

Ashoka Award of ISQ for 2006

Acceptance Speech by Kiran Deshmukh

December 22, 2006

Pune

Mr. Subodh Bhargawa, Dr. Arun Bharat Ram, Mr. Janak Mehta, Mr. Ramnathan, distinguished guests, ladies and gentlemen:

I am indeed honored to receive the Ashoka Award for 2006, today. I wish to thank the Governing Council of Indian Society for Quality for choosing me for this prestigious award. This award certainly puts a lot of responsibility on me, and I hope that I am able to live up to the honor bestowed on me.

While I understand that this award is in recognition of my role in promoting Quality Management in India, I acknowledge that this honor is entirely due to the nearly two decades of work done at my *karmabhumi*, Sona Koyo. The award, therefore, goes to the 1,300-strong Sona-Family.

On this occasion, I would like to pay my gratitude to all the members of Sona Koyo, who made it possible for me to be worthy of these laurels. I would also like to pay my tribute to the several gurus who taught me the way forward and guided my path. It is because of their abilities to transfer their knowledge effortlessly and their limitless patience, that I have been able to do—whatever little—in diffusing quality management practices in manufacturing.

Let me then share with you my journey of nearly twenty years. These have been twenty years of learning and unlearning. Being rational at some times, and being crazy at other times. Every moment was, nonetheless, as exciting as ever.

The year was 1985. It was the dawn of Indian automotive industry. The new generation vehicles about to be introduced in the market needed new generation components and systems. A few of us, engineers, set out to establish a world-class facility to manufacture new generation steering systems under the leadership of a visionary entrepreneur, Dr. Surinder Kapur. Unfortunately, none of us knew what world-class meant. But we all had a passion to create something unique.

1980s was a different time. The License Raj reigned, imports were restricted, and economy was at its worst. India was definitely not on the agenda of Japanese companies. Thanks to a bad experience they had before with an Indian company, we received very little support from our Japanese partner, Koyo Seiko. We had to set up the new company, completely on our own.

I visited Japan for the first time in early 1986. That visit was an eye opener. I had read and heard several things about Japan and Japanese manufacturing. But, 'seeing was believing'. That visit made a deep impression on my mind. We must create a company in India that is similar to those I saw in Japan, I thought.

We did set-up Sona so that it would be like a Japanese company. Unfortunately, we tried to replicate what we only saw in Japanese companies. We could not replicate what we could not see in those companies. So, while Sona's manufacturing processes and equipment layouts looked like a Japanese company, it did not have the Japanese soul. But I will talk about this soft aspect a little later.

The company was established on the foundation of three beliefs, which are the guiding principles even today. They are: (1) Respect for the individual, (2) Service to the customer, and (3) Excellence in the pursuit of our goals. We were all wearing the same uniform, eating the same food in one canteen, and sitting in an open office.

As early as 1988, we used to have a weekly suggestion meeting, where any employee could come up and read his or her suggestion.

These early years were rewarding as the market was growing and we were putting more and more products in our portfolio. There was virtually no competition as we were all protected by our manufacturing licenses.

But this was not to last for long. In early 1990s, Indian Government opened the doors to foreign companies and laid a roadmap of liberalization. Sensing the winds of change, we set out a mission to become a world-class quality company. We benchmarked ourselves against some of the leading automotive components manufacturing companies in the world. And we established a three-pronged strategy: (1) Implementation of the

Toyota Production System, (2) Upgrading our suppliers, and (3) Training and educating our employees.

We requested Koyo to help us in the first element of our strategy. Koyo, who had changed its view about India because of the relationship we built over about five years, agreed to oblige. Koyo dispatched its expert on TPS, Mr. Minoru Tanaka. And then began a new journey.

Way back in 1974, when the Japanese Industry was badly hit by the infamous oil crisis, Toyota decided to teach Koyo how to produce its products at low cost. A team was set-up to learn this new technique from Toyota, and Mr. Tanaka was made its leader. For six months, Mr. Tanaka's team learned Toyota Production System from none other than the great Mr. Taiichi Ohno, himself.

I was fortunate to learn this unique production system from a student of Mr. Ohno. Mr. Tanaka was a tough teacher. Like Mr. Ohno, he would expect us to stand in a 'Ohno Circle' for hours without a break and observe to see how we could reduce the burden on the operator. It was Mr. Tanaka, who taught me that the operator, who adds value to our products, who earns salary for all of us, must be at the center of all our activities. We must look upon him as our bread earner, and do our utmost at all the time to make his work easy.

