

Communication

The Contradictions That Drive Toyota's Success

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Summary.

Toyota has become one of the world's greatest companies only because it developed the Toyota Production System, right? Wrong, say Takeuchi, Osono, and Shimizu of Hitotsubashi University in Tokyo. Another factor, overlooked until now, is just as important to the company's success: Toyota's culture of contradictions.

TPS is a "hard" innovation that allows the company to continuously improve the way it manufactures vehicles. Toyota has also mastered a "soft" innovation that relates to human resource practices and corporate culture. The company succeeds, say the authors, because it deliberately fosters contradictory viewpoints within the organization and challenges employees to find solutions by transcending differences rather than resorting to compromises. This culture generates innovative ideas that Toyota implements to pull ahead of competitors, both incrementally and radically.

The authors' research reveals six forces that cause contradictions inside Toyota. Three forces of expansion lead the company to change and improve: impossible goals, local customization, and experimentation. Not surprisingly, these forces make the organization more diverse, complicate decision making, and threaten Toyota's control systems. To prevent the winds of change from blowing down the organization, the company also harnesses three forces of integration: the founders' values, "up-and-in" people management, and open communication. These forces stabilize the company, help employees make sense of the environment in which they operate, and perpetuate Toyota's values and culture.

Emulating Toyota isn't about copying any one practice; it's about creating a culture.

And because the company's culture of contradictions is centered on humans, who are imperfect, there will always be room for improvement. [close](#)

No executive needs convincing that Toyota Motor Corporation has become one of the world's greatest companies because of the Toyota Production System (TPS). The unorthodox manufacturing system enables the Japanese giant to make the planet's best automobiles at the lowest cost and to develop new products quickly. Not only have Toyota's rivals such as Chrysler, Daimler, Ford, Honda, and General Motors developed TPS-like systems, organizations such as hospitals and postal services also have adopted its underlying rules, tools, and conventions to become more efficient. An industry of lean-manufacturing experts have extolled the virtues of TPS so often and with so much conviction that managers believe its role in Toyota's success to be one of the few enduring truths in an otherwise murky world.

Like many beliefs about Toyota, however, this doesn't serve executives well. It's a half-truth, and half-truths are dangerous. We studied Toyota for six years, during which time we visited facilities in 11 countries, attended numerous company meetings and events, and analyzed internal documents. We also conducted 220 interviews with former and existing Toyota employees, ranging from shop-floor workers to Toyota's president, Katsuaki Watanabe. Our research shows that TPS is necessary but is by no means sufficient to account for Toyota's success.

Quite simply, TPS is a "hard" innovation that allows the company to keep improving the way it manufactures vehicles; in addition, Toyota has mastered a "soft" innovation that relates to corporate culture. The company succeeds, we believe, because it creates contradictions and paradoxes in many aspects of organizational life. Employees have to operate in a culture where they constantly grapple with challenges and problems and must come up with fresh ideas. That's why Toyota constantly gets better. The hard and the soft innovations work in tandem. Like two wheels on a shaft that bear equal weight, together they move the company forward. Toyota's culture of contradictions plays as important a role in its success as TPS does, but rivals and

experts have so far overlooked it.

Toyota believes that efficiency alone cannot guarantee success. Make no mistake: No company practices Taylorism better than Toyota does. What's different is that the company views employees not just as pairs of hands but as knowledge workers who accumulate *chie*—the wisdom of experience—on the company's front lines. Toyota therefore invests heavily in people and organizational capabilities, and it garners ideas from everyone and everywhere: the shop floor, the office, the field.

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At the same time, studies of human cognition show that when people grapple with opposing insights, they understand the different aspects of an issue and come up with effective solutions. So Toyota deliberately fosters contradictory viewpoints within the organization and challenges employees to find solutions by transcending differences rather than resorting to compromises. This culture of tensions generates innovative ideas that Toyota implements to pull ahead of competitors, both incrementally and radically.

