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TOYOTA: THE ACCELERATOR CRISIS

The root cause of their problems is that the company was hijacked, some years ago, by anti-family, financially oriented pirates.

Jim Press, former President & Chief Operating Officer (COO)
Toyota Motor Sales, U.S.A., Inc.

On February 24, 2010, Akio Toyoda, the grandson of Toyota Motor Corporation's founder, Kiichiro Toyoda, endured a grueling question-and-answer session before the U.S. House of Representatives Committee on Oversight and Government Reform. The committee represented just one of three Congressional panels investigating the 2009-2010 recall of Toyota vehicles related to problems of sudden acceleration and the company's delay in responding to the crisis.

Signs of the coming recall crisis began as early as 2006 when the National Highway Traffic Safety Administration (NHTSA) opened an investigation into driver reports of "surging" in Toyota's Camry models. The NHTSA investigation was closed the next year, citing no defects. Over the next four years, Toyota, known in the industry for its quality and reliability, would quietly recall nearly nine million Toyota and Lexus models due to sudden acceleration problems. Toyota's leadership, widely criticized for its slow response in addressing the problems, now had to move quickly to identify a solution that would ensure the safety of its vehicles, restore consumer confidence, protect the valuable Toyota brand, and recoup a plummeting share price.

Akio Toyoda testified:

I fear the pace at which we have grown may have been too quick. I would like to point out here that Toyota's priority has traditionally been the following: First, Safety; Second, Quality; and Third, Volume. These priorities became confused, and we were not able to stop, think, and make improvements as much as we were able to before, and our basic stance to listen to customers' voices to make better products has weakened somewhat.

We pursued growth over the speed at which we were able to develop our people and our organization, and we should sincerely be mindful of that. I regret that this has resulted in the safety issues described in the recalls we face today, and I am deeply sorry for any accidents that Toyota drivers have experienced.¹

Exhausted from his testimony, Mr. Toyoda's mind surely reeled as he wondered what challenges led to the current recall crisis. Had the company lost sight of its long-term philosophy, a key principle behind the *Toyota Way*? Had Toyota sacrificed quality at the expense of extreme cost reductions? Were nonfamily managers to blame for "hijacking" Toyota? Was Toyota simply subject to the latest media witch hunt in the wake of the global economic crisis? Clearly, Mr. Toyoda had much to do to address the problems of the recent past and restore confidence in his company and the brand moving forward.

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The Global Automobile Industry

In 2008, the global automobile industry was estimated to be a US\$1.9 trillion business. This represented a 19% decrease from a high of US\$2.2 trillion in 2007, just before the global financial crisis. Global industry values are shown in Exhibit 1. The Asia-Pacific region accounted for the largest industry segment, with slightly more than US\$644 billion in sales, 36% of the global market; followed by the Americas with a 31% share, or US\$548 billion in sales. The European market held a 27% share, or US\$480 billion, in sales. Despite the global automotive industry's fluctuating growth rates during the 2004-2007 period, the industry was expected to experience a fast recovery during the following years. Industry experts forecasted that the compounded annual growth rate (CAGR) would be at or above 4.5% during the 2008-2013 period.²

The global automotive market is highly concentrated. The top four manufacturers—including Toyota Motor Corporation with 12.8% market share, General Motors Corporation with 8.9%, Chrysler 8.1%, and the Ford Motor Company with 7.8%—dominated the global market (see Exhibit 2). Industry competition was intense, both at a global level and at the country level. The mature U.S. market was especially contested, with all manufacturers offering big discounts and low- to no-interest financing virtually year-round. By early 2009, the U.S. had more than one car per capita registered.

While the U.S. auto industry historically dominated the global market, the “Big Three,” as General Motors (GM), Chrysler, and Ford were referred to in the United States, had reported profit erosion since 2005. Unable to reduce skyrocketing debt, Chrysler and GM sought bankruptcy protection in early 2009. The U.S. government ultimately took a majority stake in GM in order to help the company out of bankruptcy protection. In April 2010, GM repaid US\$8.1 billion in loans received from the U.S. and Canadian governments.

Meanwhile, the Japan-based automakers operating in the U.S. (Toyota, Honda, and Nissan) fared better than the Big Three during the global economic crisis. Industry analysts believed that the reason for the disparity between the American and Japanese automakers could be attributed to the fact that the Japanese were not burdened by legacy costs such as expensive pension funds, unionized workers, and the insistence that consumers would always demand big vehicles. At the same time, however, Japanese automakers produced smaller, more environmentally friendly compact cars for the U.S. market.

In 2008, Toyota took the number one spot in terms of new car sales, selling vehicles in more than 170 countries.³ GM had been the historic global sales leader for more than 80 years. Exhibit 3 illustrates the U.S. automobile industry's market share distribution. Both Toyota and GM downplayed the significance of this achievement. According to Toyota spokesman Steve Curtis, “Being No. 1 in volume has never been our goal. Being No. 1 in quality and customer experience has been our goal.”⁴ Despite the global sales volume gain, Toyota reported revenues of US\$211 billion for 2009, a decrease of 19% from the previous year. This decrease was largely caused by the impact of fluctuations in foreign currency rates and decreased parts sales.⁵ By 2010, China had overtaken the U.S. to become the world's largest automotive market. GM's China President, Kevin Wale, concluded, “It is not a blip...”⁶

Toyota Motor Corporation

Headquartered in Japan, Toyota Motor Corporation was established in 1933 as a division of Toyoda Automatic Loom Works under the direction of Kiichiro Toyoda. In 1934, the company produced its first Type A engine at the encouragement of the Japanese government, and two years later the company produced its first passenger car, the Toyota AA.

In 1937, The Toyota Motor Corporation was established as an independent company. During World War II, the company focused solely on truck production for the Imperial Japanese Army. Only after the war, in 1947, did Toyota resume production of passenger cars. By the early 1950s, Toyota was on the verge of bankruptcy until an order of more than 5,000 vehicles from the U.S. military for its war efforts in Korea revived the company.⁷

Recognizing a growing market in the United States, in 1957 Toyota established its first sales, marketing, and distribution subsidiary in the U.S., called Toyota Motor Sales Inc. (TMS). In the early 1960s, the U.S.

introduced stringent import tariffs on certain foreign vehicles. In response, Honda and Nissan began building manufacturing plants in the U.S. In 1982, Toyota Motor Corporation formed a joint venture with General Motors, called NUMMI (New United Motor Manufacturing, Inc.). NUMMI established operations in a General Motors plant in Fremont, California, that was closed, and employed workers who had been laid off when the plant closed two years earlier. Toyota considered the NUMMI joint venture a learning opportunity.

Toyota Motor Manufacturing, U.S.A. (TMM) began production in the U.S. in 1988 and established new brands for this market. In 2009, TMM employed more than 8,900 people and supervised 14 regional offices throughout the 50 states.⁸ Toyota produced 5.2 million cars in 58 production sites in 2000, and by 2009 they had the capacity to produce 10 million cars and had added 17 production sites. Basically, Toyota had added the capacity of a Chrysler-sized company. Over the years, Toyota diversified into several nonautomotive businesses, including aerospace, higher education, robotics, finance, and agricultural biotechnology. Exhibit 4 illustrates Toyota's globalization timeline.

In the spring of 2009, Toyota named 52-year-old, U.S.-educated Akio Toyoda, a member of its founding family, as new president. In announcing Mr. Toyoda's appointment, the company said it needed someone with a youthful perspective who could carry out changes and reverse the company's decline. In the company's recent past, Mr. Toyoda would have been seen by senior management, known for its conservatism, as too young and inexperienced to take the helm. This unprecedented move happened as the company faced what it thought was its biggest crisis in decades—sales were dropping around the world. Mr. Toyoda, a critic of the company's management, believed that they had allowed Toyota to overextend itself in relentless pursuit of unseating GM as the world's biggest automaker.

When Mr. Toyoda took over, the company was on the cusp of being the world's largest automaker. Industry analysts assert that this victory came at an enormous price. Aggressive plant and model rollouts in new markets from India and China to the U.S. and Brazil had strained the company's resources, led the company to misread the market, to produce faulty products, and to build underutilized plants.

Toyota's problems paled by comparison to other automakers that were all facing crippling challenges caused by the world's economic crisis and their own inefficiencies. In the face of declining sales, Toyota began operating in crisis mode and undertook penny-pinching measures, like turning down thermostats, curbing production, slashing management bonuses, and laying off thousands of temporary workers. The company anticipated that after the financial crisis, they would be positioned to assert global leadership in the automotive industry. Mr. Toyoda was expected to make swift changes, including a management shakeup, and committed to lead Toyota's comeback by putting customers first. "I will go back to the basics of the foundation of the company," said Mr. Toyoda. "I intend to exercise as much boldness as possible in pushing ahead with the reforms."⁹

The Toyota Way

From its humble family business origins, Toyota had revolutionized management, manufacturing, and production philosophies. Many business scholars praised its values and business methods and, as a result, the *Toyota Way* was adopted by many other businesses in a wide variety of industries. The *Toyota Way* mandates planning for the long term; highlighting problems instead of hiding them; encouraging team work with colleagues and suppliers; and, perhaps most importantly, instilling a self-critical culture that fosters continuous and unrelenting improvement. From the assembly line to the boardroom, Toyota's principles push employees to strive for perfection.