In the three years that followed, we renovated our production system. We developed single-piece-processing-at-a-time system and a system of leveled production. We reduced changeover times drastically, created autonomous cells, and introduced the Kanban system. We empowered the shop-floor operator by providing him real time information through Andons, and helped him produce defect-free products by widespread implementation of pokayokes.

The results of all this were astonishing. From 1992 to 1997, our turnover increased more than three times, but our manpower increased only by about 15%. And this was achieved without any major capital investment. Productivity on our main product line increased 2.47 times in about five years.

We had now begun instilling that Japanese soul in our company.

1998 is an important milestone in the history of Indian manufacturing. Sundaram Clayton successfully challenged for the first time in India, the coveted Deming Prize. In the same year, Maruti decided to upgrade its suppliers using the well-proven methods of the Japanese TQC, now well known as TQM. Dr. K. Kumar of Maruti was a driving force in collecting—with the assistance of CII—a group of ten companies who would work together learning the TQM methodologies and improving their operations. And the person who helped Sundaram Clayton in its quality journey was to guide these companies. We were again fortunate to be selected as one of the members of this cluster. And we were fortunate to begin this new journey of TQM under the able guidance of Prof. Yoshikazu Tsuda.

The new cluster approach was unique. We would learn from Prof. Tsuda, and we would learn from each other. Prof. Tsuda would come to India once in six months. He would visit each of the ten companies, and we would accompany him wherever he went. For almost two weeks, I would be away from my Plant. But for something as important as TQM, this kind of commitment was essential.

There were several advantages of the cluster approach. Prof. Tsuda's comments at every company—no matter if it was a glass manufacturing company, or a foundry, or a brakes lining manufacturer—were equally valid for our own company. Thus we could get many instances of learning in a short time. Many companies were doing much better than us, and hence we had an opportunity to learn a great deal from them. The cluster approach also established a constructive competitive spirit among the companies, so there was always a reason to do better.

In a short period of two years, we learned and implemented many tools. We simplified our operations through standardization, exactness, and visualization. We learned statistical and other problem solving methods and began doing gap analysis in our daily work. We strengthened our management structure through implementation of the system of responsibility, authority, and accountability. Managing Points and Checking Points became the tools of managers to manage their functions effectively.

Exactly two years after we began this exciting journey, Prof. Tsuda shocked us by announcing that he wanted to dismantle the cluster. While we were all enjoying this togetherness, he said to us that he believed that the cluster had outlived its purpose. He explained that unlike in the beginning, now different companies had reached different levels of maturity. As a result, he reasoned that the cluster had moved from a 'give-and-take' phase to 'give-and-give or take-and-take' phase. We were also moving on to more strategic and deeper technological issues in our discussions. Due to the confidentiality, he believed that every company should go on its own in its journey. We were sad, but accepted our guru's advice to abandon the cluster.

Sona, however, continued its journey with Prof. Tsuda, thereafter. In fact, his visits now became more frequent, and for a longer duration, each time. We were able to discuss many issues, which otherwise we might have been shy to do. Prof. Tsuda's guidance also became more focused for our specific needs.

The inflection point in our TQM journey came when we initiated what we call the Group Kaizen Activity. Sensing our unique conditions, we judged that the voluntary quality circle activity might take a long time to take roots in our company. It may sound strange, but we decided to implement a mandatory activity of involvement. We made 64 groups covering all our employees. The entire company would meet in different groups for 30 minutes every Wednesday. Each group was asked to take up an issue of their concern, and was asked to solve the problem in three months. We began monitoring the attendance of such meetings, and implemented measures to ensure that everyone works in these groups.

We, of course, established an infrastructure to ensure this. We trained a large number of people in problem solving tools and the seven-step QC problem solving method. We provided places for the teams to sit during the Kaizen activity. We also established an organization consisting of team leaders and facilitators. Finally, we set up a process of evaluating work done by each team and a system of rewarding the best performers. The best team of a quarter goes to an amusement park with their family members; they have lunch with the top management. The best team of the

year is sent to Japan to participate in Koyo's global quality circle competition.

The activity that was started as mandatory has slowly become voluntary. Today, people stay back beyond their assigned thirty minutes to complete their work. Kaizens carried out through this activity stay permanent. Thanks to this activity, today we have several lines that have zero defect or zero breakdown for as much as three to four years.