In the following pages, we will describe some key contradictions that Toyota fosters. We will also show how the company unleashes six forces, three of which drive it to experiment and expand while three help it to preserve its values and identity. Finally, we will briefly describe how other companies can learn to thrive on contradictions.

A Culture of Contradictions

Most outsiders find Toyota unfathomable because it doesn't bear any of the telltale signs of a successful enterprise. In fact, it resembles a failing or stagnant giant in several ways. Toyota pays relatively low dividends and hoards cash, which smacks of inefficiency. From 1995 to 2006, Toyota's dividends averaged only 20% of earnings. For

instance, its 2006 payout of 21.3% was on par with that of smaller rivals, such as Nissan's 22.9% and Hyundai-Kia's 17.4%, but far behind (the then) DaimlerChrysler's 47.5%. At the same time, it had accumulated \$20 billion of cash, leading some analysts to call it Toyota Bank.

Most of Toyota's senior executives are Japanese men, whereas top management in successful Western corporations is more diverse. The company's roots are in a rural suburb of Nagoya called Mikawa, and they run deep, accounting for its managers' humility and strong work ethic. Toyota doesn't plan to relocate its headquarters to Tokyo as rivals like Honda have done. By any standard, the company pays executives very little. In 2005, Toyota's top executives earned only one-tenth as much as Ford's. Their compensation was lower than that of their counterparts at the 10 largest automobile companies, save Honda. Toyota managers also rise through the hierarchy slowly: In 2006, the company's executive vice presidents were on average 61 years old—close to the retirement age at many non-Japanese companies.

Another oddity at Toyota is the influence the founding Toyoda family wields even though it controls just 2% of the company's stock. The Toyodas appear to have a say in most key decisions, but it isn't clear why they exert power. The company's presidents came mostly from the family's ranks for decades, and although three nonfamily executives have been president over the past 13 years, there's speculation that the next president will once again be a Toyoda.

Toyota doesn't merely have some odd characteristics—it is steeped in contradictions and paradoxes. During the first phase of our research, we uncovered six major contradictory tendencies, one of which influences company strategy and the others Toyota's organizational culture.

Toyota moves slowly, yet it takes big leaps.

For example, the company started production in the United States gradually. It began in 1984 by forming a joint venture with GM called New United Motor Manufacturing, in Fremont, California, and opened its first plant in Kentucky four years later. However, the

launch of the Prius in Japan in 1997 was a huge leap. Toyota came up with a hybrid engine that combined the power of an internal combustion engine with the environmental friendliness of an electric motor much earlier than rivals.

Toyota grows steadily, yet it is a paranoid company.

In the early 1950s, the company faced near bankruptcy, but over the past 40 years, the company has recorded steady sales and market-share growth. Despite this enviable stability, senior executives constantly hammer home messages such as “Never be satisfied” and “There’s got to be a better way.” A favorite saying of former chairperson Hiroshi Okuda is “Reform business when business is good,” and Watanabe is fond of pointing out that “No change is bad.”

Toyota’s operations are efficient, but it uses employees’ time in seemingly wasteful ways.

You would be amazed to see how many people attend a meeting at Toyota even though most of them don’t participate in the discussions. The company assigns many more employees to offices in the field than rivals do, and its senior executives spend an inordinate amount of time visiting dealers. Toyota also uses a large number of multilingual coordinators—a post that Carlos Ghosn abolished at Nissan soon after he became CEO in 2001—to help break down barriers between its headquarters and international operations.

Toyota is frugal, but it splurges on key areas.

Only Wal-Mart can match Toyota’s reputation for penny pinching. In Japan, the company turns off the lights in its offices at lunchtime. Staff members often work together in one large room, with no partitions between desks, due to the high cost of office space in Japan. At the same time, Toyota spends huge sums of money on manufacturing facilities, dealer networks, and human resource development. For instance, since 1990, it has invested \$22 billion in production centers and support facilities in the United States and Europe, and for the past six years, it has spent \$170 million annually competing in the Formula One circuit.

