

# Toyota's Wisdom for Tomorrow's Managers

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## *Abstract*

Toyota's pioneering work in automobile production systems continues to be among the most profound and radical departure from conventional thinking since the times of Henry Ford, and has led to unprecedented cost efficiencies and quality improvements for them. For long, it was thought to be a Japanese expertise – one that could not be duplicated by non-Japanese people, or outside Japan. However, subsequent to Womack and Jones' pioneering works, "The Machine that Changed the World" and "Lean Thinking", it has not only been adopted outside Japan, its universal principles are also finding huge acceptance in other sectors and service industries throughout the world.

However, any process is only as good as the people involved in it and their thought process behind it. Toyota's production system is not only about how the production flow is organized – it includes fundamental aspects of professional ethics and work culture that are deeply ingrained in their thinking. These so-called "Toyota Traditions" serve as the guiding light for managers and employees alike and continue to remain relevant as ever. They also are ubiquitously applicable in almost every stream of management.

It is this author's firm belief that by merely adapting Toyota's Lean Production System, one can't transform a normal organization to a Lean Enterprise. Alongside the changes in process, one must pay adequate attention to adapting the mindset behind Lean culture as well. With that context, I have analyzed and interpreted some of the Toyota's Traditions that are most relevant in context of tomorrow's manager in this paper.

## **1. Open the Window. It's a big world out there !**

*"This spirit is alive today in the Toyota Way. The Toyota Way is not a narrow path. We don't put on blinders and only see what Toyota is doing. Success comes from expanding our vision and experiencing the world. Sakichi himself was inspired and expanded his horizons by traveling to other countries. It was during his first trip to the United States and Europe to study the textile industry that he saw and was impressed with the automobile. As Sakichi would say, "Open the window. It's a big world out there!"*

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*Inspiration comes from many places. Things in nature, a small village or another company could spark an idea. We need to have our eyes, our minds and our hearts open to things we interact with every day, so open your window to the world."*

In today's world, the competition changes its course at nano-speeds, and with increasing pressures on managing product price (or service price, as the case might be) versus profit margins, companies must look outside and beyond the box for innovative and futuristic ideas. As Michael Porter highlighted, firms often become victims of reckless benchmarking which leads to an almost similar offering of a product or a service by all competitors. In such a situation, it is not possible for firms to establish a product leadership, and ability to innovate suffers at the cost of maintaining cost leadership. Customer wins in the short-term, but eventually everyone suffers when innovation gets stifled across the industry.

Many organizations, certainly much more than what we believe, suffer from the NIH syndrome ("Not Invented Here"). Managers in such organizations have a tendency to close doors on any idea that is not home-grown. GE suffered from it. It took courageous efforts from Jack Welch to make GE managers change their outlook. In today's flat world, no one company has monopoly over good ideas, nor there any one single person, team, company or country that can claim to know it all.

The need of the day is for managers to look beyond the obvious, question the status quo, learn and get inspired by everyday examples from Mother Nature, other fields, and other industries and cross-pollinate those ideas in their daily work. A manager who just does his assigned job within the 'defined' framework is doing a great disservice to his organization, and limiting its ability to innovate the future.

## **2. Make the most sincere efforts in your assigned position**

*"Everything we do at Toyota is a chain of processes. As members of Team Toyota, we must make the chain of Toyota strong. We do this as we seek to understand and own the process, and continuously work to improve the overall flow. It is through teamwork and caring for our teammates that we keep the links together. Our diversity with a common purpose is what maintains the strength of these links. If we follow Kiichiro's wise counsel and do our work with "the most sincere effort," the links that make up the Toyota chain will always remain strong and never break."*

There is nothing like a perfect workplace. Despite the fact that people work for the same employer, they might often have mutually exclusive goals. There might be different perceptions of what is required to get something done, or there might be resource contention. And finally, there is always politics in any organization. A manager, especially a new manager in an organization, must not get unnerved by such workplace – for that is real world ! In all likelihood, other places are probably not anymore better off than what you have here. How you make the best of it is really the issue. It is very easy to berate the state of affairs and find an easy escape out, but good managers will find their

most creative juices flowing under such conditions. Learn your political landscape, and know your allies and resisters. Work towards the common purpose without getting entangled into any personality or an ego clash. In a democratic setup, it is not important that your idea always wins – what is far more sacrosanct is that the best ideas win every time, and the complete team rallies behind that idea to achieve its set objectives. Do whatever and everything it takes for the team to succeed. This can only happen when each team member puts his most sincere efforts in his assigned position.