In 2001, the company officially launched the "*Toyota Way 2001*" that included 14 management principles in four broad categories, shown in Exhibit 5. In light of Toyota's global expansion, Koki Konishi, a company general manager, alluding to the difficulty Toyota could face, told the *New York Times* in 2007:

*There is a sense of danger. We must prevent the Toyota Way from getting more and more diluted as Toyota grows overseas.*¹⁰

Developed by Toyota and incorporated in the *Toyota Way* is the Toyota Production System (TPS). TPS, commonly referred to as the precursor of “lean manufacturing” principles, was originally called “Just-in-Time” production, and is undergirded by the philosophy that “Good Thinking Means Good Product.”

Company documents describe TPS:

*The Toyota Production System (TPS) was established based on two concepts: The first is called “jidoka” (loosely translated as “automation with a human touch”), which means that when a problem occurs, the equipment stops immediately, preventing defective products from being produced; the second is the concept of “just-in-time,” in which each process produces only what is needed by the next process in a continuous flow.*¹¹

In essence, the system was designed to remove all unnecessary waste (*muda*) from the production and manufacturing process. More than just waste avoidance, it aimed to eliminate any excess interruption, misalignment, unnecessary work, or redundancies in the production process that add no value to customers. Specifically, TPS addressed seven kinds of waste: overproduction, operator motion, waiting, conveyance, self-processing, inventory, and correction (rework and scrap). Through TPS, Toyota had been able to significantly reduce lead time and production costs.

TPS evolved into a world-renowned production system, effectively injecting a new vocabulary and *modus operandi* into industries beyond automobile manufacturing. For example, companies in the construction and health care industries adopted and adapted the principles of the TPS for their own operations. The efficiency improvements caused by better logistics systems and a quality focus, resulting in significant cost savings, became standard practices in many Japanese and non-Japanese companies.

William G. Hunter, a professor and quality expert, visited Toyota and other leading Japanese firms in the 1980s to study what scholars called the “Japanese Miracle.” His conclusions included: Japanese top management was absolutely committed to quality; Japanese view America’s predominant management style, especially as it relates to quality and productivity, as being “pathetic, misguided, and somewhat comical” because of its focus on the inspection process. For more than 20 years, Japanese companies had understood that quality and productivity required a system. It had to be embedded in the corporate culture. It was not derived from a process as simple as inspection alone.¹² Hunter emphasized that the quality function was central and finance was an auxiliary function. Hunter’s diagram of the early management structure at Toyota is shown in Exhibit 6.

Pedal to the Metal

Beginning in 1995, on the heels of 68-year-old Tatsuro Toyoda’s stroke, a series of nonfamily members took the helm at Toyota. At the start of this transition, the company’s health paralleled that of Mr. Toyoda’s. Toyota was losing market share and risked posting its first loss since 1950 due to a weak Japanese economy, a strong yen that dampened exports, and increasing trade friction with the United States.

In the following 15 years, the nonfamily management was determined to accelerate Toyota’s growth with an aggressive globalization strategy. As part of this strategy, the company began building factories in the U.S., Europe, and other markets, effectively doubling the number of overseas manufacturing facilities to more than 100. Under nonfamily leadership, Toyota revived financially and gained market share at “a kind of speed no other carmaker has ever experienced in the past,”¹³ according to Koji Endo, an analyst with Advanced Research Japan in Tokyo.

In 1996, Toyota’s then-CEO Hiroshi Okuda officially launched the “Toyota 2005 Vision” which, at its core, encompassed a strong global manufacturing network that targeted local markets from Argentina to Thailand to the U.S. The 2005 Vision followed the slogan “harmonious growth” through a “global master plan” and “global profit management.” Okuda believed strongly in harmony between the global environment, the world economy, local communities, and other stakeholders, and that Toyota’s growth can be beneficial to the world.¹⁴

From the “2005 Vision,” a series of revolutionary management and production innovations emerged. Those innovations drove down costs by fundamentally changing the way cars were engineered. After taking the helm in 1999, President Fujio Cho often talked about the criticality of speed in product development cycles. Cho’s mantra ultimately yielded a program dubbed CCC21, *Construction of Cost Competitiveness* for the 21st Century. CCC21 took lean manufacturing to extreme levels. According to Takashi Araki, a project manager at partsmaker and Toyota affiliate Aisin Seiki, “The pressure [was] on to cut costs at every stage.” The explicit goal was to cut the number of components in a car by 50%.

One such example involved the grip handles mounted above the door inside most of Toyota’s vehicles. Designers scrutinized these parts and, working closely with suppliers, reduced the number of parts required by 85% from 34 to 5. Initiatives like this enabled Toyota to cut procurement costs by 40% and the installation time of many components by up to 75%.

Never complacent, Toyota’s strong growth and significant cost savings following the implementation of the “2005 Vision” led leaders to revise the plan in 2002, taking their cost leadership strategy one step further by adopting the “Global Vision 2010.” Even more ambitious, this new plan targeted a 15% global market share by early 2010. By April 2010, the company had yet to reach the 15% mark, although the new vision had sparked an impressive string of achievements, including industry-leading operating margins of 8.6%, global sales growth of up to 600,000 additional vehicles per year, and the displacement of General Motors as the world’s biggest automaker by unit sales.¹⁵

When Katsuaki Watanabe took the helm as president in 2005, he did not hesitate to share the results of CCC21 with New York’s financial community: “Under CCC21 activities, which I led, Toyota realized cost reductions of more than 200 billion yen (US\$2.2 billion) a year on a consolidated basis.”

Despite the savings of more than US\$10 billion over the six years since CCC21’s inception, Watanabe set out to achieve even more cost savings through the new “VI” (*Value Innovation*) strategy. Dubbed an “aggressive version of CCC21,” *Value Innovation* promised greater savings by making the entire development process cheaper and faster, further trimming parts, production costs, and time to market.¹⁶ According to company documents, the goal of Toyota’s new vision was “to work hard towards making every dealer, plant, regional headquarters, design center, and supplier around the world, including TMC, the ‘best company in town.’ In other words, a ‘company that is respected and admired by the communities we operate in and creates and shares a desirable future for all.’”¹⁷

Many industry insiders, including Takaki Nakanishi, an auto analyst at JPMorgan Securities in Tokyo, expressed reservations about Toyota’s rapid growth. “Toyota is growing more quickly than the company’s ability to transplant its culture to foreign markets,” Nakanishi said. “This is a huge issue for Toyota, one of the biggest it will face in coming years.”¹⁸

Engine Oil Sludge: A Harbinger of Things to Come?

Even as Toyota pursued growth at breakneck speed, and at the same time vigilantly cut costs in order to reduce waste, its vehicles were seen as the gold standard for reliability and quality among consumers and car industry analysts. Two separate surveys conducted between 2000 and 2010 by J.D. Power & Associates (a global marketing information firm that conducts independent surveys of customer satisfaction, product quality, and buyer behavior in the automotive industry) revealed that Toyota’s perceived brand image improved based on the declining rate of owner complaints.¹⁹ Toyota’s advertising and marketing strategy only bolstered the high-quality image. Unlike its domestic competitors, Toyota’s marketing campaigns remained remarkably steady over the years, weaving its hallmark values of quality, safety, and reliability into its messages.

During its meteoric rise to the top of the global automobile industry, cracks in Toyota’s reputation started to appear. In 1999, the company faced a setback that threatened to tarnish its stellar reputation for quality in the United States. As many as 3.3 million vehicles were affected when certain four- and six-cylinder engines in Camrys, Corollas, and other models became prone to oil gelling, or “sludging.” This problem manifested itself by

clogging the internal oil passages, ultimately causing the engine to seize—a problem only remedied by replacing the entire engine, which could cost more than US\$8,000. Some of the engines that failed were only two years old and still under factory warranty.

Toyota refused to cover the repairs and denied warranty claims, claiming that the sludge was the result of user error, essentially accusing vehicle owners of not changing their oil in a timely fashion, or not having the oil changed at a dealership, or using the wrong blend of oil, or an inferior filter.²⁰ The company's response to the engine sludge problem was not well received by its customers. Though the Internet was still in its infancy, Toyota customers, annoyed over the company's "maintenance issue" claim, mobilized against the company in chat rooms, on automotive Web sites, and through consumer organizations.

Toyota customers also hired lawyers and filed lawsuits against the company at an alarming rate. By 2002, some 3,400 warranty claims had been filed against Toyota. In response to this wave of customer complaints, Toyota's U.S. sales division sent letters to 3.3 million owners of 1997-2001 models offering to cover the cost of repairs for engine damages caused by the oil-sludge buildup.²¹ The company regarded the action as a special policy adjustment, not a recall.