Toyota insists internal communications be simple, yet it builds complex social networks.

It's an unwritten Toyota rule that employees must keep language simple when communicating with each other. When making presentations, they summarize background information, objectives, analysis, action plans, and expected results on a single sheet of paper. At the same time, Toyota fosters a complex web of social networks because it wants "everybody to know everything." The company develops horizontal links between employees across functional and geographic boundaries, grouping them by specializations and year of entry; creates vertical relationships across hierarchies through teaching relationships and mentoring; and fosters informal ties by inviting employees to join clubs based on birthplaces, sports interests, hobbies, and so on.

Toyota has a strict hierarchy, but it gives employees freedom to push back.

Voicing contrarian opinions, exposing problems, not blindly following bosses' orders—these are all permissible employee behaviors. Watanabe, who recounts how he fought with his bosses as he rose through the ranks, often says, "Pick a friendly fight." We were surprised to hear criticism about the company and senior management in our interviews, but employees didn't seem worried. They felt they were doing the right thing by offering executives constructive criticism.

Once we realized that contradictions are central to Toyota's success, we tried to identify the underlying forces that cause them. However, digging into Toyota is like peeling an onion: You uncover layer after layer, but you never seem to reach the center. After we had written a half-dozen case studies, a pattern finally emerged. We identified six forces that cause contradictions inside the company. Three forces of expansion lead Toyota to instigate change and improvement. Not surprisingly, they make the organization more diverse, complicate decision making, and threaten its control and communications systems. To prevent the winds of change from blowing down the organization, Toyota also harnesses three forces of integration. They

stabilize the company, help employees make sense of the environment in which they operate, and perpetuate Toyota's values and culture.

Forces of Expansion

"This is how we do things here" is a common refrain in every organization. Established practices become standardized and create efficiencies. Over time, however, those methods can prevent the adoption of new ideas. Toyota prevents rigidity from creeping in by forcing employees to think about how to reach new customers, new segments, and new geographic areas and how to tackle the challenges of competitors, new ideas, and new practices.

Three Forces of Expansion

Three forces of expansion lead the company to instigate change and improvement Impossible goals Local customization ...



Impossible goals.

By setting near-unattainable goals, Toyota's senior executives push the company to break free from established routines. This practice goes back to Toyota's genesis. In 1937, the founder, Kiichiro Toyoda, wanted to produce automobiles in Japan without using foreign technology. It seemed like an impossible goal; even mighty *zaibatsu* such as Mitsubishi and Mitsui had decided against entering the automobile industry at that stage because of the investments they would have to make. Toyoda dared to—and the rest is history.

Toyota often sets tough goals to raise employees' consciousness and self-worth. Consider the company's global strategy: Meet every customer need and provide a full line in every market. It's impossible for any company to do that. Besides, the strategy runs contrary to management thinking, which espouses the merits of making trade-offs. Strategy guru Michael E. Porter, for instance, says that the

essence of strategy is choosing what not to do. However, Toyota tries to cater to every segment because of its belief that a car contributes to making people happy. It's reminiscent of Henry Ford's desire to make automobiles affordable to American families of moderate means so that they might enjoy "the blessings of happy hours spent in God's great open spaces." Toyota has set itself the goal of delivering "a full line in every market" to make employees feel they serve a useful purpose. *Toyota Value*, the document that outlines the company's beliefs, says it best: "We are always optimizing to enhance the happiness of every customer as well as to build a better future for people, society, and the planet we share. This is our duty. This is Toyota."