### **3. Taking on challenges is the way to gain experience**

*“Eiji Toyoda, who played a key role in the initial exports to the United States, once reflected on the experience, “it was a wild risk to take, but the timing was pretty good. Our initial bad experience merely strengthened our determination ‘to make cars that would sell in the States.’ We knew that Toyota Motor Sales would collapse if we didn’t have decent products to sell. The first time we tried, we failed. So we took on the challenge of trying again, redoubled our efforts and the second time we succeeded . . . In the end, the risk was worth it.”*

Let’s face it: would you ever sign-up for a job where there were no challenges nor any opportunity to innovate solutions ? What possible value-addition (except perhaps a steady paycheck end of the month) would it be to work where there are set standards to direct your behavior for every possible thing, and you just become another cog in the wheel ? However, quite often, managers get perturbed because there are problems impeding their progress. What they must realize is that as a manager, one must not put pre-conditions to performance – it is extremely important to understand that a manager exists because there are problems that must be addressed, and eventually eliminated. These problems and challenges are actually opportunities in disguise, like a mound of soft clay waiting to be picked by a deft pair of hands to be transformed into an object of utility.

When we look around in recent few decades, business leaders right from Dhurubhai Ambani to Narayan Murthy to Ratan Tata, everyone’s path has been full of challenges – challenges so serious and overwhelming that could make anyone pick up the bags and go home. But they never gave up. They fought against all odds, suffered in the process of not compromising on their integrity, but never lost sight of the fact that taking challenges head-on was the only way to gain that critical experience to take up even bigger and meaningful challenges in the eventual quest to realize their dreams. The same applies to you and me – that’s how each of the big journeys start.

### **4. Be an Innovative and Creative Thinker**

*“In the late 1950s, Toyota began adopting new sales methods. In the spirit of innovation, Japan's Toyota Motor Sales Co., Ltd. began to emphasize “scientific marketing” over older methods. The*

*Research Office, set up in 1956, shifted focus to demand-forecasting techniques and prepared marketing plans accordingly. In 1957, they conducted their first full-scale market survey. In the same year, Toyota reduced the price of all its small passenger cars and also set up a list price system, making manufacturer's suggested retail price and distribution costs public."*

Take any technology, say MP3 player. When Apple came out with iPod, neither the technology they were offering was brand-new, not the product concept. However, the way they integrated iPod with their online music stores, iTunes, thereby making it possible for music lovers to maintain their music library seamlessly was the stroke of a genius. Likewise, in every aspect of business and workplace, one must be innovative, constantly looking for those small nuggets of wisdom, small strokes of genius to make incremental changes whenever and wherever possible.

We often tend to overrate the importance of a 'big-bang innovation' at the cost of underrating the criticality of millions of small, daily incremental innovations that make one small improvement at a time. While it would be a great opportunity, and a matter of great pride for anyone to be part of such life-altering innovation, the reality is those things don't always happen. Take the case of iPod again. If the first iPod was the epoch-making innovation, the subsequent innovations have been basically those small innovations, thousands of them, which together continue to make iPod as a market-leading product. So, both are important, and in one's career, one must not overlook the opportunity to do daily innovations to whatever one is tasked to do. Think hard about the task at hand, and how it could be done better to best serve customer's interests. Try to leave everything in just a shade better than what you started out with. Imagine the power of an enterprise where every employee even does it once a day.

## **5. More uncertain the future, more important to have courage**

*"Shoichiro Toyoda, who had just been appointed president, explained the new company's philosophy as 3Cs—Creativity, Challenge and Courage. "The third C is for courage. It is most important to take the relevant factors in all situations into careful, close consideration, and to have the courage to make clear decisions and carry them out boldly. The more uncertain the future is, the more important it is to have this courage."*

Nothing could be more apt as an advice to tomorrow's managers as this one. In today's tough and increasingly uncertain economic climate, no company, large or small, is immune to failures. Dotcom was once considered as the business model to go for, only before people realized it was more hype than reality. In more recent times, sub-prime mortgage collapse has shown how impact from one disaster could soon trigger a worldwide slowdown. Bollywood movie industry is among the most prolific, if not the most creative, in terms of coming out with the number of movies each Friday, but most of them don't survive until the next Friday. On a smaller scale, companies trying out new and innovative products or ideas also have similar exposure to risks – would youngsters like this new model of motorbike ? would housewives like the new detergent being promoted ? would patrons like the new restaurant in the neighborhood ? would students find the new MBA program of this

college attractive enough ? and so on. There is an element of uncertainty in pretty much every human endeavor.

