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National Institution for Quality & Reliability

NATIONAL HEAD QUARTERS

Chennai, India



Dr. ADIL ZAINULBHAI
Chairman, Quality Council of India (QCI)

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National Institution for Quality & Reliability

National Head Quarters

Round Table House, First Floor

No. 80, Nungambakkam High Road, Chennai - 600 034.

Phone : +91-44-28271530, E-mail : niqrhq@gmail.com Website : www.niqr.in



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Editorial



This issue brings out very pleasant news on the appointment Dr. ADIL ZAINULBHAI as the Chairman of QCI. Quality professional and people at large expect a revolutionary change in the attitude and action of the providers of services and manufacturers of products through continual improvement and innovations. One of our members, Dr. V. Swaminathan, has gone to the den of the lions of Quality to present a paper in ICQ Conference at Tokyo. The paper has the summary of many quality initiatives and tools used in TQM. 5S is known to most of the Quality professionals. The sort and informative article gives the essence in nut shell. The theory on Quality Function Deployment, -House of Quality, is presented with a case study for easy understanding of the subject. The article on HR Excellence and TEI is an excellent guidance to build a TQM organisation and support "Make in India" programme. The article on Hazard Identification Skills and Techniques for safe work places will be a good guide for those who are interested in safe environmental condition. A student project on Value Engineering gives the step by step approach with a good old case study.

Meticulously planned National Convention and the Award function went on very well and appreciated by all the participants. The list of Award winners is given in this issue and we expect that it will motivate others to challenge for these Awards.

The editorial committee is looking for more case studies rather than theoretical articles. It will be very useful for the nation and society if the actual experiences gained by corporate companies as well as SMEs are shared with fellow organisations. We solicit your feedback to improve the Quality of the Journal.

- A. Krishna Swami

Contents

Editorial	03
Message from the National President	04
Adil Zainulbhai - A. Krishna Swami	05
Road Blocks for 5S Implementation and Sustenance <i>Dr. A. Sanjeeva Rao</i>	06
RBL Trichy – Journey in HR excellence through TQM / TEI	08
End to End Strategy for Enhancing Competitiveness <i>Dr. V. Swaminathan</i>	12
Improving Hazard Identification Skills and Techniques for safe work places <i>R. Ravichandran</i>	20
House of Quality - C.V. Gowri Sankar	24
Value Engineering - A Case Study <i>Prof. D.R. Kiran</i>	33
QC STORY	39



MESSAGE FROM THE NATIONAL PRESIDENT, NIQR



Warm Greetings to all our beloved NIQR Members,

Year 2015 has given a good start for many Indian Industries & it looks like "Ache din aagaye hein". India is expected to grow at a much faster rate in the coming years and it gives us at NIQR, lot of opportunities to contribute to this growth story.

Many of us would have read the book by Jim Collins on 'Good to Great'. This book talks about how good Companies become great Companies by following few simple steps strongly & effectively. Some of the steps suggested are :

- ◆ Put the right people at the right seat in the right bus (Analogy to Business) - Focus on passion, skill, attitude & assignment matching with skill set.
- ◆ Choosing the core / focus area by looking at the intersection of 3 circles namely :
What you are "Best at"
What will be the most profitable segment / activity?
What the Team is passionate about
If one chooses to focus on the Business/Segment which is common to above three aspects, chances for exponential growth are very high.
- ◆ He also suggests to make "Stop doing list" apart from usual "to do list" & follow them strictly to align the whole organization & generate momentum to reap the benefit of "flywheel effect".

These concepts are exactly in alignment with **TQM practices** wherein we drive few focused activities for breakthrough improvement through Policy Management. At **NIQR**, we should scale up our initiatives on spreading the TQM Culture to enhance the Competitiveness of our Indian products across the Globe. In this direction, it is heartening to see the involvement of young Engineers who are learning the Quality Management through Student Chapters.

Also, as NIQR is active member of QCI, we can play a much bigger role in developing skills on using Quality tools to help the industries to leverage on the "Make in India" movement & achieve Global Manufacturing leadership position.

On behalf of NIQR, I welcome all of you to participate actively & take NIQR to next higher level.

With Best Regards,

R. SIVANESAN

National President - NIQR

ADIL ZAINULBHAI, Chairman, Quality Council of India



QUALITY COUNCIL OF INDIA (QCI) is an autonomous body jointly formed in 1997 by the Department of Industrial Policy and Promotion and key industry associations.

It runs the national accreditation structure and gives accreditation in the fields of education, health and quality promotion. National Institution for Quality and Reliability, **NIQR**, is an active member of QCI.

The first technocrat appointed by Prime Minister Modi was **Adil Zainulbhai** as the Chairman of the Quality Council of India (QCI) for three years. He will be required to assist in Modi's plan, "**Make in India**", to boost manufacturing. Under him, QCI is expected to make more quality benchmarks in manufacturing and examine service sectors more actively.

Zainulbhai has ideas on how to improve upon the work of his predecessors in QCI. At the outset he has said that "We will have to do more to imbibe the quality culture in Indian manufacturing". He has been working with senior government officials and helping to improve efficiency and effectiveness of public-sector units also.

Adil Zainulbhai has authored a research paper on the promise of India's manufacturing sector, exploring how the combination of rocketing domestic demand and the multinationals' desire to diversify their manufacturing footprint offered local product makers a once-in-a-generation opportunity to emerge from the shadow of the country's services sector.