Many of Toyota's goals are purposely vague, allowing employees to channel their energies in different directions and forcing specialists from different functions to collaborate across the rigid silos in which they usually work. For example, Watanabe has said that his goal is to build a car that makes the air cleaner, prevents accidents, makes people healthier and happier when they drive it, and gets you from coast to coast on one tank of gas (see "Lessons from Toyota's Long Drive," HBR July–August 2007). Zenji Yasuda, a former Toyota senior managing director, points out the wisdom of painting with broad strokes. "If he makes [the goal] more concrete, employees won't be able to exercise their full potential. The vague nature of this goal confers freedom to researchers to open new avenues of exploration; procurement to look for new and unknown suppliers who possess needed technology; and sales to consider the next steps needed to sell such products."

Local customization.

Toyota doesn't modify its automobiles to local needs; it customizes both products and operations to the level of consumer sophistication in each country. This strategy pushes Toyota out of Japan, where it is dominant, and into overseas markets, where it has often been the underdog. Following the strategy increases operational complexity, but it maximizes employees' creativity since they have to develop new technologies, new ways of marketing, and new supply chains. Nissan and Honda follow the same strategy, but less rigorously: In 2006,

Toyota offered 94 models in Japan—almost three times as many as Nissan’s 35 and Honda’s 30 models. Pursuing local customization also exposes Toyota to the sophistication of local tastes. For instance, when it introduced the subcompact Yaris in 1999, Toyota had to offer advanced technology, greater safety, roomier interiors, and better fuel efficiency to live up to European customers’ expectations.

Local customization forces Toyota to push the envelope in numerous ways. For instance, the company faced complex challenges in 1998 when it developed the Innovative International Multipurpose Vehicle (IMV) platform. Toyota engineers had to design the platform to meet the needs of consumers in more than 140 countries in Asia, Europe, Africa, Oceania, Central and South America, and the Middle East. The IMV platform is used for three vehicle types—trucks, minivans, and sport utility vehicles—so Toyota can minimize design and production costs. Notably, the IMV-based vehicles were the first that Toyota produced overseas without first making them in Japan, which led to the decentralized development of production know-how, manufacturing technology, and production planning technologies. Since 2004, Toyota has produced IMV-based models in Thailand, Indonesia, Argentina, and South Africa while India, the Philippines, and Malaysia manufacture them for their own markets.

The IMV also rendered the Made-in-Japan concept irrelevant to the Toyota brand. Many executives thought it was risky to relinquish the label since it had become synonymous with quality. However, executive vice president Akio Toyoda, then in charge of sales and production in Asia, launched a personal crusade to persuade employees that the company should replace Made in Japan with Made by Toyota.

Experimentation.

Toyota’s eagerness to experiment helps it clear the hurdles that stand in the way of achieving near-impossible goals. People test hypotheses and learn from the consequent successes and failures. By encouraging employees to experiment, Toyota moves out of its comfort zone and into uncharted territory.

Toyota has found that a practical way to achieve the impossible is to

think deeply but take small steps—and never give up. It first breaks down a big goal into manageable challenges. Then it experiments to come up with new initiatives and processes for handling the more difficult components of each challenge. This pragmatic approach to innovation yields numerous learning opportunities. Consider, for instance, Toyota's path for developing the Prius. In 1993, the company decided to develop a car that would be environmentally friendly and easy to use. The development team, called G21, first came up with a car that delivered a 50% improvement in fuel efficiency. Toyota's senior executives rejected the prototype and demanded a 100% improvement. That was unachievable using even the most advanced gasoline and diesel engines or even fuel cell technology-based engines. The G21 team had no choice but to tap a hybrid technology that one of the company's laboratories was developing. Sure enough, the first engine wouldn't start. When a subsequent model did, the prototype moved only a few hundred yards down the test track before coming to a dead halt. In later models, the battery pack shut down whenever it became too hot or cold. Despite these setbacks, Toyota didn't stop working on the project and unveiled a hybrid concept car at the 1995 Tokyo Motor Show. Its executives knew that alternative power train technologies were emerging, but the fact that the Prius would be an interim solution didn't deter them. They believed the project was worth the investment because Toyota would learn a lot in the process.

