

Newsletter

# Indian Society for Quality

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Dear Readers ,

Greetings from ISQ!

Wishing you all a very happy, healthy, safe and prosperous 2026!

We hope this year will bring peace and conflicts going on in several parts of the globe will be resolved for the betterment of humanity.

We all are eager to see the trade conflicts to get settled in the next Quarter and tariff issues are resolved in a win all solution. The year 2025 was not so good for the business and ended on a more unpredictable and uncertain note, the outlook does not seem to be of any comfort either.



These are challenging times as the consequences are always born by the common man.

In this issue we bring a varied flavour in the articles and hope you will find the same interesting and enriching.

Our constant features viz. Vignettes from Ram and Quiz, which have been well appreciated, will bring you new insights.

Last quarter was very hectic for ISQ as we hosted the ANQ Congress in Bengaluru. Pre Conference workshop and Factory visit received huge enthusiasm from the participants and got excellent feedback. The organizing committee headed by Mr Chandramouli and guided by Mr Vijay Kalra, Mr Janak Mehta and Mr Ramanathan, supported by ISQ secretariat headed by Mr Prabhakar Shettigar deserve a huge round of applause for pulling off one of the largest ANQ Conference flawlessly. In person presence of Dr Kano, Prof Ando and other dignitaries from Asian Countries and Europe is a testimony of the caliber of the Conference.

You will find more details inside.

As usual glimpses of all the events and activities of ISQ from the last quarter of 2025 are included.

It is encouraging to see more contributors for the Newsletter articles, our sincere thanks to the authors who contributed by sharing their wisdom for the benefit of our readers.

We welcome more and more such Contributions.

We have attached a link to the IAQ Newsletter “CONTACT”, please do browse through as it has gem of piece.

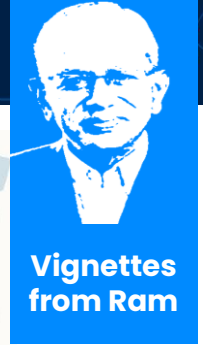
[Click here](#) to read.

Happy reading!

Ved Parkash  
Chief Editor

**ISQ Newsletter team:** Ved Parkash – Editor in chief

**Editorial Members:** Sarika V. Joshi, B. Sundara Rajan, R. Santoshi



# Quality and the Fragmented Notions of Excellence

## Quality in Modern India: The First Rise

One meaning that dictionaries give to quality is that it connotes a degree of excellence. To be excellent is to be very good, superior, or to have high standards. In Latin, you have a verb *excellere* – to surpass or to rise above. But quality is a neutral term.

It can have, as Gregory Watson would put it, degrees of badness or goodness. The ISO 9000 standard in 1987 settled on a rather mundane definition: fulfilling customer requirements, rather than call it excellence, with its fuzzy meaning. Of course, the purpose of pursuing quality remains – excellence in some form.

## Parsing the Excellence Term

The concept of excellence has historical roots. The Greek word *arete* of Indo-European origins means excellence. In the Aristotelian sense, it is about becoming our potential. The Confucian term *de* has connotations of virtue and integrity in a harmonious society. In Sanskrit we have words like *Uttamam* (perfect, excellent) or *Shreshta* (great, superior). Tirukkural has numerous couplets that express excellence, with ethical, pragmatic, and scholarly nuances. The Arabic word *Ihsan* also means excellence, especially as beauty in action.

After the publication of his book *Competitive Strategy* (1980), a still young Michael Porter took an aggressive stance against the burgeoning Quality Movement in the U.S. He would aver that quality could only build 'operational effectiveness,' not a strategic one. He was also misinformed in thinking that quality was internally bound and not defined by customer value. Management consultancies soon replaced Porter's effectiveness term with the word excellence. In 1982 Tom Peters and Robert Waterman Jr., wrote their blockbuster book *In Search of Excellence*, drawing from limited experience a slanted theory that has not stood the test of time, lacking as it does a philosophical underpinning.

Today, the word Excellence is used with tags attached, such as Business, Process, Performance, Operational, Organizational, or Management. A little reflection will show that they are not all at the same level. Business excellence – that is, superior business – is a consequence of what a company does. It is a result. Performance Excellence too is a result though not as all-encompassing as Business Excellence. Process or Operational Excellence are intermediate results of actions taken. On the other hand, Management Excellence is really about superiority in the principles, mechanisms and strategies used by a company. The phrase Organizational Excellence may fit our needs, representing both a state of being and continued evolution. The practice of TQM ought to create Organizational Excellence.