While never admitting to design or manufacturing flaws, the letter informed customers that Toyota was extending the engine warranty to eight years with unlimited mileage. However, many drivers had already paid for the repair and expected to be reimbursed. It was not until February 2007 that Toyota finally settled the remaining class-action lawsuits. Concurrent with the settlement, Toyota implemented a system that allowed some 7.5 million customers to be reimbursed for repairs and incidental expenses going back as far as the year 1999. At the time of the settlement, Toyota U.S. spokesperson Mike Michels told *Automotive News*:

*This is one of the first issues for Toyota where the Internet played a major role. Today, we closely monitor public discussion and compare how that correlates with information from dealers and warranty data. We compare them all...today, we're in a position to move faster.*²²

Unrelated to the oil-sludge crisis, Toyota recalls almost doubled, from 975,902 to 1,887,471 vehicles worldwide, during the period from 2003 to 2004. In 2005, in reaction to the surge in quality issues and recalls, then-president Watanabe implemented a high-level so-called "Customer First" management committee that had the task to coordinate engineering, production, sales, and service issues related to quality.²³ However, as Toyota became the leading automaker in the world, the initiative was never really pushed. Toyota scrapped the *Customer First* program in early 2009, perhaps under pressure from falling margins and declining sales (see Exhibit 7).

Accelerating Recalls

On February 2, 2010, only three years after Toyota settled the oil-sludge class-action lawsuits, U.S. Department of Transportation Secretary Ray LaHood publicly criticized Toyota's response to rising consumer concerns over allegedly faulty accelerator pedals. He told the Associated Press that, "Toyota may be a little safety deaf."²⁴ This was a huge blow for the company's market perception of quality, safety, and reliability. LaHood made this comment about six months following the fatal crash of a Lexus ES 350 that killed an off-duty highway patrol officer and his family. Just moments before the crash, the driver called 911, reporting that his accelerator was stuck.

One month later, on September 29, 2009, Toyota recalled 3.8 million U.S. vehicles, claiming that floor-mat problems could cause the accelerator to be stuck. In a move reminiscent of the oil-sludge crisis, Toyota insisted that there was no vehicle-based cause for the problems. Over the next six months, Toyota announced several adjustment measures and, in addition, recalled millions more vehicles with the aim of preventing the floor mat from causing the accelerator to get stuck. On January 16, 2010, Toyota informed the NHTSA that the pedals themselves had a dangerous "sticky" habit, thus revealing that the problem was not just the floor mats. Five days later, Toyota recalled approximately 2.3 million more vehicles because of stuck accelerator pedals.

Toyota told the government that it "thinks a friction problem in its accelerator pedal mechanisms may make the pedal 'harder to depress, slower to return, or, in the worst case, mechanically stick in a partially depressed position.'" At the same time, CTS Corporation, the Elkhart, Indiana, supplier that made the accelerator pedal

mechanisms for Toyota, said that the friction problem accounted for fewer than a dozen cases of stuck accelerators, “and in no instance did the accelerator actually become stuck in a partially depressed condition.”²⁵

On January 26, 2010, in a drastic move, Toyota suspended sales and production of popular models, including the Corolla and Camry, as it tried to find a workable solution to fix the accelerator problem. Over the next few days, Toyota expanded the recall of vehicles in the U.S. by another 1.1 million vehicles, bringing the total worldwide recalls related to the accelerator problem to 8.8 million. During the following weeks, Toyota did not seem to stay out of the press as a new safety recall emerged from the automaker on a nearly weekly basis. A detailed timeline of events is shown in Exhibit 8.

Despite the months and years that had passed since problems with the accelerator pedal first surfaced, Toyota’s leadership appeared to be in no hurry to address the problem. At a news conference in Japan on February 5, President Toyoda finally apologized for the car recalls and promised to beef up quality control: “I apologize from the bottom of my heart for all of the concern that we have given to so many of our customers.”²⁶

Two weeks later, on February 24, 2010, Toyoda delivered prepared testimony before the U.S. House of Representatives Committee on Oversight and Government Reform. The transcript of Toyoda’s full testimony is shown in Exhibit 9.

Transportation Secretary LaHood said Toyota “*put consumers at risk*” by failing to promptly notify authorities about potentially defective accelerator pedals. LaHood asserted that Toyota knew about the problem in late September but did not issue the recall until late January, violating a federal law that requires an automaker to notify the government of a safety defect within five business days.²⁷ As a result, on April 5, 2010, the NHTSA sent a letter to Toyota demanding that the company pay a US\$16.4 million civil penalty—the maximum under the law—for its slow response to the sticking accelerator pedal. On April 19, the company agreed to pay the fine.²⁸ To former Toyota insiders, the mangled message had roots in the company’s fractured organizational structure in the United States.

The government fine was not the only expense that Toyota had to worry about. Echoing its oil-sludge crisis, customers and shareholders filed multiple lawsuits, including three class-action suits, claiming company executives “deliberately misled investors and the public about the depth of accelerator problems in millions of its vehicles.”²⁹ In addition to these potentially costly lawsuits, Toyota’s market capitalization had fallen 21 percent, and its inventory position skyrocketed since the problems became public in late January 2010.³⁰

To make matters even worse for the carmaker, the April 2010 issue of the popular Consumer Reports magazine, a commonly referenced source for car buyers, issued a “Don’t Buy: Safety Risk” rating for the 2010 Lexus GX 460. The magazine argued that handling problems made the vehicle unsafe.³¹ This was the first time in nearly a decade that the magazine had rejected a vehicle. Perhaps learning a lesson from the accelerator crisis, Toyota responded immediately by saying it would recall all 9,400 of the 2010 Lexus GX 460s that were sold since December 2009. Toyota, the worldwide benchmark manufacturing company for quality and the promotion of continuous improvement, had seriously stumbled. By spring 2010, a Consumer Reports National Research Center survey reported that American drivers felt that Ford had made significant improvement in its car safety and quality, while Toyota was perceived to have made a dramatic drop.³²

Structural Challenges

As Toyota grew into a global powerhouse in the auto industry, the organizational structure that emerged was a centralized design “...that put key decision-making in the hands of executives in Japan...” Toyota built up a vast complex of engineering centers, test tracks, financial arms, sales offices, and manufacturing plants that spread from California to New York, spilling over into Canada and Mexico. Toyota did not have a U.S. headquarters; its units operated as fiefdoms that reported independently to Japan.³³ Some industry analysts pointed to Toyota’s unique subsidiary structure as a contributing factor in the recall crisis and the company’s delay in responding to the same.

According to former Toyota employees, “The complicated tasks of gathering information about sudden acceleration reports, analyzing the problems, and engineering fixes, as well as reporting the issues to federal safety regulators, were handled by different Toyota subsidiaries, each managed separately in many cases from Japan...” Documents released by the U.S. House of Representatives investigators show that some of the disjointed subsidiaries of Toyota had an explicit strategy to minimize safety recalls, saving the company hundreds of millions of dollars even while reports of fatal accidents were increasing.

Some believed that Toyota’s structure in the U.S. ultimately impaired its ability to prevent the safety problems before they reached the crisis stage. In the midst of Toyota’s recall crisis, several former insiders offered insights into the structural drivers of the recall crisis. John Julia, a former engineering manager at Toyota’s technical center in Ann Arbor, Michigan, told the *Los Angeles Times*: “You know the joke that every bank branch has a president—well, every Toyota facility has a president, and one can’t tell another what to do.”

Julia, who left Toyota in 2003 after eight years with the company, described how he had only very limited interactions with the sales or dealership organizations responsible for collecting safety data from consumers. His experience was that this information went directly to Japan without ever being relayed back to the U.S. organization, and that all key engineering decisions came from Japan.

Another insider, Laurence Boland, who spent 25 years with Toyota in its sales organization based in Torrance, CA, observed: “They let Americans do what they do best, advertising and services, and in that area they left us alone. But when it came to money and technical matters, they kept the control in Japan.”

Former Toyota attorney Dimitrios Biller supported the observation that no real decisions were made in the U.S. John P. Kristensen, an attorney in a lawsuit against Toyota, argued that:

Toyota has used its structure to fend off lawsuits, forcing attorneys to file repeated requests for information to subsidiaries. You don’t need an MBA to know that Toyota’s American subsidiaries were intentionally created to keep consumers in the dark...the system was set up intentionally to work like this.