Toyota organizes experiments using strict routines, as is widely known. It has refined Plan-Do-Check-Act (PDCA), the continuous-improvement process used throughout the business world, into the Toyota Business Practices (TBP) process. The eight-step TBP lays out a path for employees to challenge the status quo: clarify the problem; break down the problem; set a target; analyze the root cause; develop countermeasures; see countermeasures through; monitor both results and processes; and standardize successful processes. Similarly, the A3 report, named for a sheet of paper 11 inches by 17 inches, is a succinct communication tool. As we mentioned earlier, it forces employees to capture the most essential information needed to solve a problem on a single sheet that they can disseminate widely.

By encouraging open communication as a core value, Toyota has made its culture remarkably tolerant of failure.

What sets Toyota's culture apart is the way it encourages employees to be forthcoming about the mistakes they make or the problems they face. By encouraging open communication as a core value for decades, Toyota has made its culture remarkably tolerant of failure.

Forces of Integration

As Toyota expands, it has to deal with a greater variety of perspectives from the growing number of employees and customers in many markets. In addition, the quality of internal communications deteriorates, and it becomes difficult to coordinate operations across markets and product groups. How does the company cope with the hazards of constant change and growth? We found three forces of integration that allow Toyota to stick to its mission. They perpetuate its culture and stabilize the company's expansion and transformation.

Three Forces of Integration

Three forces of integration stabilize the company's expansion and transformation Values from the founders

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Values from the founders.

Over the decades, several people have developed Toyota's values: Sakichi Toyoda, who created the parent Toyoda Automatic Loom Works; Kiichiro Toyoda, Sakichi's son and founder of the Toyota Motor Corporation; Taiichi Ohno, the TPS's creator; Eiji Toyoda, Kiichiro's first cousin and a former Toyota president; Shotaro Kamiya, who developed the company's sales network; and Shoichiro Toyoda,

Kiichiro's son and another former president. The values include the mind-set of continuous improvement (*kaizen*); respect for people and their capabilities; teamwork; humility; putting the customer first; and the importance of seeing things firsthand (*genchi genbutsu*).

Toyota inculcates these values in employees by demonstrating their everyday relevance through on-the-job training and through stories that managers tell succeeding generations of employees. Although it is a complex organization, we believe four simple beliefs have kept the company from losing its way.

Tomorrow will be better than today.

Toyota has succeeded in the long term because of its naive optimism. Its employees see obstacles as challenges that energize them to do better. They really believe that Toyota will make tomorrow a better day than today was. An attitude of never being satisfied with the status quo explains why employees conduct experiments all the time.

Everybody should win.

The company has stressed teamwork as a guiding principle since its early days. When a problem arises, each member of the team is accountable and has the authority and responsibility to find a solution. The practice started on the factory floor and has spread throughout the corporation.

Genchi genbutsu.

At a recent conference, Toyota's chairperson Fujio Cho translated *genchi genbutsu* as "Have you seen it yourself?" The implication is that if you have not seen something firsthand, your knowledge about it is suspect. Toyota's senior executives hold themselves to the same standard, emphasizing the importance of the tacit knowledge rooted in each employee's actions and experiences. By visiting a factory and a dealership when he was in St. Petersburg, Cho commanded respect not just by talking about *genchi genbutsu* but by practicing it.

Customers first, dealers second—and manufacturer last.

Toyota believes its success depends on maintaining the trust of

dealers and customers, and it goes to extraordinary lengths to forge lasting relationships with them. Even on the factory floor, supervisors drive home to workers that it isn't the company but customers that pay their salaries.

Up-and-in people management.