## How Companies Structure Quality or Excellence Functions

In Japan, separate sections to promote quality under the banner Total Quality Control (TQC) came into being in the 1950s and 1960s. In America in the 1980s, Quality departments 'drove' the 'quality programs' of companies which were trying to convert to the Quality Way. Indian companies took to forming TQM Cells, largely from the 1990s. Some had separate teams handling Total Productive Maintenance and Toyota Production System.

Then, Six Sigma came roaring into the scene, and Master Black Belts took charge of quality improvement, especially in multinational companies. The word 'quality' tended to get dropped and replaced by departments identified typically as Business Excellence.

In 1996, the Tata group started its Tata Business Excellence Model (TBEM) based on the framework of Malcolm Baldrige, and mandated annual assessments across all group companies. In Tata Autocomp, some of whose units have won the Deming Prize recently while still subjected to TBEM assessments, they internally refer to their initiative as one of building Organizational Excellence.

Likewise, the Mahindra group mandated a Mahindra Quality Way (MQW) based on TQM in 2008 and then morphed it to The Mahindra Way (TMW) while retaining most of the original model. This too calls for annual assessments of group companies. Mahindra companies have normally had Business Excellence departments rather than TQM cells. The Aditya Birla group follows its Corporate Business Excellence and World Class Manufacturing systems, though the activity is decentralized now.



## Quality and the Fragmented Notions of Excellence contd-

It is interesting that Indian companies (which tend to follow American management) have Business Excellence departments, a practice that is rare in America.

### National Quality Awards with 'Excellence' Frameworks

In the U.S., the Malcolm Baldrige National Quality Award was established in 1987. It is still called that, but the term quality has disappeared from the framework, which, since 2010, is labelled Baldrige Performance Excellence Program.

The European Foundation for Quality Management (EFQM) started the European Quality Award in 1992, but now it is termed the EFQM Global Award and follows its own Excellence Model. In India, many companies get themselves assessed on the CII/EXIM Award system, which is established on the EFQM model.

Even in Japan, in addition to the Deming Prize, the pinnacle of all quality awards, there is a separate Japan Quality Award set up in 1996 by Japan Productivity Centre for Socio Economic Development and run on the lines of Malcolm Baldrige. The award refers to 'Management Excellence.'

Canada, Dubai, Switzerland, UAE, Jordan, Spain, Taiwan, and New Zealand have national awards named simply after 'Excellence,' rather than quality. Malaysia has an award named the Quality Management Excellence Award. Nepal's quality award too refers to management excellence.

The Business Excellence tag is used in the national awards of Australia, Belgium, Singapore, Fiji, and the U.K. Business Excellence as a term is popular in companies in Singapore, as in India.

### Awards that Carry the Quality Tag:

The term 'national quality award' is still the dominant practice. China, Netherlands, Egypt, Indonesia, Iran, Saudi Arabia, Korea, Pakistan, Philippines, Colombia, Mexico, Italy, Thailand, Russia, Malaysia, France, Brazil, Argentina, Chile, Vietnam, Kazakhstan, Denmark, Poland, and Czech Republic are some countries and territories that administer such awards.

India has two Quality Awards – one, the Rajiv Gandhi National Quality Award, run by the Bureau of Indian Standards, a Government body, apparently suspended since 2014, and the other, the Ramkrishna Bajaj National Quality Award (RBNQA) of the Indian Merchants Chamber, which still runs. The Deming Prize, awarded by JUSE in Japan, is of course the most respected quality award in India.

Israel and Luxembourg seem to name their national awards by including both the terms – Quality and Excellence. In India, the Ramkrishna Bajaj award has a second category – below quality – and it is called Performance Excellence. The Philippines Quality Award refers to Performance Excellence too.

### Avoiding a Tower of Babel:

It is incumbent on quality professionals to prevent the meaning of quality from getting blurred by disjointed ideas stacking up around the word 'excellent.' As quality professionals, what we communicate must have meanings shared universally. Diverse adjectives to the word 'excellence' have fragmented the idea of quality.

If we must use the excellence word, it might be best to speak of creating excellence in management, or in the organization as a whole. That means a management that is principled, far-sighted, committed to customers, employees and society, adept at working with management mechanisms and improving everything. In short, bringing well-being to humanity.