Though the majority of Toyota’s key decisions came out of Japan, some Toyota insiders and industry analysts took another perspective, and maintained that Toyota had tried hard to become a local company in the U.S. Emphasizing Toyota’s localization effort in 2007, Toyota Executive Vice President Tokuchi Uranishi stated:

Local customization comes first, followed by model integrations, shared platforms, and common parts to reduce complexity. It should not be the other way around, nor should it be at the same time. A global company that surveys every potential market need and chooses one optimal solution will be very efficient, but along the way it sacrifices the creative potential of its employees in the local operations.³⁴

In July 2002, as part of Toyota’s internationalization efforts, the company established a Global Knowledge Center (GKC) in Torrance, CA, to pursue a dual strategy of localization and global integration. The objective of the GKC was to disseminate innovation from specific local markets into a global process to benefit the whole company. According to company documents, the GKC was a strategic resource for sharing innovative ideas and global knowledge of best practices in sales and marketing across multiple countries. Dedicated to collaborating with Toyota distributors, the GKC aimed to optimize growth and to leverage the Toyota brand globally.³⁵

Until the GKC was established, Toyota was not organized for transferring customer knowledge across countries or sharing best practices in sales and marketing among different business units. In a 2005 interview Executive Vice President Yoshimi Inaba stated: “What we can do today is to provide local staff with a lot of ideas and examples based on our international experience so that they can adapt them to local requirements for greater market success.”³⁶

So how exactly does one of the world's best manufacturers, known for its profitability, strong engineering, and quality, manage its aggressive global expansion strategy? Akio Matsubara, Toyota's Senior Managing Director of Human Resource Management, offered the following answer:

When we operate in other countries, we are sensitive to the needs and requirements of the countries and regions we have entered. For example, to get a sense of the true situation on the ground in the United States, we ran a test at [NUMMI] in California, a joint venture with GM. After that, we started factory operations in Kentucky. The issue then was how to successfully assimilate into the region. We tried to become an extremely local-friendly company, because in many cases our company significantly affects the local economy and the lives of the people in the region in question.³⁷

A Complex Web

With more than 8,900 U.S.-based employees, 14 regional offices, and 1,500 dealerships across all 50 states, Toyota was one of the largest foreign companies in the United States. Despite size, Toyota struggled to effectively leverage its TPS standards due to the complexity of its far-reaching and complex global supplier and partner network compounded by its headquarter-centric decision-making processes.

A manufacturer has to design, engineer, build, buy, and then assemble more than 10,000 parts to make a car. As part of TPS, Toyota broke away from the Western supply-chain model, which saw carmakers sourcing in-house or awarding short-term contracts to the lowest-price bidders. Toyota refined supply-chain management by selecting certain suppliers as the exclusive suppliers of particular components. This led to intimate collaboration between Toyota and these long-term partners. Toyota classified its suppliers according to a three-tier system. Tier-one suppliers supplied large, integrated systems to the automakers, followed by tier-two suppliers who provided individual parts and/or assembled components, followed finally by tier-three suppliers who primarily provided single components for several tier-two suppliers.³⁸

Toyota, along with many other Japanese companies, including Honda, had a business structure called keiretsu, essentially a networked, industry-specific, diversified conglomerate that resulted in the vertical integration of its supply chain. Akio Okamura, a partner at Roland Berger Strategy Consultant's Automotive Competence Center, observed:

Japan's automotive industry from its inception was shaped by keiretsu, business groups that have bound banks, trading houses, and industrial firms into loosely knit conglomerates. Sticking together by holding shares in each other and buying each other's wares, foreign companies were largely prevented from gaining a foothold in this market.

Okamura, also commenting on the effects of globalization on kaizen practices, stated:

As original equipment manufacturers (OEMs) move to share global platforms, suppliers are being asked not only to supply parts to Japanese OEM plants, but also to their partners' plants. Japanese suppliers also are being forced to search for foreign partners to supply overseas markets.³⁹

While Toyota pursued its aggressive global growth strategy, its supply chain became dangerously stretched. The company began to depend increasingly on suppliers from outside of Japan and outside the keiretsu structure, non-Japanese suppliers with which Toyota did not have prior working experience. Toyota also struggled to find enough senior engineers responsible for monitoring these new suppliers. Nevertheless, Toyota leaned even more heavily on its single-source supply-chain approach, often using single suppliers for entire ranges of its cars across multiple markets—and reaping incredible economies of scale in the process. A senior executive at one of Toyota's tier-one suppliers told the *Economist*:

If you don't want duplication of supply, you have to have very close monitoring, you have to listen to your supply base, and you have to have transparency. That means delegating to local managers. With Toyota, it works well at the shop-floor level, but things break down higher up.⁴⁰

A Lack of Consensus

On April 14, 2010, the *Wall Street Journal* published an article chronicling the Japanese family versus nonfamily management infighting that had apparently been plaguing Toyota for some time. Jim Press, the former CEO of TMS and the highest-ranking non-Japanese executive ever employed at Toyota, told the WSJ that the root cause of [Toyota's] problems was that the company was hijacked, some years ago, by anti-family, financially oriented pirates.⁴¹

In March, Mr. Toyoda, while acknowledging that the ultimate responsibility for the recalls rested with him, seemed to agree with Mr. Press's comments when he stated at a news conference that the problems arose when some people just got too big-headed and focused too excessively on short-term profits only. In the context of Japanese culture, which was based on harmony, consensus decision-making, and blame avoidance, such comments were highly unusual. In Japan, the public debate of problems and explicit conflict negotiations were avoided at all costs, and conflict resolution was typically sought behind closed doors.⁴²

Given Toyota's highly centralized Japanese management structure, some industry analysts wondered if the recall crisis would have been handled differently had it occurred closer to Japan.⁴³ The TPS's "go and see" principle suggests that to truly understand a situation, one needs to go to where the work is done. Given Toyota's centralized management structure and increasingly complex web of suppliers, some analysts wondered whether this principle got lost among Toyota's foreign subsidiaries, especially in the United States. Some suspected that cultural differences between Japan and the U.S. were exacerbating the crisis and making it less manageable. Differences can be seen using the Cultural Orientation Indicator comparing the United States and Japan. Exhibit 10 provides an overview of these differences.

Additionally, Richard Johnson and William Ouchi, in their classic study of Japanese management styles, found that the practice of "decision-making by consensus" had costs. On occasion, the Japanese were so concerned with the desire for conflict avoidance that important issues failed to get full attention. Managers who disagreed with a certain proposal would sometimes remain silent rather than upset the relationships that they had so carefully developed.⁴⁴ Therefore, it was highly unusual when Toyota's nonfamily managers publically stated that Toyota's troubles were less a quality crisis and more a management and public relations crisis.

Mr. Okuda, nonfamily member and Toyota's president from 1995 to 1999, put an even finer point on this argument in 2000 when he told the *Wall Street Journal*, referencing family managers such as now-president Akio Toyoda, "Nepotism just doesn't belong in our future."³⁸ Other nonfamily managers argued that Mr. Toyoda was too focused on top-line growth and profits in order to overtake GM as the world's leading automaker, instead of making sure that the company's reputation as a quality manufacturer remained intact.

In Toyoda's Congressional testimony on February 24, 2010, he alluded to a return to these principles:

*I believe that only by examining the problems on site can one make decisions from the customer perspective. One cannot rely on reports or data in a meeting room. I will ensure that members of the management team actually drive the cars, and that they check for themselves where the problem lies, as well as its severity.*⁴⁶

Moving Forward

*We need not be concerned. We need only continue as always, making our improvements.*⁴⁷

Kiichiro Toyoda, Founder
Toyota Automatic Loom Works

Could Akio Toyoda simply follow his grandfather's advice to focus on continuous improvement, especially given plummeting margins? Mr. Toyoda had to sort out what combination of structural, cultural, or strategic challenges led to the current recall crisis. Had the company lost sight of its long-term philosophy, a key principle behind the *Toyota Way*? Had Toyota sacrificed quality at the expense of extreme cost reductions? Were nonfamily managers truly to blame for "hijacking" Toyota?

What role had Toyota's supply chain and *keiretsu* structure played in the recalls? Thinking beyond Toyota's woes to the global industry, did Harvard's Michael Porter have Toyota in mind when he said that Japanese firms rarely have strategies because operational excellence alone is not strategy?

Was Toyota simply subject to the latest media witch hunt in the wake of the global economic crisis? Would *Consumer Reports*, which traditionally praised Toyota vehicles, really have issued a "Don't Buy" on the Lexus without pressures of the economic crisis and a media-driven campaign for Buy American? Ford and GM had both had more and larger recalls than Toyota (see Exhibit 11).

Clearly, Mr. Toyoda had much to do to fix the problems of the recent past, and restore confidence in his company and the brand moving forward. More importantly, Mr. Toyoda had given his personal commitment in his testimony to the U.S. House Committee on Oversight and Government Reform: "My name is on every car. You have my personal commitment that Toyota will work vigorously and unceasingly to restore the trust of our customers."

