



## 9<sup>TH</sup> D. L. SHAH MEMORIAL LECTURE

on

“Revolution of Quality & Productivity in Japan”

by Dr. Shrinivas Gondhalekar, Director, Kanzen Institute Asia-Pacific Pvt. Ltd.,

### Lecture Proceedings

Nineth D.L.Shah memorial lecture was held on Saturday 24 th February 2018 in the afternoon at hall of harmony, Nehru centre, Worli, Mumbai-400018.

Mr.Santosh Khadagade, Vice President, NCQM invited all dignitaries and chief guest to come on the Dias and occupy their respective seats.

Mr. Mahesh V. Gandhi, Trustee of NCQM welcomed the guests who included among others, learned speaker Dr. Srinivas Gondhalekar, Mr. H.K.Taneja, Trustee of D.L.Shah Trust(DLST), Mr. Khushroo Khambata, CEO of DLST, Dr.H.M.Mehta, Trustee of NCQM and Mr.B.Banerjee , President, NCQM.

Mr. Gandhi gave an update of NCQM’s activities and achievements over the past 32 years. Mr. H.K.Taneja gave an update of D.L.Shah Trust for Applied Science & Technology, Arts & Philosophy and its activities.

Mr. Banerjee introduced the speaker whose brief CV was already available in the invitation letter itself.

To start with, Dr.Gondhalekar (popularly known as Dr.G) highlighted global presence of Kanjen Institute.

I am summarizing below “learning points” of his talk and also experiences I had while working with him for a long time. He started off by saying that Quality improvement is the first step for an organization to become World Class.

It commences with early detection and elimination of defects.

With the help of some volunteers, Dr.G demonstrated the importance of single piece production over batch production in preventing defects through timely detection and feedbacks. He also made a video presentation highlighting productivity improvement in U-shape layout over normal linear layout.

Then he focused on problem solving approaches with the quote

“It is impossible to solve significant problems with the same level of knowledge that created them”- Albert Einstein.

He reiterated that root causes of any problem can be found through inductive logic which uses forward thinking approach. It generalizes from a specific one such as cause & effect analysis. Deductive logic, on the other hand, relies on backward thinking approach. The latter brings out specific causes from a maze of general ones through directed search.

“Differential Diagnosis” technique comes in the second category. It is perhaps the most powerful technique to diagnose real root cause(s) of chronic quality & productivity problems.

I have seen him at work in close quarters. His ability to apply the technique rapidly and carry the diagnosis to a successful completion is unparalleled.

As Prof. Masaaki Imai, Founder Chairman of Kaizen Institute of Japan puts it “the real root cause of a defect will be understood only if you are able to create the defect at will”.

Finally Dr.G narrated success stories from Toyota and various other Japanese companies and dedication of Japanese people towards perfection.

Several live case studies on application of Differential Diagnosis technique are compiled by Dr.G in his book titled “Chronicles of a Quality Detective”.

Other learning points from Japanese companies are that they

- Prefer half yearly budget so that midcourse correction can be made
  - Focus to find what is wrong and not who is wrong.
  - Don’t want to live on their laurels.
  - Prefer to quantify everything.
  - Philosophy is to know the whole person.
  - Put efforts to get people to buy into the decision.
  - Are customer centric. Their top management keeps on making proactive visits to customers.
- My personal experience is that this is the best way an organization can enhance its market share.
- Build quality into the product by strictly monitoring critical process quality parameters.

[ Compiled by Mr. B. Banerjee ]

## Synopsis of Dr. Shrinivas Gondhalekar's speech

Names such as Deming and Juran are well known in the field of Quality Management. They made a significant contribution to showing the path to the Japanese industry towards better Quality just after World War II. What is not perhaps so well known is the silent revolution that occurred in Toyota Motor in Japan, just after World War II. It was led by Taiichi Ohno, Shigeo Shingo, and their likes. They transformed the whole approach to Quality taking it from control to prevention of defects. They called their system 'Jidoka', which roughly speaking can be interpreted as preventing quality defects from occurring at all and from passing downstream. This system reverses the age old paradigm, and establishes that improvement in Quality leads to reduction in costs. If improving Quality does not reduce costs, it suggests that there may be a misinterpretation of Quality.

There are three aspects to Quality: Customer Needs, Standards (Specifications), and Conformance to Standards. Many Quality Managers focus on the third aspect. ISO 9000 and other series are a well known aid in this, demanding that whatever standards be laid down, there needs to exist evidence of conformance to the standards. However, the aspects of ensuring that customer needs are correctly identified and converted into standards and specifications tends to remain a weak area. So also confirming that meeting the set standards does indeed result in customer needs being met is at times neglected.

Designing standards which go beyond customer needs gives an impression of raising the quality, but it is not really so. As Juran neatly summed up, 'Quality is Fitness for Use'. That's all. Introducing additional features and raising the specifications beyond customer needs only increases the cost, not the quality. Deming had a deeper view on this. He defined quality as 'Pride of Workmanship'. His definition did not refer to the product but to the producer. In a sense, it is a great definition because pride of workmanship will never allow a person to deliver something unfit for use.

How to ensure that the producer does not over deliver or under deliver? Jidoka comes in handy. Here, the producer is required to raise a flag when in doubt or when a problem occurs. The improvement over traditional management is that it requires signaling at the onset of the doubt or problem. The signal is a non invasive one, which enables the supervising persons to attend to the problem without getting constantly disturbed in their other work. Signaling at onset drives the conformance of quality at its source. Poka yoke or mistake proofing is an approach to devising simple ways to ensure that a defect cannot occur at all. When "Quality at Source" is practiced, the costs come down.

In conclusion, we can say, "why should Quality be raised", "because costs come down!"

## Few Snap Shots of the Memorable Event



Mr. H. K. Taneja, Trustee D.L.Shah Trust and Dr. Shrinivas Gondhalekar (Speaker) garlanding portrait of Late Shri D. L. Shah



Mr. Taneja welcoming Dr. Gondhalekar with a lucky tree



Mr. Mahesh V. Gandhi, Trustee NCQM briefing NCQM's activities & achievements to the audience



Mr. Taneja briefing activities of Shri D. L. Shah Trust to the audience



Mr. B. Banerjee, President NCQM introducing the speaker



Dr. Shrinivas Gondhalekar delivering his speech



A section of large audience



Another view of the audience engrossed in the lecture



Question / Answer session is in progress



Mr. Taneja presenting a silver plaque to Dr. Shrinivas Gondhalekar



Dignitaries on the dias  
L-R – Dr. S. V. Viswanathan, Mr. Santosh Khadagade,  
Dr. P. K. Banerjee, Mr. B. Banerjee,  
Chief Guest Dr. Shrinivas Gondhalekar,  
Dr. R.H.G.Rau, Mr. Mahesh V. Gandhi,  
Mr. Khushroo Khambata, & Prof. B.V.R.Murty



Dr. S. V. Viswanathan, Hon. Secretary, NCQM  
proposing vote of thanks