TQM helped us not only in upgrading capabilities of our shop-floor employees; it also helped us create unique technical capabilities in our engineers. Through the application of Deep Analysis, we have been able to generate new knowledge in the company, and this knowledge has culminated in us developing new products that provide value to our customers. In last four years, we have been granted two patents and have applied for another five.

Two years after the cluster was dismantled, Prof. Tsuda—based on our performance in application of the TQM practices and our business results—recommended us to go in for the Deming Prize. When we began this journey, Deming Prize was nowhere on our radar. Now it became a goal to pursue.

In late 2002, we underwent the Diagnosis by the Deming Committee. The results of diagnosis changed our mental setting from present to future. The examination process, beginning from diagnosis to the final examination, mobilized the entire organization and we achieved outstanding results very quickly.

In a short time of one year, our in-house rejection reduced to a factor of 0.28, and customer returns reduced to a factor of 0.18. Operator efficiency improved by 9% in six months, and our profit before tax improved from 3% to over 8%.

The hallmark of Indian TQM, as observed by Deming Prize Committee members, is its integration with TPM. Most of the Deming Prize winning companies in India have used TPM for speeding up TQM activities on the shop floor. TPM techniques have been made to complement TQM practices rather than conflicting with them.

We set a target of achieving zero defects, zero breakdown and zero accidents in our operations with the help of TPM practices. We involved our operators in maintaining their machines and thereby helping in eliminating defects and breakdowns. Cross-functional teams started a company-wide campaign to identify and eliminate wastes on the shop floor. Our employees are, now, able to anticipate possible accident areas and they are continuously working to make our factories safer to work.

November 11, 2003 was a historic day in Sona's journey. It was the day on which Dr. Kapur received the Deming Application Prize in a ceremony in Tokyo on behalf of the 490 members of the Sona Koyo family. Here was a small, young and struggling company, transformed to a dynamic, energized, confident and thinking organization, ready to enter the global markets.

November 11th that year was historic also for another reason. It was on this day, that Dr. Kapur and I met Prof. Shoji Shiba in Tokyo during the Deming Award ceremony. I had read Shiba-san's books on TQM and had used them extensively in the training that I was conducting in the company. Some discussions on that day, and several follow-up correspondences between him and Dr. Kapur finally resulted in him agreeing to come to India and guide a community of companies on his methods of breakthrough management.

So, in July 2004, the first learning community of Prof. Shiba was formed and we became the founding member of the community. Through classroom training, mutual visits, workshops, and visits to benchmark-companies, Prof. Shiba demonstrated to us the need for breakthrough management and the best practices in managing breakthroughs. In this rapidly changing business environment, incremental improvements are not sufficient. To face the many challenges of the 21st century, we need to develop different skills and different mindset. And we need to build an ambidextrous organization in which different types of management practices coexist.

While process control is the job of the frontline operators and continuous improvement is the job of the middle managers, it is the responsibility of the top management to lead breakthroughs in a company. So my senior colleagues and I went through the

program of skill development. We created more than ten what Prof. Shiba calls 'real change leaders' who developed the skills of conceptualizing so that they could see not only the visible, but also the invisible and the unknown. Through this training, these leaders are able to sense problems proactively and formulate problems based on the exploration of the sensed problem.

We have learned how to cope with the new paradigm of innovation. These efforts have resulted in us developing some completely new products for completely new markets. We now recognize that the way forward is not only delighting our current customers, but also creating new values for our current and future customers.

The business environment has changed a great deal over the last twenty years. The way business is done is also changed in these years. Definition of quality has changed, and so have the methods of quality management. The true meaning of quality management is recognizing those changes and altering our ways to suit them. The basic philosophy, however, should be that whatever we do must be scientific and must have a purpose behind it.

Ladies and gentlemen, I have tried to chronicle my journey with quality management. As I said before, every bit of this journey was enjoyable and rewarding. But it would not have been possible without the cooperation and assistance of my colleagues, and without the guidance and direction of my gurus. I, therefore, dedicate this prestigious award to my colleagues and my gurus.

I once again thank the Governing Council of the Indian Society of Quality for finding me worthy of this award, and assure you that I will do my best in furthering the cause of quality in the Indian industry.

Thank you, ladies and gentlemen!