Many companies either promote employees or ask them to leave—up-or-out, as the practice is called. Toyota rarely weeds out underperformers, focusing instead on upgrading their capabilities. In fact, Toyota is still committed to long-term employment—as all Japanese companies once were. During the 1997 Asian financial crisis, for instance, Toyota's Thailand operation weathered four straight years of losses with no job cuts. The order had come down from then president Hiroshi Okuda: "Cut all costs, but don't touch any people." In August 1998, Moody's lowered Toyota's credit rating from AAA to AA1, citing the guarantee of lifetime employment. Even though the downgrade increased Toyota's interest payments by \$220 million a year, company executives told the rating agency that it would not abandon its commitment.

Toyota prefers on-the-job training to off-the-job programs. During their initial training, employees are given the freedom to make judgment calls. They have to adhere to a broad set of guidelines rather than follow a strict set of rules. The company adds more context to employees' perspectives by asking them to think as if they were two levels higher in the organization. Toyota trains employees in problem-solving methods during their first 10 years with the company. Another feature of its people management policies is the role exemplary employees play as mentors. They shoulder the responsibility of developing a cadre of managers who learn through experimentation, and pass on Toyota's values by sharing personal experiences—a modern-day apprenticeship system.

When Toyota evaluates managers, it usually emphasizes process performance and learning over results. The company looks at how managers achieved their goals; how they handled issues; how they fostered organizational skills; and how they developed, motivated, and empowered people. The company uses five kinds of criteria, all of

which are fuzzy and subjective. For instance, one category it employs is personal magnetism (*jinbo*), which captures how much trust and respect the manager has earned from others. *Jinbo* is a vague criterion that is open to interpretation and impossible to quantify; you can evaluate people on it only if you have worked closely with them. Another quintessentially Toyota measure of manager performance is persistence or resilience. The company sees this as part of its DNA, describing it as *nebari tsuyosa*, which translates, literally, as adhesive strength.

Characteristics of Toyota Executives

Willingness to listen and learn from others
Enthusiasm for constantly making improvements
Comfort with ...



Toyota's evaluation criteria are particularly relevant in automobile manufacturing, where various types of expertise are essential to success. It's not the kind of company where a few shine. Watanabe says that "every single person is the main actor on the stage." When Toyota promotes employees, it doesn't praise them. Instead, senior executives deliver a message along these lines: "Congratulations on your promotion. Many others were within a hair's breadth of being selected. Keep that in mind as you do your job." This is to instill humility in employees by reminding them that their success is due in part to the efforts of equally accomplished colleagues.

Open communication.

Toyota operates 50 manufacturing facilities outside Japan, sells vehicles in more than 170 countries, and employs close to 300,000 people. Despite its size and reach, Toyota still functions like a small-town company. Its top executives operate on the assumption that "everybody knows everybody else's business."

Information flows freely up and down the hierarchy and across

functional and seniority levels, extending outside the organization to suppliers, customers, and dealers. Typical of traditional Eastern business practice, personal relationships are of primary importance, and Toyota's networks are human rather than virtual. Employees must cultivate the skill of listening intently to opinions in an open environment. The result is a web of relationships that former executive vice president Yoshimi Inaba calls the "nerve system." Like the human body's central nervous system, Toyota transmits information swiftly across the entire organization.

Even in a Toyota plant, executives deliver and receive information by going to the front lines in person. For instance, the head of the Takaoka and Tsutsumi plants, Takahiro Fujioka, is on the factory floor every day and joins workers for drinks in the evening (*nomikai*) sometimes as often as four times a week. Similarly, senior sales people share information with dealers and learn about customer tastes by visiting them. Toyota uses this system to avoid the pitfalls of poor communication typical of big organizations. We identified five elements that underpin Toyota's unique communications system.

Disseminate know-how laterally.

The slogan "Let's *yokoten*" is often heard in the corridors of Toyota. *Yokoten*, which is short for *yokoni tenkaisuru*, literally means unfold or open out sideways. At Toyota, communication is viral and knowledge is diffused in all directions. The company has found that one of the best ways to ensure good communications is to have everyone work together in a large room with no partitions (*obeya*). The concept originated in Japan because of the perennial shortage of office space, which we mentioned earlier, but the company now uses it all over the world. Project teams also post information on the walls of a dedicated situation room for everyone to see—a practice known as *mieruka* (visualization).