### About the author:

**Mr. N. Ramanathan** is a senior counsellor and advisor of TQM. He is a Mechanical Engineer with Masters from IIM, Ahmedabad(1969) with 55 years of experience in industry, and in teaching and counselling. He is the recipient of the Edwards Medal 2021 for outstanding leadership from American Society for Quality (ASQ). Ram has received the Dronacharya Award in 2018 by ISQ for his contributions to teaching and counselling on quality. He is an Academician in the International Academy for Quality (IAQ) and serves on its Board as Vice President, and as Chair of its Examination Committee. Mr. Ram has been associated with thirteen successful Deming Prize challenges, and has taught and advised Ashok Leyland, CEAT, SRF, Indus Towers, JSW, Mahindra group of companies, Tata Quality management Services, Tata Steel, and other organizations.



## Missing the TQM Bus- PSU perspective

### Letter to Editor

Dear Sir,

It was a pleasure to read article of Shri N Ramanathan “Missing the TQM Bus – Twice” in the September 2025 issue of ISQ Newsletter. An unknown history of “Quality” and “Quality Movement including TQM” in India has been aptly unfolded by him.



Please permit me to add that during the period mentioned by Shri Ramanathan as “Missing the Bus – Round one”; somewhere around 1979 and onwards, our Country also lost a big opportunity in creating Indian Gurus like Juran and Jack Welch by not looking at excellent approaches used by the Public Sectors like BHEL – who spearheaded the Quality Movement in PSUs during the above period as back as mid/ end 70s. The Country could not visualize the benefits and recognize the efforts of such PSUs led by their leadership of Quality Department.

During that period of late 70s and 80s, Corporate Quality of BHEL used to train its Executives on QM principles through Indian Statistical Institute Chennai and publish Books/ training material with live examples, BHEL Case Studies etc for internal use in BHEL. Also, BHEL had taken authorization of JM Juran to publish extracts from his books and/ or reproduce them. *I am still having few of such BHEL publications with me. Any one will be surprised to see them.* We could not sustain such excellent approaches and lost the opportunity on capitalizing benefits of such efforts.

However, we see light at the end of tunnel. BHEL led the PSUs in embracing TQM and adopting the EFQM Model, in mid-90’s. Today we find PSUs like BEL, NTPC etc achieving excellent maturity levels on their respective journey towards Excellence through TQM. Added with such efforts of our PSUs, had we recognized the efforts of PSUs in 80s itself, the Country would perhaps have been far ahead in our “Journey Towards Excellence” and making a “Viksit Bharat”.

Regards

Atul Shrivastava

**Mr. Atul Shrivastava**, is Retired General Manager, Bharat Heavy Electricals Limited (BHEL) and Quality Management & Business Excellence Consultant, having over 50 years’ experience. He is a qualified assessor for CII EXIM Award, EFQM. He is Quality Champion of NTPC BE Model. He is President of ISQ NCR Chapter. He is a consultant for Business Growth in Public Sector Enterprises, MSMEs through Quality Management and Business Excellence principles

# A Triumph of Planning and Participation



**ANQ CONGRESS  
BENGALURU 2025**



The 23rd ANQ Congress, hosted for the third time in India (previously in 2004 and 2010), concluded successfully with remarkable participation and widespread appreciation. This achievement was made possible through the dedicated efforts of ISQ’s office bearers, its chapters, the various organizing teams, and the invaluable cooperation of ANQ member organizations.

Click here for a detailed report

**Dates:** November 3rd to 7th 2025  
**Venue:** M S Ramaiah University of Applied Sciences, M S R Nagar, Bengaluru 560054, India  
**Theme:** Quality Innovation forging a path to a Sustainable Future- “Powered by Asian Synergy”

## Pre-Conference Seminar 1 & 2 -4<sup>th</sup> November



**Seminar 1:**  
*Managing People –The Quality Way*  
 by **N Ramanathan**  
**Seminar 2:**  
*Why do we need “ Policy Management” in addition to daily Management*  
 by **Yukihiro Ando**



**Main Congress (5<sup>th</sup> & 6<sup>th</sup> November) – No of participants 460,  
 International participants – 63 No. of papers accepted for presentation - 115**

