, in the 1980s, the traditional keiretsu system—an arrangement in which buyers formed close associations with suppliers—was the darling of business schools and the envy of manufacturers everywhere. Although there was some tentative movement in the West toward keiretsu-like supplier partnerships at the time, the rise of manufacturing in low-wage countries soon made cost the preeminent concern. Most Western companies today wouldn’t dream of investing in supplier relationships that would require significant care and feeding. Indeed, many people probably assume that keiretsu died when Japanese manufacturers initiated Western-style cost-cutting tactics.

But some Japanese automakers have revived and reinvented keiretsu. Toyota provides an instructive example. Its recent stumbles in quality notwithstanding (about which more below), our research suggests that Toyota has gained enormously from the new keiretsu. It now has supplier relationships that are more open, global, and cost-conscious than they ever were, yet it has deepened the trust, collaboration, and educational support that were the hallmarks of keiretsu in their earlier form. Having conducted interviews and gathered data during 39 visits to auto plants and 192 visits to parts makers in Japan and overseas, and analyzed two decades’ worth of auto-manufacturing data, we believe that Toyota’s current supply-chain system represents one of the company’s greatest advantages.

Through a detailed look at Toyota, we will describe how the new keiretsu depart from tradition and will explore numerous lessons for developed-world and emerging-market companies seeking to innovate rapidly while cutting costs.

**The Old and New Keiretsu at Toyota**

The traditional keiretsu consisted of obligational relationships based on trust and goodwill. (For the purposes of this article, we’ll focus on vertical keiretsu, those among a manufacturer and its suppliers, and we’ll ignore horizontal keiretsu, which involve cross-holdings among companies centered on a bank.) That’s in sharp contrast to Western-style arm’s-length supplier relationships, which are governed by as much contractual clarity as possible.

In the traditional keiretsu world, an original-equipment manufacturer (OEM) would draw on exclusive, decades-long relationships with key suppliers, in which it often owned significant shares. The OEM would buy individual parts (not systems) at prices that weren’t very competitive—they were usually based on what it had paid for parts for its most recent model.

However, as practiced by Toyota, the new keiretsu breaks from tradition in four ways:

* Instead of buying exclusively from companies with which it has long-term relationships, Toyota also sources from the global market, including from megasuppliers whose streamlined operations allow them to offer very low prices. This gives it flexible sourcing and keeps costs down.
* When setting target prices for long-term suppliers, Toyota looks at the prices offered by multiple global companies, another boon in containing costs.
* Instead of buying individual parts, the automaker demands that suppliers provide integrated systems of components. This helps it develop high-quality products while reducing costs and development time.
* Toyota encourages suppliers to enhance their ability to provide these integrated systems and to become involved in product development at the planning stage.

At the same time, Toyota hews to the traditional keiretsu model in important ways:

* Despite the automaker’s tough demands, its relationships are still based on trust, cooperation, and educational support for suppliers. The level of mutual commitment and assistance is perhaps even greater than in the 1980s.
* Contracts governing the relationships are ambiguous, consisting of general statements and nonbinding targets. For example, rather than insisting on specific prices or price reductions for each year of a contract, as U.S. automakers typically do, Toyota states its expectations of annual *cost* reductions over the life of a contract—and shares the benefits by allowing suppliers who achieve those reductions to maintain their prices for a certain period of time. Spelling out specifics, Japanese companies believe, would encourage partners to do only what they were instructed to, and nothing more. Toyota counts on its suppliers to go the extra mile—to learn about and meet customers’ demands, help develop innovative processes, find and correct errors, and do whatever it takes to meet deadlines.

**After the Bubble**

The new keiretsu grew out of a crisis that affected the Japanese auto industry as a whole. In the early 1990s Western car manufacturers initiated radical cost-cutting programs, fueling the growth of megasuppliers such as Magna, Johnson Controls, and Valeo. To stay ahead, Japanese automakers turned to megasuppliers as well.

Moreover, the bursting of the Japanese economic bubble created a period of stagnation that stretched into the country’s “lost decades.” With sales and profits falling, some automakers went in search of capital, opening themselves to investment by foreign companies such as Renault, Ford, and Daimler—which pushed for further cost-cutting.

**Toyota’s Evolving Keiretsu**

**1939**

Two years after its founding, Toyota forms a suppliers’ association, at first just for the purpose of exchanging information. Within a few decades the automaker is using the association to educate suppliers about manufacturing technology and company improvement.

**1949**

Nippondenso (now Denso, the largest Toyota keiretsu supplier and the world’s second-largest auto parts maker) is established as a spin-off from Toyota.

**1954**

Toyota initiates a “supermarket-like” approach to stocking and managing parts, whereby supplies are replenished only after they are used. Within a decade this evolves into Toyota’s *kanban* production-control method, and it is later adopted by the company’s suppliers.