Notes

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- ⁵ Hoover's "Toyota Motor Corporation" Report, 2009.
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- ⁷ <http://www2.toyota.co.jp/en/history/>.
- ⁸ Hoover's "TMS USA" Report, 2009.
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- ¹³ Alan Ohnsman, Jeff Green, and Kae Inoue, "The Humbling of Toyota," *BusinessWeek*, March 11, 2010.
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- ¹⁶ Alan Ohnsman, Jeff Green and Kae Inoue, "The Humbling of Toyota," *BusinessWeek*, March 11, 2010.
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- ¹⁹ Norihiko Shirouzu, "Inside Toyota, Executives Trade Blame Over Debacle," *Wall Street Journal*, April 13, 2010.
- ²⁰ Richard Truett, "Oil Sludge Threatened To Smear a Good Name." *Automotive News* 82.(2007): 56. *Business Source Complete*. EBSCO. Web. 23 Mar. 2010.
- ²¹ "Toyota to Cover Costs Of Repairing Engines Damaged by Sludge." *Wall Street Journal*, 12 Feb. 2002, Eastern edition: ABI/INFORM Global, ProQuest. Web. 22 Apr. 2010.
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- ³⁷ *Ibid.*, p. 96.
- ³⁸ "The Machine That Ran Too Hot." *Economist* 394.8671 (2010): 74. *Business Source Complete*. EBSCO. Web. 23 Mar. 2010.
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Exhibit 1. Global Automobiles Industry Value: \$ Billion, 2004-2008

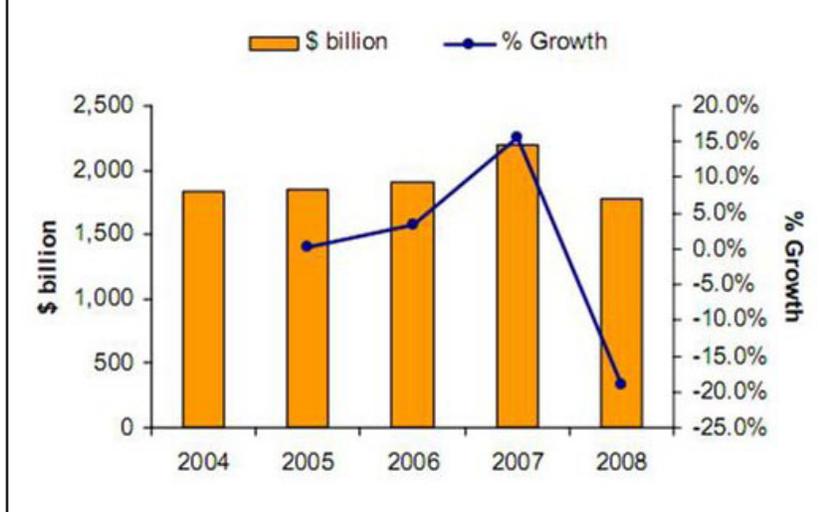


Exhibit 2. Global Automobiles Industry Share:
% Share, by Value, 2008

<u>Company</u>	<u>% Share</u>
Toyota Motor Corporation	12.80
General Motors Corporation	8.90
Daimler AG	8.10
Ford Motor Company	7.80
Other	62.40
Total	100.00

Source: *Datamonitor*.

Exhibit 3. U.S. Automobiles Industry Share:
% Share, by Value, 2009

<u>Company</u>	<u>% Share</u>
Toyota Motor Corporation	17.80
Ford Motor Company	17.50
General Motors Corporation	14.50
Honda Motor Company, Limited	11.80
Chrysler Group LLC	7.50
Other	30.90

Source: *IBISWorld*.

Exhibit 4: Toyota Globalization Timeline

	The Americas	Europe/Africa	Oceania/Asia/ Middle East/China
1950s	1957: First Crown export 1957: Toyota Motor Sales, U.S.A., Inc. established 1958: Toyota do Brasil S.A. starts operations		
1960s			1962: Toyota Motor Thailand Co., Ltd. established
1970s	1973: Caltex Design Research, Inc. established 1977: Toyota Technical Center U.S.A., Inc. established		
1980s	1984: Toyota-GM joint venture in the U.S., New United Motor Manufacturing, Inc. (NUMMI), starts production 1988: Toyota Motor Manufacturing, Kentucky, Inc. (TMMK) starts production 1989: Lexus dealerships established in the U.S.	1987: TMME Technical Center established	
1990s	1998: Toyota Motor Manufacturing Indiana, Inc. (TMMI) and Toyota Motor Manufacturing, West Virginia, Inc. (TMMWV) start operations	1990: Toyota Motor Europe Marketing & Engineering S.A. (TMME) established 1992: Toyota Motor Manufacturing (U.K.), Ltd. (TMUK) starts production 1998: Construction of new plant in France announced	1998: Tianjin Toyota Motor Engine Co., Ltd. (TTME) starts operations 1999: Toyota Kirloskar Motor, Ltd. starts operations (India)
2000-2005	2001: Toyota Motor Manufacturing, Alabama, Inc. (TMMAL) established 2002: Toyota Motor Manufacturing de Baja California S. de R.L. de C. V. (TMMBC) established (Mexico)	2001: Toyota Motor Manufacturing France S.A.S. (TMMF) starts production 2002: Toyota Peugeot Citroën Automobile Czech (TPCA) established 2002: Toyota Motor Manufacturing Poland Sp.z o.o.(TMMP) starts production 2002: Toyota Motor Industries Poland Sp.zo.o.(TMIP) established 2005: Production of the Toyota Aygo starts at TPCA (Czech Republic) 2005: Toyota Motor Manufacturing Russia Ltd. (TMMR) established	2000: Sichuan Toyota Motor Co., Ltd. (SCTM) starts production (China) 2002: Toyota Kirloskar Auto Parts Private Ltd. (TKAP) established (India) 2003: FAW Toyota Motor Sales Co., Ltd. (FTMS) established (China) 2004: Toyota FAW (Tianjin) Dies Co., Ltd. (TFTD) established (China) 2004: Toyota FAW (Changchun) Engine Co., Ltd. (FTCE) established (China) 2004: IMV series Hilux Vigo launched (Thailand) 2004: Guangzhou Toyota Motor Co., Ltd. (GTMC) established (China)
2006	Feb.: Opening of the NAPSC March: Agreement reached to subcontract production to Subaru of Indiana Automotive, Inc. (SIA) (production to start in spring 2007) April: Establishment of the TEMA May: TMMK, TMMI, and TMMWV celebrate 20th anniversary Sep.: Toyota Motor Manufacturing Canada Inc. (TMMC) celebrates 20th anniversary Oct.: TMMK starts production of the Camry Hybrid Nov.: Toyota Motor Manufacturing, Texas, Inc. (TMMTX) starts production of the Tundra	Jan.: Expansion of TME-TC Mar.: Opening of the E-GPC	May: Production of the Camry starts in Guangzhou, China Aug.: Establishment of Training Course at the AP-GPC

Source: *Toyota*.

Exhibit 5. 14 Principles of the “Toyota Way”

Section I: Long-Term Philosophy

Principle 1. Base your management decisions on a long-term philosophy, even at the expense of short-term financial goals.

- Have a philosophical sense of purpose that supersedes any short-term decision-making. Work, grow, and align the whole organization toward a common purpose that is bigger than making money. Understand your place in the history of the company, and work to bring the company to the next level. Your philosophical mission is the foundation for all the other principles.
- Generate value for the customer, society, and the economy—it is your starting point. Evaluate every function in the company in terms of its ability to achieve this.
- Be responsible. Strive to decide your own fate. Act with self-reliance and trust in your own abilities. Accept responsibility for your conduct, and maintain and improve the skills that enable you to produce added value.

Section II: The Right Process Will Produce the Right Results

Principle 2. Create a continuous process flow to bring problems to the surface.

- Redesign work processes to achieve high value-added, continuous flow. Strive to cut back to zero the amount of time that any work project is sitting idle or waiting for someone to work on it.
- Create flow to move material and information fast as well as to link processes and people together so that problems surface right away.
- Make flow evident throughout your organizational culture. It is the key to a true continuous improvement process and to developing people.

Principle 3. Use “pull” systems to avoid overproduction.

- Provide your down-line customers in the production process with what they want, when they want it, and in the amount they want. Material replenishment initiated by consumption is the basic principle of just-in-time.
- Minimize your work in process and warehousing of inventory by stocking small amounts of each product and frequently restocking based on what the customer actually takes away.
- Be responsive to the day-by-day shifts in customer demand rather than relying on computer schedules and systems to track wasteful inventory.

Principle 4. Level out the workload (heijunka). (Work like the tortoise, not the hare.)

- Eliminating waste is just one-third of the equation for making lean successful. Eliminating overburden to people and equipment and eliminating unevenness in the production schedule are just as important—yet generally not understood at companies attempting to implement lean principles.
- Work to level out the workload of all manufacturing and service processes as an alternative to the stop/start approach of working on projects in batches that is typical at most companies.

Principle 5. Build a culture of stopping to fix problems, to get quality right the first time.

- Quality for the customer drives your value proposition.
- Use all the modern quality assurance methods available.
- Build into your equipment the capability of detecting problems and stopping itself. Develop a visual system to alert team or project leaders that a machine or process needs assistance. Jidoka (machines with human intelligence) is the foundation for “building in” quality.
- Build into your organization support systems to quickly solve problems and put in place countermeasures.
- Build into your culture the philosophy of stopping or slowing down to get quality right the first time to enhance productivity in the long run.

Principle 6. Standardized tasks and processes are the foundation for continuous improvement and employee empowerment.