A manager must accept such uncertainties as part of the role, and must constantly work towards using the uncertainty to the firm's advantage, and in a bigger sense, for society's good. When we look back in time, most successes happened when the future was uncertain. Did IBM know if the world would embrace Personal Computers ? Did Toyota know the world would need a hybrid car in 1997 ? Did Google know its search engine would succeed when there were already established big players ? Do pharmaceutical companies know if their billion-dollar research would lead to the new drug for cancer ? There is always a certain amount of uncertainty, but let it not get the better of you. The best managers take uncertainties as part of the game and evolve their strategies around them. What is important is to have faith in oneself, conviction in one's ideas and courage to step into uncharted waters, and display a lot of perseverance to stay in the game. Courage doesn't really end by just taking the plunge – one must follow through the entire business cycle. If things were really simple and predictable, there would already be a lot of people trying their luck, and by definition, when there are a lot of players, the relative differentiation they can offer reduces. However, when things are tough and unpredictable, not everyone who enters the fray gets to cross the finish line, and by definition, any such effort is not only personally satisfying, it also gets amply rewarded. So, don't run away from uncertainty, for it is uncertainty that makes the work more challenging and worthwhile.

## **6. If a problem is left unsolved and the superior is uninformed, neither Kaizen nor cost reduction can be applied**

*“Of all places, it was the American supermarket that inspired Taiichi Ohno's famous **Kanban System** on the production line. In the early 1950s Ohno observed how customers only picked up the number of items they needed from the grocery store. In turn, the supermarket replenished the supply — at the right time and in the required amounts. This got Ohno thinking about how to eliminate waste on the production line.*

*Back then, parts moved to the next stage as soon as they were completed. Employees didn't communicate with each other about their needs. But Ohno realized it would be more efficient if an employee in the later stage of the process informed a worker in the previous phase how many parts he needed and when. With Ohno's "supermarket formula," only enough parts were produced in the former phases to replace what was used in the next.*

*At first, parts shortages and line stoppages happened frequently because floor employees weren't used to the method. But Ohno didn't worry. He emphasized the importance of locating the cause each time a problem occurred. It then became clear to the person in charge of each stage that there was an urgent need to adjust the production speed and improve the process.”*

Many of us wrongly believe that it is the job of an employee to bring problems to the attention of his manager, and it is the job of the manager to solve those problems. Nothing could be further from truth! The job of an employee is to bring solutions to the notice of his manager. A jobholder, operating at whatever level in the organization, is in the best place to look at the problem and identify way(s) to fix it.

Kaizen is not about a senior quality manager sitting in his office making powerpoint presentations about a three-year strategy to improve quality. It is all about every employee in the chain making all-out efforts to look at every problem, ask five 'whys' (more on that later in this paper), identify the root cause and take adequate action such that there is a permanent fix and not a temporary workaround. A top-down strategy works only when a supporting bottom-up practice is wholeheartedly practiced alongside. Among other things, it also empowers every jobholder to become more responsible for his assignment, and summon all resources required for him to solve the problem without getting into the time-consuming process of escalating the problem to his manager, hoping that would expedite a solution. Learn to accept that your role entails fixing problems and not merely reporting them up the hierarchy.

## **7. Unless we establish a unique pattern of control and organization, no amount of financial resources will be sufficient**

*"Unfortunately, overall efficiency was not as good as expected because the output differed among the various processes. Undeterred, Kiichiro wrote the words "Just-in-time" on a banner and hung it on the wall. "People talk about having missed the train just by a minute," he said, but of course it's possible to miss a train just by a second. What I mean by 'Just-in-time' is not simply that it is important to do something on time, but that is absolutely essential to be precise in terms of quantity and not, for example, produce something on time but in excess, since excess amounts to waste," he said.*

*"An automobile consists of thousands of parts, each one essential for building flawless, complete vehicles," Toyoda said. "It is no easy task to coordinate their assembly. Without perfect organization of the assembly process, even a mountain of parts fails to become a vehicle. For the task of coordinating the assembly of thousands of parts, we must design a unique pattern of control and organization. Unless we establish a unique pattern of control and organization, no amount of financial resources will be sufficient."*