**1970s**

Toyota starts autonomous study groups with suppliers, so that they can use the Toyota Production System to improve quality and productivity.

**1989**

Toyota establishes a suppliers’ association in the United States—the Bluegrass Automotive Manufacturers Association, or BAMA—to serve its new manufacturing centers there.

**1991**

Japan’s economic bubble bursts. Squeezed by soft domestic sales, Toyota increases its focus on reducing costs.

**2000**

Toyota initiates a radically new purchasing strategy and begins choosing suppliers on the basis of globally competitive target prices.

**2000s**

Toyota forges deeper collaborations with suppliers at earlier stages of product development, inventing a new keiretsu.

The keiretsu began to lose luster. Seen through a shareholder-value lens, they looked costly and old-fashioned. In 1999 Renault became Nissan’s major shareholder, and a Renault leader, Carlos Ghosn, became the Japanese company’s COO. He soon launched the Nissan Revival Plan, aimed at reducing costs by 20% over three years. Ghosn told the press that Nissan’s keiretsu had not functioned well, and Nissan later sold its holdings in most supplier companies. Japan’s supplier relationships appeared to be drifting steadily toward the Western model.

In 2000, with competitive pressures continuing to build and its leaders pressing for rapid global growth, Toyota initiated a radically new purchasing strategy it dubbed “Construction of Cost Competitiveness for the 21st Century,” or CCC21. (See [“Lessons from Toyota’s Long Drive,”](https://hbr.org/2007/07/lessons-from-toyotas-long-drive/ar/1) HBR July–August 2007.) The plan called for selecting suppliers on the basis of globally competitive target prices, with the goal of reducing costs by 30% over three years. It also addressed a competitive advantage the megasuppliers were developing—the ability to provide sophisticated component systems rather than just individual parts. Under CCC21, Toyota began requiring suppliers to enhance their capabilities for producing these value-added systems.

CCC21 enabled Toyota to meet its cost target, and the number of individually purchased parts declined. But it would be inaccurate to view CCC21 as an adoption of Western-style arm’s-length contracting. Over the past two decades Toyota’s suppliers’ association (*kyohokai*) has remained quite stable: From 1991 to 2011 fewer than 20 of about 200 companies withdrew. From 1991 to 2010 the average sales-dependence ratio (the revenue from Toyota-related business as a share of total revenue) of 44 of the company’s suppliers has remained about 80%, even as Toyota has expanded its sourcing pool.

Toyota has also helped many suppliers meet its changing needs. Instead of abandoning suppliers when others offer lower prices, it provides support for operational improvements, organizing “study groups” and dispatching engineers to help vendors improve efficiency and quality and bring prices down. When Toyota drops a supplier for a particular model because of price, it works to maintain the relationship, providing opportunities for the vendor to supply parts for other models, for example.

Even after the adoption of CCC21, Toyota’s arrangements with suppliers continued to be ambiguous rather than spelled-out, with an emphasis on goodwill and trust. This is particularly noticeable in collaborations involving innovative product design. Toyota executives told us that the company requires suppliers to have a deep understanding of its processes and manufacturing goals and believes knowledge of this type can’t be conveyed merely by providing design drawings.

Toyota counts on suppliers to go the extra mile—to develop new processes, find and correct errors, and do whatever it takes to meet deadlines.

**Education, Toyota Style**

Toyota aims to build up suppliers’ stores of “tacit knowledge” through long-term sharing of work experiences, including attempts to solve problems together through trial and error. This hands-on training, which is as much cultural as technical, encourages suppliers to be on the lookout for problems, anomalies, and opportunities throughout the development and production of parts. Whereas Western manufacturers sometimes check only documents when inspecting suppliers’ factories, Toyota always examines the physical workplaces and products—thus the expression *genchi genbutsu* (roughly, “actual workplaces and actual things”), which speaks to the importance of being present when problems arise.

Over the past decade or so Toyota has forged deeper collaborations with suppliers at earlier stages of development. For many years it handled much of its own interior-systems development. But in 2004, after three of its keiretsu firms—Toyoda Boshoku, Araco, and Takanichi—merged to create an organization that could supply complete interior components (a merger in which Toyota was said to have played a key role), the automaker brought the new company, Toyota Boshoku, into its product-development process at the planning stage.

Few manufacturers have been as open to suppliers’ ideas or as successful in incorporating them as Toyota. It expects systems suppliers to help improve product design by, for example, figuring out how to incorporate lighter materials without sacrificing strength. For the Corolla Fielder, a model sold in Japan, Toyota Boshoku and Toyota jointly developed a new interior system with one-touch fold-down rear seats. And consider Advics, a company formed from the brake divisions of Toyota and three of its suppliers for the purpose of developing complete brake systems. In 2001 Advics’s improvements in product design and purchasing achieved a 30% cost reduction in the antilock brake systems for the Noah and Voxy cars.