## Esteemed speakers during the Congress



**Dr. Noriaki Kano**  
 Hon. Chairperson – ANQ



**Janak Mehta**  
 Hon Chairperson - ANQ



**Dr. Duan Yonggang**  
 Chairperson - ANQ



**Dr. Wan Seon Shin**  
 Professor,  
 Sungkyunkwan University



**Dr. Yeongkong Ko**  
 Vice President of HRD  
 Institute K-water



**N. Ramanathan**  
 Counsellor QBM



**Dr. Pedro Saraiva**  
 Academician, IAQ



**Yukihiro Ando**  
 President Elect - IAQ



**Dr. Ayed Alamri**  
 President,  
 Saudi Quality Council



**Prof. Shu Yamada**  
 Hon. Director - ANQ



**Kiran Deshmukh**  
 Former CTO,  
 Sona BLW Precision Forgings



**Dr. Miroslav Drljača**  
 IAQ – Board member



**Wang Lin**  
 Vice President- CAQ

# A Triumph of Planning and Participation



**ANQ CONGRESS  
BENGALURU 2025**



## Awards and Recognition

### Asian Service Award (ASA) and ARE-QP Award

**ASA** is to recognise organisations who inspire a culture of service excellence and who can serve as role models to catalyze a transformation in service within the Asia Region.

**ARE-QP** stands for: ANQ Recognition for Excellence in Quality Practice. This award not only provides recognition to the organization performing excellent work in the field of Quality Management and Practices, it improves the visibility of ANQ as an organization promoting quality movement in Asia

Award	Organisation	Region	Title
Asian Service Award	CSG Shenzhen Power Supply Co., Ltd.	China	Data-Intelligence-Driven and Customer-Centric: Building a World-Class Electricity Business Environment
ARE-QP	CNNP Nuclear Power Operations Management Co., Ltd.	China	"One-Stop" Intelligent Management, Empowering Efficiency Upgrades in Nuclear Power Plant Maintenance
ARE-QP	"One-Stop" Intelligent Management, Empowering Efficiency Upgrades in Nuclear Power Plant Maintenance	China	"Your Power Our Care": Strive to Become a Leading Power Service Enterprise
ARE-QP	WALRUS PUMP CO., LTD.	Taiwan	Deepening Quality, Leaping Innovation: Creating an Outstanding Model in the Pump Industry
ARE-QP	National Research University "Moscow Power Engineering Institute" (MPEI), Center of Expert Programs	Russia	The EFQM 2025 Model as a Tool for Evaluating Quality Assurance Systems in Education

### Ishikawa Kano Silver Medal Award

CNNP Nuclear Power Operations Management Co., Ltd. was awarded the prestigious Ishikawa Kano Silver Medal, as announced by Mr. Janak Mehta, Chairman of the Indian Society for Quality (ISQ) and Honorary Chairperson of ANQ, during ANQ2025. Mr. Huang Qian received the award virtually on behalf of the company. This recognition honors the company's outstanding achievements in quality management and operational excellence in the nuclear power sector, acknowledging their commitment to continuous improvement and quality-driven performance.



### Felicitations of Prof. Prem Motwani

Prof. Prem K. Motwani, a leading authority on Indo-Japan relations, received the Mason Book Prize from IAQ for his work *Becoming World Class: Lessons from 'Made in Japan.'* He was felicitated by Prof. Yukihiro Ando at the closing plenary of ANQ2025. Drawing on over four decades of expertise, the book analyzes why 'Make in India' initiatives faltered despite the introduction of the Japanese production model in the 1980s, highlighting how Japan leveraged TQM and TPM to build 'Made in Japan' into a global brand and offering India a strategic roadmap for similar success.



For a detailed report visit [www.anforq.org](http://www.anforq.org) and [www.isqnet.org](http://www.isqnet.org)

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# A Triumph of Planning and Participation



## ANQ CONGRESS BENGALURU 2025

November 3<sup>rd</sup> to 7<sup>th</sup> 2025

M S Ramaiah University of Applied Sciences



# Thank you!

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# ISQ events October 2025 to December 2025

## Annual Conference 2025 - ISQ Awards Day

**13 December, 2025**  
**Venue: Hall Grand Maratha – Four Points by Sheraton, Pune**

Following the landmark ANQ congress 2025, ISQ thoughtfully condensed its flagship annual event into a one-day celebration on 13 December 2025 in Pune, continuing its tradition of Honoring Excellence, Inspiring Quality. The **ISQ Awards Day 2025**, held at Four Points by Sheraton, Pune, recognized exemplary individuals and organizations for their outstanding contributions to quality excellence in India. The event combined award presentations with seminars and success stories, adding significant value for delegates.