Adil studied mechanical engineering at IIT-Bombay in the 1970s. Next, he went to Harvard Business School for a management degree. The CEO of HP, Meg Whitman and the former head of Enron, Jeffrey Skilling were his classmates. He is now on IIT's advisory board and is the president of Harvard Business School Alumni Association in India.

After his stint at the Harvard, he worked with McKinsey in the United States between 1979 and 2004 and in India till 2012, where he headed the Washington office, started the Minneapolis office and expanded McKinsey Consultancy's presence in India, steering it through challenges. Now, he is part of the board of four companies, Reliance Industries, L&T, Cipla and Network18. Besides being busy with consultancy for industries, he is also advisor or director at various Not-for-profit Trusts. Zainulbhai is a Trustee of Saifee Burhani Up liftment Trust. This trust is formed by the rich Dawoodi Bohra- Muslims and they are especially interested in rural healthcare.

The new QCI chief relishes public speaking. He is known to be in the thick of any discussion, making witty conversation often peppered with anecdote.

He speaks at important Indian and international forums, such as those of the Confederation of Indian Industry, Federation of Indian Chambers of Commerce and Industry, National Association of Software and Services Companies and World Economic Forum.

Zainulbhai has often talked about the scepticism around the country's growth prospects. "There was mounting frustration about India's potential and whether it would ever reach there. But at the same time, the underlying strengths and opportunities were fantastic," he observed in a panel discussion last year. He is also pragmatic and has said that "When you look at the development of a country and improving the lives of a billion-plus people, you can't do that in a quarter or a year or a five-year period. But over a 10-15 year period, you can actually change many things."

NIQR is quite confident that under his able and wise leadership considerable change and improvement will take place in the next three years in quality of manufacturing and services at large.

- A. Krishna Swami

Road Blocks for 5S Implementation and Sustenance

Dr. A. Sanjeeva Rao

1. What is 5S movement?

Basically it is a determination to organize the work place, to keep it clean and neat, to maintain standardized conditions and to maintain the discipline that is essential to do an excellent job in such a way the output results into internal / external customer satisfaction.

5Ss are like a mirror reflecting our attitudes and behavioural patterns. Management has to be 100% behind the program. They must be fully committed and involved whole heartedly. Everyone has to do his or her part with full commitment. It will not be easy, but it will be rewarding for the whole organisation.

2. Objectives

- To achieve effective use of space / working area.
- To eliminate wastage of time in searching of items.
- To create a pleasant work place.
- To improve overall productivity and quality.
- To reduce equipment breakdowns and to improve equipment utilization.
- To reduce maintenance cost of machines.
- To enhance safety of people and equipment.
- To reduce inventory levels.

3. Road map for 5S implementation and sustenance

- Finalization of 5S Road Map along with schedule of implementation.
- Awareness training on 5S to top & senior management / Middle management and staff / Company operatives and workmen / Trainees & contract workmen.

- Formation of steering committee and selection of 5S chief coordinator.
- Finalisation of 5S Zones and Zone coordinators.
- Taking fixed point photographs on the status.
- Identify areas for improvement and maintain 5S record of activities.
- Review regularly 5S activities & provide the resources by steering committee.
- Development of 5S work- standards / checklists/ cleaning standards/ Operating procedures/ audit checklists.
- Selection of 5S internal auditors through well-defined process.
- Two day training program for 5S internal auditors to get qualified.
- Release of 5S internal audit schedules regularly.
- Carryout Internal audits and develop action plans for continuous improvements and educate employees on importance of 5S.
- Development of recognition system for excellence in 5S implementation and maintenance.
- Development of 5S manual.
- Carryout half yearly steering committee audits.
- Link 5S activities with roles and responsibilities of individuals.
- Practice all the steps of 5S as a part of daily management to sustain improvements.

4. Road blocks for implementation & sustenance of 5S

- Not enough commitment and involvement by the middle level managerial personnel.

-
- No uniformity in making Zones.
 - No clear definitions of unwanted items/records in working areas.
 - Delay in decision making in clearance of items for disposal and criteria for disposal.
 - No clarity of what type of items to be covered under the red tag system.
 - Purpose for visual control not clear.
 - Delays in providing financial resources for implementation, particularly in case of second step (Orderly arrangement of items in work place).
 - Low level of standards, particularly for 1S (Disposal of unwanted items), 2S (Orderly arrangement of items) and 3S (Cleaning).
- No well-defined item by category wise activities by the Zone coordinators.
 - Inadequate participation of employees, particularly with respect to 2S and 3S.
 - No well-defined scoring pattern by internal auditors.
 - No integration of 5S activities with individual roles and responsibilities.
 - No bench marking models particularly for 2S and 3S activities.
 - No defined reward system for getting highly committed and motivated work force.

5. Conclusion:

Any Organization, which follows the road map directions highlighted above and taking care to avoid the road blocks, will achieve 5S, the work place management at very high level and able to sustain the results.

Dr. A. Sanjeeva Rao, M.Stat. from ISI - Past President NIQR - Six Sigma Black Belt, currently a consultant to many organisations.

Never mistake knowledge for wisdom. One helps you make a living; the other helps you make a life.
- *Sandra Carey.*

You cannot help men permanently by doing for them what they could do for themselves.
- *Abraham Lincoln*

Many of the great achievements of the world were accomplished by tired and discouraged men who kept on working.
- *Oscar Wilde*

Being ignorant is not is not so much a shame, as being unwilling to learn.
- *Benjamin Franklin.*