- Use stable, repeatable methods everywhere to maintain the predictability, regular timing, and regular output of your processes. It is the foundation for flow and pull.
- Capture the accumulated learning about a process up to a point in time by standardizing today’s best practices. Allow creative and individual expression to improve upon the standard; then incorporate it into the new standard so that when a person moves on, you can hand off the learning to the next person.

Principle 7. Use visual control so no problems are hidden.

- Use simple visual indicators to help people determine immediately whether they are in a standard condition or deviating from it.
- Avoid using a computer screen when it moves the worker’s focus away from the workplace.
- Design simple visual systems at the place where the work is done, to support flow and pull.
- Reduce your reports to one piece of paper whenever possible, even for your most important financial decisions.

Principle 8. Use only reliable, thoroughly tested technology that serves your people and processes.

- Use technology to support people, not to replace people. Often, it is best to work out a process manually before adding technology to support the process.

- New technology is often unreliable and difficult to standardize and therefore endangers “flow.” A proven process that works generally takes precedence over new and untested technology.
- Conduct actual tests before adopting new technology in business processes, manufacturing systems, or products.
- Reject or modify technologies that conflict with your culture or that might disrupt stability, reliability, and predictability.
- Nevertheless, encourage your people to consider new technologies when looking into new approaches to work. Quickly implement a thoroughly considered technology if it has been proven in trials and it can improve flow in your processes.

Section III: Add Value to the Organization by Developing Your People

Principle 9. Grow leaders who thoroughly understand the work, live the philosophy, and teach it to others.

- Grow leaders from within, rather than buying them from outside the organization.
- Do not view the leader’s job as simply accomplishing tasks and having good people skills. Leaders must be role models of the company’s philosophy and way of doing business.
- A good leader must understand the daily work in great detail, so he or she can be the best teacher of your company’s philosophy.

Principle 10. Develop exceptional people and teams who follow your company’s philosophy.

- Create a strong, stable culture in which company values and beliefs are widely shared and lived out over a period of many years.
- Train exceptional individuals and teams to work within the corporate philosophy to achieve exceptional results. Work very hard to reinforce the culture continually.
- Use cross-functional teams to improve quality and productivity and enhance flow by solving difficult technical problems. Empowerment occurs when people use the company’s tools to improve the company.
- Make an ongoing effort to teach individuals how to work together as teams toward common goals. Teamwork is something that has to be learned.

Principle 11. Respect your extended network of partners and suppliers by challenging them and helping them improve.

- Have respect for your partners and suppliers, and treat them as an extension of your business.
- Challenge your outside business partners to grow and develop. It shows that you value them. Set challenging targets and assist your partners in achieving them.

Section IV: Continuously Solving Root Problems Drives Organizational Learning

Principle 12. Go and see for yourself to thoroughly understand the situation (genchi genbutsu).

- Solve problems and improve processes by going to the source and personally observing and verifying data rather than theorizing on the basis of what other people or the computer screen tell you.
- Think and speak based on personally verified data.
- Even high-level managers and executives should go and see things for themselves, so they will have more than a superficial understanding of the situation.

Principle 13. Make decisions slowly by consensus, thoroughly considering all options; implement decisions rapidly (nemawashi).

- Do not pick a single direction and go down that one path until you have thoroughly considered alternatives. When you have picked, move quickly and continuously down the path.
- Nemawashi is the process of discussing problems and potential solutions with all of those affected, to collect their ideas and get agreement on a path forward. This consensus process, though time-consuming, helps broaden the search for solutions, and once a decision is made, the stage is set for rapid implementation.

Principle 14. Become a learning organization through relentless reflection (hansei) and continuous improvement (kaizen).

- Once you have established a stable process, use continuous improvement tools to determine the root cause of inefficiencies, and apply effective countermeasures.
- Design processes that require almost no inventory. This will make wasted time and resources visible for all to see. Once waste is exposed, have employees use a continuous improvement process (kaizen) to eliminate it.
- Protect the organizational knowledge base by developing stable personnel, slow promotion, and very careful succession systems.

Source: J. Liker, 2004. *The 14 Principles of the Toyota Way: An Executive Summary of the Culture Behind TPS*, p. 37. Ann Arbor, MI: University of Michigan.

Exhibit 6. Toyota's Management Structure as depicted by William Hunter

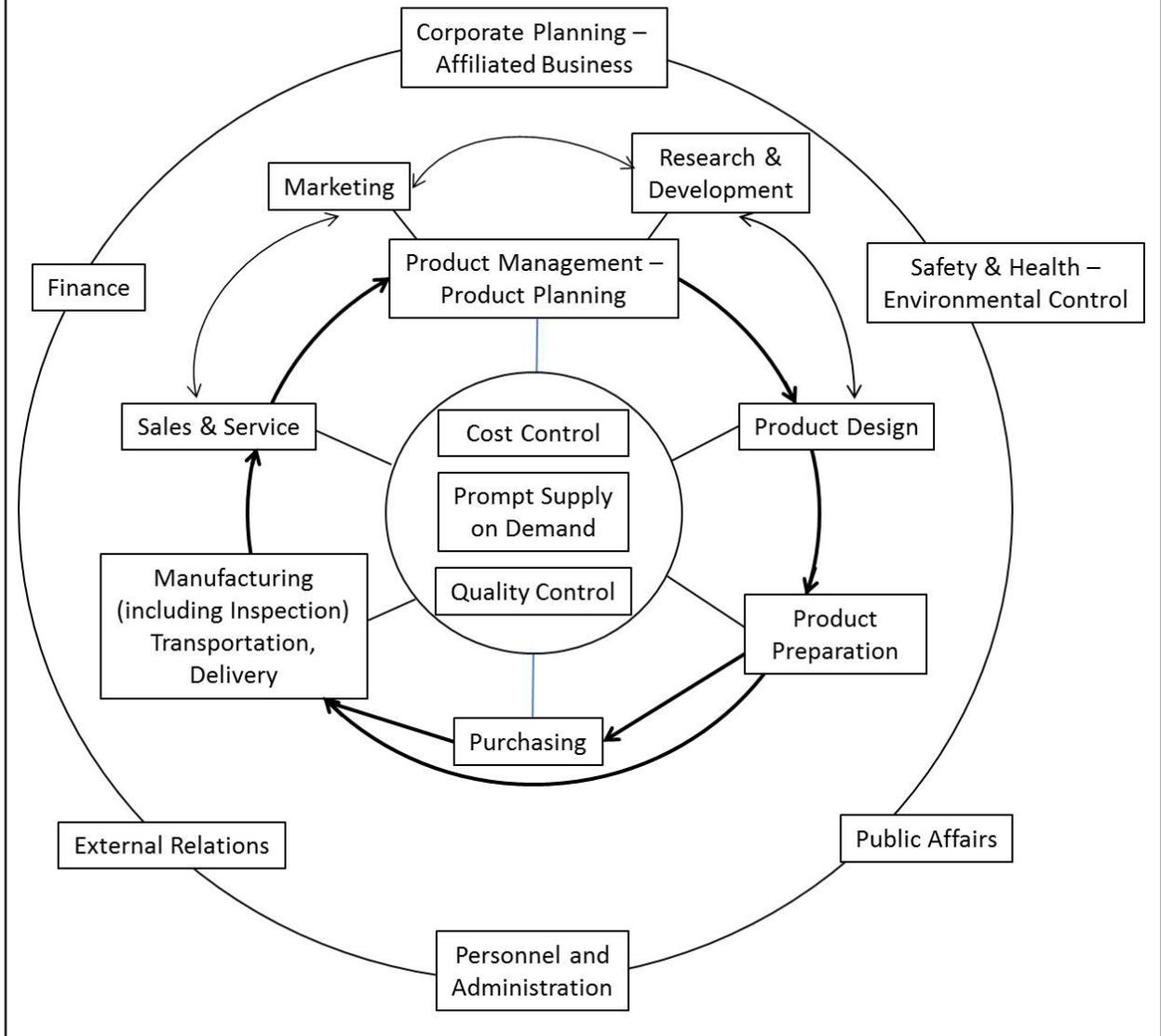


Exhibit 7. Toyota Motor Corporation's Annual Income Statements, March 2005–March 2009