Many people believe throwing in a lot of money or a resource, or both, is the right way to solve a problem. While it might be true that a lot of problems get aggravated for lack of one of these two, it is far more important to remember that a surplus in resources almost invariably leads to overlooking the root-cause of the problem. A project might be delayed for a variety of reasons, but adding manpower, as Fred Books taught us several decades back, could be like adding fuel to fire. There is a very famous software company, among the largest in the world, which reportedly never

staffs its projects more than 90%. The idea is not to make people suffer by working overtime, but create an opportunity for the team to explore how to improve its efficiencies which only happens when there is a scarcity of resources. Similarly, when E Shreedharan was asked to takeover Delhi Metro, it was already running late. Before doing anything else, he reportedly pulled-in the project dates by one month ! While I am not advocating that creating an artificial or forced scarcity of resources is the only, or best, way to pressurize the team into higher performance, I am illustrating the point that very often, there are systemic inefficiencies that we tend to overlook, especially when we have resources in plenty.

When there is an abundance of resources, not only do we get waste in the process, we also never get an opportunity to achieve hyper-performance from teams. In such conditions, the project, or such organization, only becomes like a virtual black-hole – every time there is a problem, the management of the team demands more money or resource, without really guaranteeing if they are any closer to solving the problem. On the other hand, a ‘lean’ team operates under a unique pattern of control and organization, carefully looking at each stage of the process, questioning why it should be part of the value stream. Develop the habit to do with less – it has lifelong payoffs.

## 8. Eliminate muda, mura, muri<sup>2</sup> completely

*At each worksite, groups were formed to find ways to rationalize operations always bearing in mind Ohno's words, "eliminate **muda, mura, muri** completely." Out of these discussions came the **Kanban** system as a means of improving communication between processes and the **andon** system. The **andon** cord empowered workers to stop the entire production line if any complications arose, thus adding a human check to **jidoka**. **Andon** boards also informed workers of the whereabouts and nature of the problem.*

This is probably the lynchpin of Toyota's production system, and certainly among the most marketed of its slogans. There is an almost maniacal focus on eliminating all forms of waste from the system. And this system is not just about setting one-way expectations from workers to achieve that, it is also empowering them to take such decision (for example, to stop the production line when there is a defect, whatever the cost of production downtime it might entail) and facilitating them (instead of running up to the supervisor each time there is a problem, the ‘andon’ cord is available to each worker to be pulled to stop the production line each time he sees a problem).

We often use the term ‘red-tape’ to indicate the amount of management overhead in a process. While it is perfectly possible that when the system was created, someone felt it was required for a certain reason, whereas that reason doesn't exist anymore due to advances in technology, or marketplace of some other business reason. As a jobholder and also as a manager, we are responsible to not just use the process to achieve intended business results, we must also identify

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<sup>2</sup> waste, unevenness, overburden

such wastes and work towards eliminating it completely. Look for such waste in any rework, any repetitive activity, any overproduction, any inventory, any unnecessary movement of people or material, or any unnecessary lead time – your ability to uncover such waste will improve as you get in the habit, and what might seem as beyond control to you initially, you might eventually be able to reduce, even minimize, such defects with sustained efforts.

## 9. Ask ‘Why’ five times about every matter

*“We come across problems in all sorts of situations in life, but according to Taiichi Ohno, pioneer of the Toyota Production System in the 1950s, “Having no problems is the biggest problem of all.” Ohno saw a problem not as a negative, but in fact as “a kaizen opportunity in disguise.” Whenever one cropped up, he used to encourage his staff to explore problems first-hand until their root causes were found. “Observe the production floor without preconceptions,” he would advise. “Ask ‘why’ five times about every matter.”*

Mistakes are a part of life, and every workplace. As human being, we don’t want to look bad in front of our teams by making mistakes, so I don’t think anyone really believes people make mistakes willfully. There might be a small percentage of such people, but let’s focus what happens when good, well-intentioned people make mistakes. Most often, such mistakes happen because of systemic issues, or inadequate training, lack of communication, etc. A common way to solve problems is to take whatever corrective action fixes the problem fast enough and then move on. However, it is important to not stop at taking that corrective action but to go under the surface and find out the real root cause. Only when the real root cause has been addressed, can we expect that similar defects (or symptoms of that root cause manifesting itself as a defect) are not likely to recur. In Toyota’s experience, asking ‘Why’ multiple times, five times to be precise, helps one get to the core of the problem and uncover the real issues. While ‘five’ must not be taken as a dogma, it is important to understand that real issues start surfacing only when deep-dive analysis is performed.