As part of its product-development process, Toyota provides physical spaces that facilitate cooperation with and among suppliers. Vendors may be invited to a meeting known as an *obeya*—literally, a big room—where they work with Toyota representatives from several departments, including design, engineering, production, quality, and purchasing. Obeya meetings help Toyota avoid a pitfall common in other companies: Even if purchasing managers accept a supplier’s proposed design change, the change might later be rejected by the manufacturer’s engineers. In Toyota’s system everyone is in the big room making decisions together.

Toyota has also used a residential-engineer program, in which experts from suppliers work alongside Toyota’s designers for periods ranging from about six months to three years. The program, which hammers home the principle of “right first time,” fosters communication at the earliest stages of development, reducing the need for adjustments later on. Together with the obeya meetings, it has helped cut product-development lead time from three years to as little as one year, depending on the product’s complexity. Developing the bB small wagon, for example, took only about a year; the model was launched in Japan in 2000, and a successor, the Scion xB, appeared in the U.S. a few years later.

Toyota has developed keiretsu-like relationships overseas. In 1992 it created the Toyota Supplier Support Center to help U.S. vendors learn the Toyota Production System. In 1997 it established the Toyota Europe Association of Manufacturers, a group of about 70 companies that join together in study groups. And Toyota Europe’s Supplier Parts Tracking Team, containing specialists from purchasing, quality, design, production, and other functions, visits suppliers to help introduce the manufacturing of new parts.

A supplier’s ability to learn is key to your future competitiveness. Suppliers that demonstrate a willingness to understand the root causes of mistakes are the most likely to improve.

Overseas, the company tends to be more explicit in its communications than it is in Japan, providing clearer rules and more-detailed specs. Still, key aspects of the new keiretsu appear to translate, including genchi genbutsu. When we visited Toyota facilities in the U.S. and UK, along with the plants of Aisin, Denso, and other suppliers, managers told us they prize engineers who grasp the “actual workplaces” mind-set, because those engineers drive implementation of the Toyota Production System.

Toyota’s supplier relationships are closer to the old keiretsu than those of the other Japanese Big Three automakers are, but Nissan and Honda have retained features of the traditional practice too. Having moved toward Western-style supplier relationships under Carlos Ghosn, Nissan shifted its stance again in 2004, announcing a new purchasing policy that represented a reevaluation of keiretsu. It has increased its investment in one large supplier and continues to rely on goodwill and trust in its dealings with many vendors. One example of its recent keiretsu-like practices is a program in which its engineers and those of its suppliers take up process-improvement projects in the suppliers’ factories. Honda, too, relies on trust and goodwill rather than explicit contractual terms and has organized supplier-development activities. However, in 2010 it announced a very un-keiretsu-like reduction in suppliers—in some categories, cutting the number almost in half.

**A Tenacious Practice**

The new keiretsu are far from perfect. Suppliers striving for high quality sometimes find it hard to deliver the simpler, cheaper parts needed in emerging markets. That’s why Honda recently announced an open purchasing policy under which it uses more parts from megasuppliers and from local suppliers in emerging countries. It could be argued that Nissan’s recent success in China—it has surpassed both Toyota and Honda in sales growth there—comes from its emphasis on openness in purchasing; if a supplier relationship is *too* close, the OEM has difficulty opening up to new suppliers. And obligational contracts can be burdensome for suppliers and their employees: Japanese parts makers sometimes require workers to labor through the night to meet the OEMs’ demands.

Nevertheless, the essence of keiretsu has proved durable, and the ability to avoid the hidden costs of Western-style supplier relationships is an important reason. A chief source of those costs is obfuscation of the root causes of supply-chain problems, as manufacturers and suppliers alike maneuver to avoid blame. Keiretsu relationships allow OEMs and suppliers to work together to detect a problem’s causes. And it’s cost-effective for OEMs to provide educational support to suppliers, because that ultimately brings down the suppliers’ costs and lowers the prices they charge. Suppliers’ high levels of dedication, innovativeness, and expertise all contribute to the manufacturer’s competitiveness. (See the sidebar “Why Are Keiretsu So Durable?”)

**Why Are Keiretsu So Durable?**

Keiretsu have proved to be tenacious in Japan for a number of reasons:

**Cost:**

The manufacturer avoids hidden costs of Western-style supplier agreements, including a pervasive unwillingness among both manufacturers and suppliers to identify root causes of supply-chain problems for fear of appearing to be at fault.

**Quality:**

The manufacturer counts on dedication and expertise from its keiretsu suppliers and thus has confidence in the quality of components. This is essential to just-in-time manufacturing: If an automaker had to test every part, it would be unable to maintain seamless lean production and minimal inventories.