Toyota Motor Corporation					
Primary Industry: Auto Manufacturing					
NYSE: TM [ADR] Tokyo: 72030			Fiscal Year-End: March		
Annual Income Statement (All dollar amounts in millions except per share amounts.)					
	Mar 09	Mar 08	Mar 07	Mar 06	Mar 05
Revenue	211,023.5	263,028.2	203,218.7	179,731.8	172,318.7
Costs of Goods Sold	189,707.2	215,314.2	163,167.8	144,771.6	138,124.1
Gross Profit	21,316.3	47,714.0	40,050.9	34,960.2	34,194.6
Gross Profit Margin	10.10%	18.10%	19.70%	19.50%	19.80%
SG&A Expense	26,055.0	24,998.3	21,053.7	18,912.3	18,662.4
Depreciation & Amortization	15,368.9	14,919.0	11,732.5	10,348.4	9,267.9
Operating Income	-4,738.7	22,715.8	18,997.2	16,047.9	15,532.2
Operating Margin	--	8.60%	9.30%	8.90%	9.00%
Nonoperating Income	-1,944.2	3,174.7	2,297.0	2,571.3	1,611.0
Nonoperating Expenses	941.4	--	--	--	--
Income Before Taxes	-5,760.2	24,384.8	20,217.3	17,833.4	16,298.3
Income Taxes	-580.2	9,120.0	7,622.3	6,793.5	6,110.7
Net Income After Taxes	-5,180.0	15,264.8	12,595.0	11,039.9	10,187.6
Continuing Operations	-4,491.3	17,187.4	13,951.3	11,723.3	10,879.8
Discontinued Operations	--	--	--	--	--
Total Operations	-4,491.3	17,187.4	13,951.3	11,723.3	10,879.8
Total Net Income	-4,491.3	17,187.4	13,951.3	11,723.3	10,879.8
Net Profit Margin	--	6.50%	6.90%	6.50%	6.30%
Diluted EPS from Total Net					
Income (\$)	-2.9	10.9	8.7	7.2	6.6
Dividends per Share (\$)	2.1	2.8	1.9	1.7	0.9

Exhibit 8. 2006-2010 Timeline of Toyota Recall-Related News

2006	September 14	NHTSA opens an investigation into driver reports of “surging” in Camry models.
2007	March	Toyota receives reports about accelerator pedal issues in Tundra model.
	April	NHTSA states that no defect was found in 2006 Camry investigation. It closes probe into “surge” problems in Camry model.
	September 26	Toyota and Lexus models recalled to secure floor mats, which were reported to slip and cause the car to accelerate out of control.
2008	January 31	NHTSA opens investigation of Tacoma truck models experiencing sudden acceleration problems.
	August 27	NHTSA closes investigation of Tacoma trucks stating they found no evidence to suggest a vehicle defect.
2009	April 21	In response to sudden acceleration reports, a Toyota spokesperson states that, “People are under so much stress right now, they have so much on their minds. With pagers and cell phones and IM, people are just so busy with kids, families, boyfriends, and girlfriends. So you are driving along and the next thing you know you are two miles down the road and you don’t remember driving because you are thinking about something else.”
	August 28	A family of four driving a Lexus ES 350 is killed. Moments before the crash, the driver called 911 to report that his accelerator was stuck.
	September 29	Toyota issues a safety notice for 3.8 million vehicles due to the crash risk posed by the gas pedal becoming caught under the floor mat. NHTSA calls for the recall of the 3.8 million vehicles.
	November 4	NHTSA accuses Toyota of providing owners with “inaccurate and misleading information” about its floor mat recall.
	November 25	Toyota recalls 4 million vehicles to reconfigure gas pedals and redesign floor mats due to the risk of floor mat entrapment.
	December 26	Four people die near Dallas when their Toyota Avalon accelerates off of the road.
2010	January 12	Toyota announces that it will install a brake override system in addition to the brake pedal redesign and floor mat reconfiguration.
	January 21	Toyota recalls 2.3 million vehicles to correct a separate problem that could cause the gas pedal to stick.
	January 26	Toyota suspends sales and halts production of 8 car models due to accelerator pedal problems.
	January 27	Toyota increases its floor mat recall to an additional 1.1 million cars. General Motors announces incentives for Toyota owners who want to swap their car for a GM model.
	January 29	Toyota expands its recall to models sold in Europe.
	February 1	Toyota says it has developed a fix for the sticking gas pedal issue and has begun shipping the new parts to dealers.
	February 2	U.S. Transportation Secretary LaHood criticizes Toyota’s response to the problems with the gas pedals.
	February 3	Transportation Secretary LaHood warns consumers not to drive recalled cars, then claims this was a misstatement and consumers should contact their dealers. NHTSA claims to have received more than 100 complaints about braking system problems in the Prius.
	February 4	Toyota says the recalls for gas pedal-related issues could end up costing the company US\$2 billion. Toyota also confirms on this date that the recalls total 8.1 million vehicles. The automaker blames a software glitch for braking problems in its 2010 Prius. The NHTSA opens a formal investigation into the braking system of the Prius hybrid model.
	February 5	Toyota president and CEO Akio Toyoda apologizes for the car recalls at a news conference in Japan and promises to beef up quality control: “I apologize from the bottom of my heart for all of the concern that we have given to so many of our customers.”

February 9	Toyota recalls 437,000 hybrids worldwide over brake problems, bringing the total number of cars recalled to 8.5 million.
February 13	Toyota announces the recall of 8,000 Tacoma trucks in North America for potential defects in the front drive shaft of certain 2010 models.
February 16	Toyota announces plans to suspend production at two U.S. plants as sales slow following the company's massive recalls. NHTSA orders Toyota to provide documents showing when and how it learned of the defects affecting about 6 million U.S. vehicles.
February 17	Toyota president Akio Toyoda says he will not appear before U.S. lawmakers, and that the company will take steps to fix problems with its cars. The U.S. government plans to open an investigation to probe possible steering issues on about 500,000 Toyota Corollas.
February 18	Toyota president Akio Toyoda accepts a "formal invitation" to appear before a Congressional committee investigating unintended acceleration in Toyota cars.
February 21	In an internal presentation, Toyota staffers say the company saved US\$100 million by negotiating an "equipment" recall rather than a "vehicle" recall.
February 22	Toyota says it has received a federal grand jury subpoena for documents relating to Prius braking problems.
February 23	<i>Consumer Reports</i> drops two of the four Toyotas that would have made its annual list of Top Pick cars because of a "stop sale" order.
February 24	Toyota president Akio Toyoda apologizes during a prepared testimony before the U.S. House of Representatives Committee on Oversight and Government Reform: "I'm deeply sorry for any accident that Toyota drivers have experienced," and pledges full cooperation as the investigation continues.
April 5	The NHTSA sent a letter to Toyota demanding that the company pay a US\$16.4 million civil penalty—the maximum under the law—for its slow response to the sticking accelerator pedal.
April 8	Toyota Motor Sales (TMS), U.S.A., Inc., announced it has established a new SMART business process utilizing existing product engineers, field technical specialists and specially trained technicians to quickly and aggressively investigate customer reports of unintended acceleration in Toyota, Lexus, and Scion vehicles in the United States. The rapid-response Swift Market Analysis Response Team will attempt to contact customers within 24 hours of receiving a complaint of unintended acceleration to arrange for a comprehensive on-site vehicle analysis.
April 14	Toyota asked dealers to temporarily suspend sales of the new 2010 Lexus GX 460 after <i>Consumer Reports</i> issued a "Don't Buy" safety warning on the SUV.
April 15	Toyota has announced that it will now check all of its SUVs for problems similar to the one uncovered by <i>Consumer Reports</i> in the Lexus GX 460 SUV.
April 16	Toyota to begin voluntary safety recall on certain 1998-2010 model year Siennas to address potential corrosion on spare tire cable.
April 19	Toyota announced that it has agreed to settle the civil penalty demanded in the NHTSA's April 5 letter related to the company's recall for slow-to-return and sticky accelerator pedals by paying US\$16.4 million. Toyota announces voluntary recall on 2010 model-year Lexus GX 460 to update vehicle stability control software.
April 22	The international ratings agency Moody's Investors Service downgraded Toyota's credit rating to Aa2 from Aa1 because of concerns over product quality weakening the firm's capacity to repay long-term debt.
April 28	Toyota announces voluntary recall on 2003 model-year Sequoia to upgrade program logic in vehicle stability control system.

Exhibit 9. Prepared Testimony of Akio Toyoda, President, Toyota Motor Corporation, to Committee on Oversight and Government Reform

February 24, 2010

Thank you, Chairman Towns.

I am Akio Toyoda of Toyota Motor Corporation. I would first like to state that I love cars as much as anyone, and I love Toyota as much as anyone. I take the utmost pleasure in offering vehicles that our customers love, and I know that Toyota's 200,000 team members, dealers, and suppliers across America feel the same way. However, in the past few months, our customers have started to feel uncertain about the safety of Toyota's vehicles, and I take full responsibility for that. Today, I would like to explain to the American people, as well as our customers in the U.S. and around the world, how seriously Toyota takes the quality and safety of its vehicles. I would like to express my appreciation to Chairman Towns and Ranking Member Issa, as well as the members of the House Oversight and Government Reform Committee, for giving me this opportunity to express my thoughts today.

I would like to focus my comments on three topics—Toyota's basic philosophy regarding quality control, the cause of the recalls, and how we will manage quality control going forward.

First, I want to discuss the philosophy of Toyota's quality control. I myself, as well as Toyota, am not perfect. At times, we do find defects. But in such situations, we always stop, strive to understand the problem, and make changes to improve further. In the name of the company, its long-standing tradition and pride, we never run away from our problems or pretend we don't notice them. By making continuous improvements, we aim to continue offering even better products for society. That is the core value we have kept closest to our hearts since the founding days of the company.