**Recipient of Jamsetji Tata Award**  
**Anant Goenka**

### Recipients of Harsha Award



**Anil Sachdev**



**Gowri Kailasam**



**Dr. Kaushik Murali**



**Mahesh Hegde**



For detailed report please [click here](#)

## TOPS Convention 2025 – Pune

**10 October, 2025**      **Venue: IICMR MBA Institute, Pune**

What an incredible experience it has been at ISQ Pune TOPS 2025, that had unfold into one of the most inspiring and record-breaking events ever! This year, we created history —

- ✓ 36 companies
- ✓ 80 projects (Advanced & Basic)
- ✓ 270+ participants and delegates
- ✓ 15 Jury Members

— all highest-ever in the journey of ISQ Pune TOPS!

For detailed report visit <https://www.linkedin.com/feed/update/urn:li:activity:7387824610454470656>

### Pune chapter organised a knowledge sharing session

29 11 2025

Quality Reimagined in the New Customer Paradigm

Devraj Chattaraj

## Upcoming programs

# TQM for Errorfree Manufacturing

### A Practical Approach by Mahesh Hegde

Gain insights from a seasoned TQM expert on achieving First Time Right and transforming your manufacturing processes towards Zero Defect performance using best-in-class methodologies.

#### Why this program!

- ❖ Achieving Zero Defects is a common goal but a complex challenge. This program demystifies the process by:
- ❖ Shifting mindsets through TQM principles and philosophy.
- ❖ Providing a structured, step-by-step approach to error-free manufacturing—from design and development to shop-floor execution.



**5-6 FEBRUARY, 2026**

**Venue: Tata Management Training Centre,  
Mangaldas Rd, Pune, Maharashtra 411001**

To know more and register please visit the page below

<https://isqnet.org/category/events/national/index.html>

## TOPS Convention 2025-26 NCR

A one-day contest on Team Oriented Problem Solving /improvement case studies / projects for executives from OEMs, Tier 1 and 2 manufacturing companies, process industry, academia, service sector and health care.

**14 FEBRUARY, 2026**

**Venue: Tata Power-DDL Learning Centre,  
Pocket F, Sector 11, Rohini, Delhi, 110085**

The competition is open to Executives/ Supervisors from OEMs, tier 1 & 2 companies, process and service organisations preferably from northern, eastern states. It is applicable to diverse areas of problem solving and it is methodology agnostic. Some suggested area for the Case Studies are New Product Development, internal and external Customer Concern Resolution, Productivity improvement, cycle time reduction, process capability improvement, improvement in MTBF, MTTR etc.

To know more and register please visit

[https://www.isqnet.org/wp-content/uploads/2025/12/TOPS\\_Convention\\_NCR\\_14022026.pdf](https://www.isqnet.org/wp-content/uploads/2025/12/TOPS_Convention_NCR_14022026.pdf)

## TOPS Convention 2025-26 Chennai

Date: 10 01 2026

Venue: SRM Institute of Science & Technology,  
Ramapuram Campus, Chennai

- ✓ *One Venue*
- ✓ *29 Organizations – 4 sectors .*
- ✓ *61 teams .*
- ✓ *180 + participants .*
- ✓ *10 Juries .*
- ✓ **Unlimited Learning**
- ✓ Watch out the next issue for details



# Understanding World Of Voluntary Standards *by Anil Jauhri*

There is a global practice that for products and services with health or safety or environment implications, 'standards' are mandated by law for compulsory compliance. Food and Drugs are two ready examples which are heavily regulated be it USA or India or Bhutan. Environmental regulations are another example.

In addition, there is a whole world of voluntary standards – even in regulated sectors – be it food or healthcare. These are not obligatory and its up to the businesses to decide which standard they would adopt based on the benefits it brings to them. One ready example is ISO 9001 for quality management system – a hugely popular standard globally, first published in 1987 and arguably the most certified standard today. The annual survey conducted by the International Organization for Standardization (ISO) shows that there are 1.47 million certifications covering 2.32 million sites for ISO 9001.

In the developed economies, there is role clarity – that regulation is the responsibility of the governments while voluntary standards are driven by markets and stakeholders, chiefly industry. The national standards bodies in developed economies like USA or Europe are industry led and in the private or non-governmental sector.

This is not the case in developing economies where the industry or other stakeholders were, and are, not strong enough to sustain voluntary standardization and hence governments took the initiative to establish national standards bodies. India is a prime example where the government set up the Indian Standards Institution (ISI) as a non-profit Society, which is immortalized now through the popular ISI mark, in 1947 even before independence, and later transformed it into a statutory body by enacting the Bureau of Indian Standards Act in 1986.