**Innovation:**

With the manufacturer’s encouragement, suppliers come up with product and process breakthroughs, including, in Toyota’s case, improvements in seat systems and antilock brakes.

***Anshin:***

This concept, meaning “peace of mind,” captures a supplier’s confidence that as long as it makes genuine efforts to help the manufacturer, the relationship will be sustained. That stability benefits manufacturers as well.

After Toyota’s recovery from the 1991 crisis, profits rose steadily. The ratio of consolidated operating profit to net sales climbed from 5.1% in 1991 to 8.5% in 2003 to 9.3% in 2007. However, the company was hit by the 2008 global recession and the 2011 earthquake and tsunami, and by 2011 the ratio had declined to 2.5%.

In the midst of the economic downturn came the 2009–2010 unintended-acceleration crisis, during which Toyota recalled 9 million vehicles worldwide. (A U.S. government report concluded that the problems resulted from accelerator pedals that got stuck or ones that got caught under floor mats.) As a result, Toyota took steps to improve its responsiveness to customer complaints and to speed its corporate decisions. In 2010 it revised its quality standards for parts, reportedly drawing on suggestions from suppliers. It also asked suppliers to strengthen their quality management starting at the design stage and conducted joint activities with them to that end. Although U.S. sales volume slipped from 2009 to 2011, it recovered in 2012. According to J.D. Power’s U.S. Vehicle Dependability Study, from 2009 to 2013 the number of problems per 100 vehicles declined 13% for Toyota, 44% for Lexus, and 39% for Scion, suggesting that overall quality has improved—owing in part to suppliers’ contributions.

**Engineering Your Own Keiretsu**

Despite the flaws, the new keiretsu provide a useful template for companies seeking to enrich their relationships with suppliers for long-term benefit. Indeed, although the arm’s-length approach is still dominant in the West, there has been some renewal of interest in keiretsu-style relationships, with a few manufacturers creating hybrid purchasing programs that involve keiretsu-like associations.

In certain industries in Europe, suppliers develop deep loyalties to manufacturers and participate in improving their supply chains. For example, the Swedish bus and truck maker Scania holds workshops to help suppliers learn the Scania Production System, which includes continuous improvement and lean production. Scania’s purchasing system shares other features with keiretsu: Suppliers identify with the hub company, which, in turn, works to make them more globally competitive (although it doesn’t hold shares in them).

IKEA, too, takes a long view of its supplier relationships, working to build committed partnerships based on mutual advantage. It delegates extensive tasks to vendors and collaborates with them in the interest of efficiency and cost containment. For example, it worked with a number of longtime suppliers to develop the technology for printing veneer patterns on the fiberboard tables in its Lack furniture series.

Companies looking to engineer their own forms of the new keiretsu should keep certain guidelines in mind:

* Learn to think short-term and long-term at the same time. Tell suppliers that you envision lasting relationships, but only if they are cost-competitive today—and work with them to achieve that. Encourage them to regard you as a long-term partner by, for example, not only informing them of your cost-reduction expectations but also showing how the benefits will be shared.
* Know your suppliers. If you don’t understand their processes, you can’t contribute to improving them. Instead of outsourcing all components, establish joint ventures for key parts. Visit suppliers’ workplaces.
* Develop trust with your suppliers. Make it clear that the relationship will help them improve their operations and become more competitive. Be the customer they want to work with.
* Balance explicit and implicit communication. Too much explicitness can lead to mistrust; too much implicitness can result in misunderstanding.
* Establish a portfolio of suppliers and identify those most worth improving (you can’t improve them all). Which ones have the potential to be globally competitive? Assign grades according to capabilities such as quality, cost, delivery, people, and development. A supplier’s ability to learn is key to your future competitiveness. Suppliers that demonstrate a willingness to understand the root causes of mistakes are the most likely to improve.
* Build personal relationships between your company and your suppliers, not only at the management level but also among employees. Meet your suppliers. Create joint study groups. Have your managers work with suppliers’ engineers on the shop floor. These steps will lead to faster problem solving and an atmosphere in which vendors are comfortable making suggestions.
* If suppliers underperform, see what can be done to change the situation. Think in terms of development rather than switching. Give them opportunities to show how they could improve.
* Involve suppliers in developing new products—invite their engineers to serve on your development teams—and conduct process-improvement activities in their factories. This will increase your competitiveness across the supply chain.

Increasingly the locus of competition is between supply chains rather than between individual companies. Western manufacturers that want to move toward improved supplier relationships must remember the keys to keiretsu-like partnerships: support, cooperation, trust, and goodwill. Those elements are critical even in a hypercompetitive, cost-obsessed environment, because they reduce the hidden costs of arm’s-length relationships.

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