Give people the freedom to voice contrary opinions.

Toyota's communication system works because the organization is open to criticism. Employees feel safe, even empowered, to voice contrary opinions and contradict superiors. Each individual in Toyota

is expected to act according to what he or she thinks is right. Every employee enjoys the prerogative to ignore the boss's orders or not take them too seriously. Confronting your boss is acceptable; bringing bad news to the boss is encouraged; and ignoring the boss is often excused. In many of our interviews, employees told us how local operations had succeeded by refusing to obey orders or ignoring what headquarters had advised. For instance, the head of Toyota Motor Sales, U.S.A., Yukitoshi Funo, told us candidly: "Before I was sent to the U.S. in 1997 [as senior vice president], I made the rounds of several top executives in Japan. They told me to increase the number of sales outlets. These were executive vice presidents and managing directors. I went to the market to see the situation. Increasing the number of dealerships would have caused more intense competition and threatened proper management of dealerships. I decided to ignore everything those top executives told me."

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Have frequent face-to-face interactions.

Although there are no reprisals if local operations don't act on headquarters' advice or if subordinates disobey orders from supervisors, refusing to listen to others is a serious offense. Toyota's system functions only when information from the source is available to everybody in the organization. The emphasis is therefore on interactions at the scene (*genba*). For instance, Tony Fujita, former vice president of Toyota Motor Sales, U.S.A., believes that Toyota distinguishes itself from American carmakers by listening to dealers. "Other carmakers have meetings with dealers, but I think Toyota is unique in the frequency and the seriousness of what we discuss [with them]."

Make tacit knowledge explicit.

Another element in Toyota's nerve system is the practice of

converting experiential or tacit knowledge into an explicit form to be shared throughout the organization. When Fujio Cho was president, Toyota put into writing the founders' wisdom that had until then been passed down orally. Senior executives evaluated sayings and anecdotes and identified two core values as the pillars of *The Toyota Way 2001*: continuous improvement (*kaizen*) and respect for people.

Create support mechanisms.

In 2002, the company set up the Toyota Institute and the Global Knowledge Center at Toyota City in Japan and Torrance, California, respectively. Together with the University of Toyota, established four years earlier at Torrance by Toyota Motor Sales, U.S.A., these formal mechanisms support Toyota's communication networks by disseminating best practices and company values. In addition, employees are encouraged to join a wide variety of informal groups, as we mentioned earlier. Every employee belongs to several committees (*iinkai*), self-organizing study groups (*jishuken*), and other social groups, of which there are close to 20 in the company. This helps create a multilayered communication network at Toyota.

Emulating Toyota

People often ask us, "Tell me one thing I should learn from Toyota." That misses the point. Emulating Toyota isn't about copying any one practice; it's about creating a culture. That takes time. It requires resources. And it isn't easy. First, companies have no choice but to embrace contradictions as a way of life. Most enterprises stop growing because they stick to processes and practices their past successes have generated. However, old methods also lead to institutional rigidities. Companies can overcome them by trying to reach new markets or by tackling fresh challenges. Second, companies must develop routines to resolve contradictions. Toyota uses numerous tools such as the Plan-Do-Check-Act model, the eight-step Toyota Business Practices process, the A3 reporting system, and the widely known ask-why-five-times routine. Unless companies teach employees how to deal with problems rigorously and systematically, they won't be able to harness the power of contradictions. Third, companies must encourage employees to voice contrary opinions. Top managements must be open to criticism and

hearing opposing viewpoints if they want new ideas. • • •

Should companies try to do as Toyota does? We believe they should.

Toyota's culture of contradictions places humans, not machines, at the center of the company. As such, the company will be imperfect, and there will always be room for improvement. In that sense,

Toyota's model mirrors human creativity. Can you say the same about your company?

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