*Globally, standards are divided into **mandatory regulations**—for health, safety, and environmental protection—and **voluntary standards**, which businesses adopt for quality or market advantage. While developed countries maintain a clear separation—governments regulate and industries manage voluntary standards—developing nations like India rely heavily on the government to establish and manage standards bodies such as **ISI (now BIS)** and **Agmark**. India's voluntary sector has grown, with multiple organizations like **BIS, QCI, NABH, and NHB** developing their own standards, creating overlap and competition.*

## **Front Foot Forward**

**By Anil Jauhri**

*Internationally, private initiatives like **GlobalG.A.P., GFSI, and PEFC** benchmark standards and grant global acceptance. For India to achieve international credibility, even government-led institutions must align with such voluntary benchmarking systems. As India aims to be a developed economy by 2047, the government should focus on regulation, allowing the private sector to lead voluntary standardization while ensuring ethical practices and transparent oversight in certification and accreditation.*

Even before ISI came into being, India had established Agmark as a voluntary standards and certification system for agricultural commodities under the Agricultural Produce (Grading and Marking) Act, 1937.

The national standards bodies in our neighbouring countries or gulf or Africa continue to be governmental although they produce voluntary standards.

The same applies to accreditation, the system for attesting the competence of conformity assessment bodies like inspection bodies, testing labs or certification bodies say for ISO 9001. In large parts of the world, it's a voluntary activity even if owned by the government in developing countries whereas in many developed economies, these bodies are in private sector.



**Anil Jauhri**



# Understanding World Of Voluntary Standards *by Anil Jauhri contd--*

Accreditation whether as indicated above for conformity assessment or in education or healthcare is voluntary in developed economies and in private sector whereas in developing economies, it is initiated by the governments and housed in governmental institutions. However, a significant development in accreditation world was the in 2008 when the European Commission adopted a regulation 765/2008 to prescribe a single national accreditation body system. However, it continues to be largely a voluntary activity.

There is another feature which separates regulated and voluntary sectors.

Typically, there is a single regulator in a country or in a jurisdiction – we have the Food Safety and Standards Authority of India (FSSAI) for food and Central Drugs Standard Control Organization (CDSCO) or Telecom Regulatory Authority of India (TRAI) in telecom services or the state governments who have authority to regulate say healthcare sector among others.

However, in the voluntary sector, there are likely to be multiple initiatives since there is legally no bar on anyone developing standards.

Indeed, in India, we have this multiplicity present – while BIS is the national standards body, a number of standards have been developed by the National Accreditation Board for Hospitals & Healthcare Providers (NABH) under the Quality Council of India even though BIS standards exist or standards on Good Agricultural Practices (IndG.A.P.) or Good Hygienic Practices/HACCP (IndiaHACCP) have been developed by QCI even though BIS has standards on these subjects. Now the National Horticulture Board (NHB) has come up with its own BharatGAP standard adding to the multiplicity.

The same situation prevails globally – there is widely popular Germany based GlobalG.A.P. standard which is even a prerequisite for entering European market for Indian agricultural produce specified not by the governments but by the buyers. In fact, there are more than 300 plus private sustainability standards and certifications going around the world which can be seen at StandardsMap and many of these affect Indian industry – especially in agrifood and textiles sectors. Without certification against such standards, they do not get entry into developed markets.

The point to understand is that in voluntary sector, there will be multiplicity and competition, sooner or later and one has to be prepared for it.

There is another aspect.

We aim for global acceptance and in the voluntary sectors around the world such initiatives have come up naturally in private space to endorse such standards or certifications/accreditations.

There is the Global Food Safety Initiative (Home - MyGFSI) which benchmarks food safety related standards or the Programme for the Endorsement of Forest Certification (PEFC - Programme for the Endorsement of Forest Certification) for forestry related standards or ISQua External Evaluation Association (ISQua EEA) which endorses hospital standards and accreditations.

It has to be understood that if India looks for global recognition or acceptance, the concerned institutions need to subject themselves to such evaluations and benchmarking even if they are governmental, like BIS or QCI or in case of education NAAC or even regulators like NMC or NCIMS, but operate in voluntary space like accreditation.

It has to be remembered that even if it is a governmental institution, in the voluntary space, it has to play by the rules of voluntary sector.

Many governmental bodies have understood this yet some are not clear.