As a manager, cultivate the habit of peeling the layers of onion until you have the real root-cause in front of you. Don’t offer a quick-fix solution to the visible symptom of a problem – it not only stops you from going deeper to uncover the real problem, it also potentially delays what could be a bigger problem. Begin by asking ‘why’ five times whenever you see a problem, and don’t settle for anything until you have found the real root-cause.

## 10. Trust is key

*“With sorrow in his heart, he explained the circumstances to his workers, which led to 1,600 voluntary retirements. Management then vowed that this would be the first and last time such an event would come to pass at Toyota, and, in a gesture of respect to former employees, Kiichiro resigned from his position as president of the company. This act marked a new beginning: with neither money nor*

*facilities to its name, the company concentrated on nurturing its one remaining asset — its people. Toyota was able to recover by relying upon the invaluable resource of associates' knowledge and skills, with the lessons it had learned providing firm foundations for future growth.”*

Every country, industry and company has economic cycles. There are boom times, but not forever. They follow periods of recession and uncertainty. During such periods of uncertainty, a kind of paranoia grips the workforce, especially when news of mass-scale layoffs, company scandals and bankruptcies abound. Employees start feeling vulnerable about any possible danger looming at their jobs, and view every communication from the management with suspicion and try to read the fine print. Employers react to such measured responses by employees as an act of mistrust. Even though no one is at fault, the end-result is detrimental to business interests for both – while employees leave, hopefully for greener pastures which is questionable considering that similar situations exist at other companies also, the employer suffers in terms of reduced productivity and motivation levels in the remaining employees. As a manager, you have a big role to play in such a situation.

You must view the situation with compassion but without judgment. It is only fair that employees feel anxious about things. Take stock of the situation, talk to people and establish credibility by listening to them. As a manager, you have the opportunity to help people by formulating what would be a good response from management to such situation and take it up with your management. Your role as a bridge between the management and employees is most critical in building a trust between these two generally mistrusting parties and making them see the problem from each other's eyes. While there is no guarantee that your suggestions will all be accepted, the act of your efforts will improve the trust-building process for all stakeholders, not to mention improve your own personal credibility as a good corporate citizen and a caring manager. Even if not all things can be done, people will understand things that can't be done as long as you are able to communicate them with reasonable explanations, their disappointment notwithstanding. Meanwhile, management will view you as someone who has ability to connect with people, and could be relied upon for good understanding of issues on the floor. This is clearly your opportunity.

## **Conclusions**

The role of a manager continues to adapt as the human society evolves. From a quintessential command-and-control manager, it has come to value involvement of a manager as someone who leads from the front and takes on newer challenges, brings new ideas, is participative, empowers his teams, communicates across the organization, understands the process holistically, focuses on optimizing efficiencies and is a lifelong learner. While functional competencies continue to remain extremely relevant, there is a big focus on skills that help a manager adapt to the situation in its sociological settings and work as a team to achieve common objectives.

We live in highly uncertain times. As I write this, the juggernaut of economic Frankenstein is on a giant roll downhill, picking up speed and volume every passing day, and anything that comes its

way is just getting annihilated. Financial giants like Lehmann Brothers and Wachovia Bank are history and the future of The Big Three carmakers of Detroit is under a big question mark. Though India has managed to remain relatively unaffected by the first wave of economic tsunami, I must caution tomorrow's managers against settling in a comfort zone. India is getting increasingly integrated with World Economy, and going ahead, we will be equal partners in sharing both, pleasures as well as pains. You have a big role to play in shaping this future.

While business school education prepares tomorrow's managers by imparting required functional knowledge and skills that enhance his performance, a manager's success in his job ultimately depends on his core values, professional ethics and sociological skills. Yesterday's models that gave unbridled powers to a manager to get the job done are obsolete. Today's workforce is highly skilled, educated, confident and knows what it wants, a trend that is only likely to get stronger in coming future. As a manager, you must undertake a journey of lifelong learning to acquire a set of non-functional skills to problem-solving that help you achieve better results on a sustainable basis. Toyota's traditions are a good starting point to that journey.

## Endnotes

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