At Toyota, we believe the key to making quality products is to develop quality people. Each employee thinks about what he or she should do, continuously making improvements, and by doing so, makes even better cars. We have been actively engaged in developing people who share and can execute on this core value. It has been over 50 years since we began selling in this great country, and over 25 years since we started production here. And in the process, we have been able to share this core value with the 200,000 people at Toyota operations, dealers, and suppliers in this country. That is what I am most proud of.

Second, I would like to discuss what caused the recall issues we are facing now. Toyota has, for the past few years, been expanding its business rapidly. Quite frankly, I fear the pace at which we have grown may have been too quick. I would like to point out here that Toyota's priority has traditionally been the following: First; Safety, Second; Quality, and Third; Volume. These priorities became confused, and we were not able to stop, think, and make improvements as much as we were able to before, and our basic stance to listen to customers' voices to make better products has weakened somewhat. We pursued growth over the speed at which we were able to develop our people and our organization, and we should sincerely be mindful of that. I regret that this has resulted in the safety issues described in the recalls we face today, and I am deeply sorry for any accidents that Toyota drivers have experienced.

Especially, I would like to extend my condolences to the members of the Saylor family, for the accident in San Diego. I would like to send my prayers again, and I will do everything in my power to ensure that such a tragedy never happens again.

Since last June, when I first took office, I have personally placed the highest priority on improving quality over quantity, and I have shared that direction with our stakeholders. As you well know, I am the grandson of the founder, and all the Toyota vehicles bear my name. For me, when the cars are damaged, it is as though I am as well. I, more than anyone, wish for Toyota's cars to be safe, and for our customers to feel safe when they use our vehicles. Under my leadership, I would like to reaffirm our values of placing safety and quality the highest on our list of priorities, which we have held to firmly from the time we were founded. I will also strive to devise a system in which we can surely execute what we value.

Third, I would like to discuss how we plan to manage quality control as we go forward. Up to now, any decisions on conducting recalls have been made by the Customer Quality Engineering Division at Toyota Motor Corporation in Japan. This division confirms whether there are technical problems and makes a decision on the necessity of a recall. However, reflecting on the issues today, what we lacked was the customers' perspective.

To make improvements on this, we will make the following changes to the recall decision-making process. When recall decisions are made, a step will be added in the process to ensure that management will make a responsible decision from the perspective of "customer safety first." To do that, we will devise a system in which customers' voices around the world will reach our management in a timely manner, and also a system in which each region will be able to make decisions as necessary. Further, we will form a quality advisory group composed of respected outside experts from North America and around the world to ensure that we do not make a misguided decision. Finally, we will invest heavily in quality in the U.S., through the establishment of an Automotive Center of Quality Excellence, the

introduction of a new position—Product Safety Executive—and the sharing of more information and responsibility within the company for product quality decisions, including defects and recalls.

Even more importantly, I will ensure that members of the management team actually drive the cars, and that they check for themselves where the problem lies as well as its severity. I myself am a trained test driver. As a professional, I am able to check on problems in a car, and can understand how severe the safety concern is in a car. I drove the vehicles in the accelerator pedal recall as well as the Prius, comparing the vehicles before and after the remedy in various environmental settings. I believe that only by examining the problems on site, can one make decisions from the customer perspective. One cannot rely on reports or data in a meeting room.

Through the measures I have just discussed, and with whatever results we obtain from the investigations we are conducting in cooperation with NHTSA, I intend to further improve on the quality of Toyota vehicles and fulfill our principle of putting the customer first.

My name is on every car. You have my personal commitment that Toyota will work vigorously and unceasingly to restore the trust of our customers.

Thank you.

Source: Toyota

Exhibit 10. Cultural Orientations Indicator® (COI)

	<u>United States</u>	<u>Japan</u>
Characteristics of a good manager	Employees want to be treated fairly and with respect, with adequate and honest communication from their managers. As a society with highly egalitarian values, employees also want to be trusted that they will perform effectively and will not be micromanaged. For a manager to be effective, he/she should understand what motivates employees from various perspectives beyond only promotion and remuneration.	A Japanese manager is expected to be an excellent and skilled worker; to provide a great example to do the job; to help guide, support, and help employees in the right direction accordingly; is responsible for protecting and defending his or her subordinates to others or higher authorities when something happens on a project (especially when the subordinates face difficulties or made mistakes); a person who has good skills to coordinate the group as a team/family; and a good listener.
Motivation	Many U.S. Americans in the business world are motivated by monetary rewards and status, such as job advancement, material goods, or a nice office. U.S. Americans are also motivated by accomplishment of a job well done. A compliment from a manager is not only desired but is often expected by workers in this culture. U.S. Americans want to work hard for promotions, but are also self-motivated.	The Japanese tend to be motivated when they work as a group and experience an accomplishment and achievement as a group. However, in contemporary society, personal recognition is becoming more important than ever before. Many Japanese believe the following are key motivators: recognition, fair performance evaluation, and salary increase and promotion.
Decision-Making	As an egalitarian culture, the United States emphasizes decision-making at all levels of an organization, not only at upper levels of management, depending on the gravity of the decision being made. There tend to be lower levels of bureaucracy than in highly hierarchical cultures, and more empowerment for people to make decisions at multiple levels in a company.	The Japanese tend to make their decisions as a group. Furthermore, although they have a strong hierarchy orientation, on decision-making the bottom-up process is very common since many business proposals are created among lower-ranking managers.
Authority	Managerial power tends to come from one's hierarchical position in the organization, and also from alternative sources of power such as affiliation, technical expertise, as well as their personality and ability to motivate their team. Whether a manager operates in a collaborative and participative manner or in an authoritative manner, most workers will air their disagreements in some way, even in a union environment.	Although most Japanese companies maintain a strong hierarchical structure, the subordinates are more expected to have their own views with a sense of initiative or leadership. Japanese managers expect their subordinates to be able to find and create their own jobs/projects and propose their own jobs to their managers.
Delegation	Managers delegate tasks readily in the United States, and are typically not as concerned about losing power in the delegation process. With higher tolerance for risk commonly found in the U.S., and also lower levels of hierarchy, there is not as much concern of failure when delegating, and there tends to be little micromanagement in the delegation process.	Fundamentally, tasks are delegated by the managers to their subordinates. However, the biggest difference between the Japanese task delegation style and many Western styles is that the members are expected to create their jobs and tasks proactively by understanding the circumstances. This skill is regarded as the most essential skill for the workers.

Information Sharing	Among many U.S. organizations, people and departments share information readily, depending on the need to know. However, information may not be shared readily among different departments, which can be a barrier to optimal efficiency and a sense of organizational teamwork.	Regular meetings and frequent personal contact among team members is common. The frequent communication system to share information (Report—Contact—Consult, or <i>Ho-Ren-So</i>) is practiced by everyone under this group work environment.
Structuring of Tasks	Generally, a manager in the United States will present a task and a general idea for how the task should be organized. Participant input is often solicited to help modify and change the task according to specific requirements. Managers typically enter with objectives, and employees in the United States will often help determine the tasks to meet the required outcomes.	In Japan, the big picture decisions are often decided by higher management, and they are brought down to the lower level. At the same time, the jobs according to the big picture are decided by the group members. The managers' roles are not to define and order the job areas and tasks. Rather, their roles are to grow and manage subordinates to be able to understand the vision and proactively plan their own jobs accordingly.
Conflict Management	In the United States, conflicts and disagreements are typically dealt with right as they arise, and discussed openly. Occasionally, indirect approaches, such as the use of a third party, might be needed in some situations, but this is the exception in the United States.	The Japanese like neither conflict nor debate in public. When they have a conflict during the negotiation, they try to solve the issues behind the scenes. Japanese often try to take advantage of a conflict in terms of building a firm relationship by overcoming it together.
Organizational Structure	Historically, U.S. businesses grew out of a “command and control” hierarchical management structure. Much of this legacy top-down hierarchical structure still exists, but this structure has changed dramatically over the past century with much flatter organizations, greater decision-making authority given to lower levels within an organization, and more autonomy in the workplace.	Most Japanese companies still follow a rigid hierarchical, pyramid structure. This system is based on seniority. However, the system does not reflect the simple top-down power relationship that is more common in several Western corporate systems.

Source: CulturalNavigator.com.

Exhibit 11. Top 10 Largest Vehicle Recalls 1971-2009

<u>Company</u>	<u>Year</u>	<u>Problem</u>	<u>Number of Vehicles</u>
Ford	1996	Ignition switch fires	7.9 million
GM	1971	Broken engine mounts cause sudden acceleration	6.7 million
GM	1981	Broken front suspension bolts result in steering problems	5.8 million
Toyota	2009	Shifting floor mats cause unintended acceleration	5.4 million
Ford	2005	Cruise control switch fires	4.5 million
Ford	2009	Cruise control switch fires	4.5 million
Ford	1972	Defective seat belts	4.0 million
GM	1973	Possibility of stones disabling steering gear	3.7 million
Volkswagen	1972	Faulty windshield wiper assembly	3.7 million
Honda	1995	Seat belt release jam	3.7 million

Source: M. O'Rourke, 2010. "Toyota's Total Recall." *Risk Management*, 57: 8-11.