# Understanding World Of Voluntary Standards *by Anil Jauhri contd--*

BIS is a statutory body and yet is a member of ISO which is a non-governmental, private body. If it wishes that its standards like on HACCP or GAP should have global acceptance, it has to be open to reaching out to say GFSI. The same applies to QCI where NABH is member of ISQua EEA, which is a private body, and the accreditation Boards, the National Accreditation Board for Certification Bodies (NABCB) and the National Accreditation Board for Testing and Calibration Laboratories (NABL), are members of International Accreditation Forum (<https://iaf.nu/en/home/>) or International Laboratory Accreditation Cooperation (<https://ilac.org/>) both of which are non-profit but private bodies.

It is in the interest of the industry and the country that we prove our world class standards. conformity assessments and accreditations by accepting the challenge of such voluntary benchmarking or endorsement systems. That we should have a say in such platforms is a topic for another day! India's record in international bodies in this area is not particularly distinguished.

As we aspire to be a developed economy in 2047 and recognizing that in terms of intellectual ability and expertise, we have developed significantly since the days Agmark or ISI was set up, it is time the government and all stakeholders from industry to trade to academicians to civil society recognize the separation of roles – government to focus on regulation leaving the voluntary space to non-governmental sector rather than launching voluntary initiatives. The need in fact is to regulate the voluntary sector which is fraught with risk of unethical practices be it ISO 9001 certification or organic certification or carbon market. At best, the government may benchmark the multiple voluntary initiatives based on a transparent, clearly defined essential criteria as it has done by making a provision in the Ecomark rules to recognize other ecolabels or Ministry of Ayush is initiating under its Ayush Quality Mark programme (Ayush Export Promotion Council). We will do well to remember that when government liberalized sectors such as telecom or insurance to allow private players, it also set up regulators to exercise oversight in these sectors.

## About the author:

Anil Jauhri is former CEO of the National Accreditation Board for Certification Bodies (NABCB), Quality Council of India, where he served for over six years until 2019. With more than 45 years of experience in quality, standards, certification, accreditation, and technical regulations, he earlier worked with the Bureau of Indian Standards and the Export Inspection Council. He is a nationally and internationally recognized expert, having engaged with UNFCCC, WTO, UNIDO, FAO, APO, ADB, IFC, and others. He currently serves on the UNFCCC CDM Accreditation Panel, the UNFCCC Art 6.4 Expert Panel, the Yoga Certification Board, and chairs the Governing Council of Carbon Registry – India. He also contributes to initiatives on Ayush product recognition, sustainable coffee certification, and Green Hotel standards. As an academic, he has been visiting faculty at GIM and teaches Regulations and Standards at Tata Institute of Social Sciences.



# Applications of GAP Model in Educational Sector

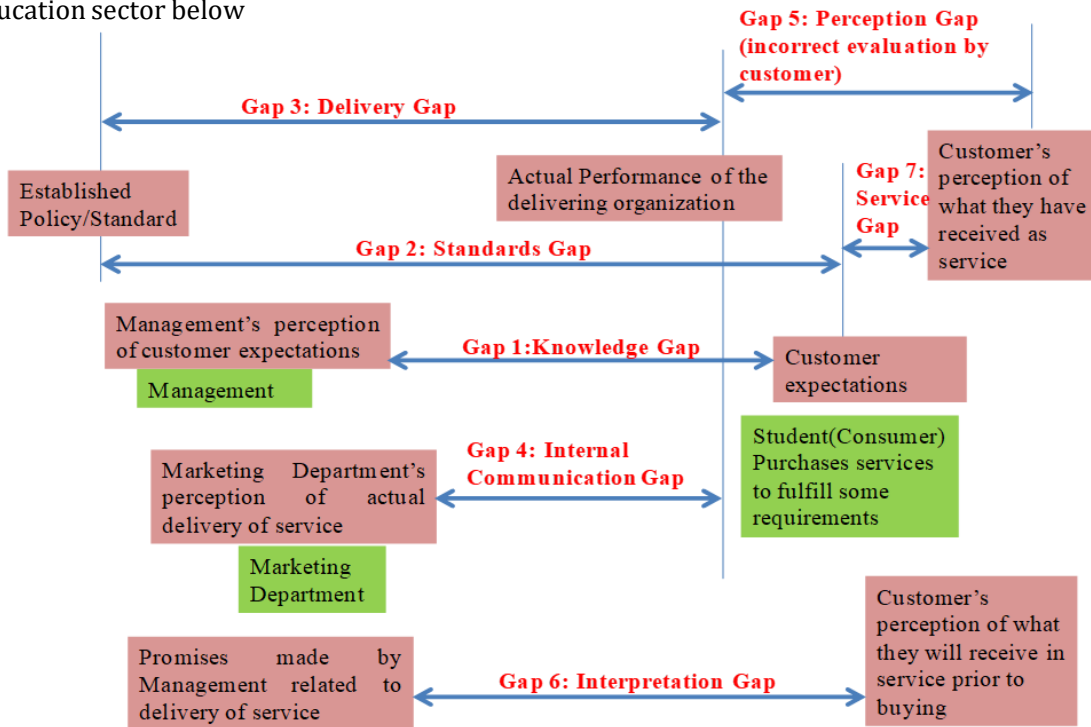
by **Dr. Joohi Chaturvedi**, Assistant Professor, Jaipur School of Business JECRC University, Jaipur



**Dr. Joohi Chaturvedi**

## 1. Introduction

All organizations are working to ensure quality management by ensuring that they fulfill the requirements of the customers. The dynamic world pushes the organizations to continuously monitor the requirements of the customers and incorporate these in their product/services. One such model to measure various gaps in the delivery, perception, expectation of stakeholders like management, customers and departments like marketing is the GAP model. This model shown in Figure 1 has 7 gaps which are elaborated with realistic examples from education sector below



**Figure 1** Gap Model (Source: Compiled from (Lovelock & Wirtz))

**1. Knowledge gap represents the gap between the service providers belief and the customer’s actual expectations.** The example here is that standard curriculum is designed for all students and students come from different background. The service provider believes that same teaching methodology, curriculum, classroom and instruction material will fulfill the needs of all the students. The learning ability is different hence there is a need to calibrate these as per the requirements of students. Every time a new batch enters to study the program their composition in terms of learning abilities, background, past knowledge is different and their expectation in terms of outcomes is same which means that they want to reach the same level of skill development .However as their learning abilities and preferred learning styles are different they might want to be taught using a different teaching methodology.

**2. Standards gap represents the gap between quality standards established for service delivery and management’s perception of customer’s expectations.** This gap generally occurs when the management doesnot understand the customer requirements well and the gap in understanding is also visible in the established standards or procedures. Example is that management feels that placements and higher education enrolment are the primary requirements of the students and entrepreneurship is not the primary requirement and doesnot focus on it. Hence, there is no policy for entrepreneurship development or nothing mentioned about entrepreneurship development in student outcome policy.



# Applications of GAP Model in Educational Sector

contd\_\_

**3. Delivery gap means the gap between what is specified in the standards and actual performance.** Example can be that firms belonging to different sectors will visit the campus but some sector employers donot conduct any drives. Another example is 100 percent placements is the promise that organization has made but the promise is not achieved.

**4. Internal Communication gap is the gap in the understanding of the marketing and sales team about what they are delivering in terms of performance and features of their service/product and what the company/organization is able to deliver.** Example can be Marketing team promotes their institute stating they have huge number of events organized at college but some events were cancelled due to low participation though they are a part of academic calendar.

**5. Perception gap is the gap between what is delivered to customers and what is actually received by them and they are inaccurate in evaluating what they have received.** Example can be that students are trained in case study method but they are not able to learn the concept well and it is visible in their internship reports. Hence, they are saying that they were not trained on same but in reality they were not able to practice well so the gap was visible in their work.

**6. Interpretation gap states the gap between what is promised by the service provider through communication before delivery and what customers believe that they will get.** Example is that the institute has promised that they will give a degree which is acceptable in India and 2-3 countries abroad but the students feel that the degree they will receive will be acceptable.

in 20 countries. The students feel that as the institute has applied for NBA accreditation so by default their degrees will be acceptable in 20 countries but in reality until institute will be NBA accredited it's not necessary that 20 countries will accept their degrees.

**7. Service gap is the gap between what the customers expect to receive and what they believe is delivered to them.** Example in this case can be students expect 24 hours doubt clarification by faculties but their doubts are clarified only when faculties are free. The time taken by faculties to clarify doubts is variable because they donot get enough time to visit the doubt clarification portal.

The gap model is a wonderful tool to analyze what can go wrong in a service or a product. If probable gaps are identified well and actions are taken to bridge the gap it will make the product/service more robust. Like Failure Mode Effect Analysis it can help in making the product or service design more foolproof.

**Table 1 Solution strategies for all gaps mentioned in Gap Model with respect to the Education Sector**

S.No	Gap Type	Solution
1	Knowledge Gap	<p>A comprehensive module using different teaching methodology catering to different learning styles of students can be designed. The solution also lies in the adaptability of the faculty to ensure students from different background are able to grasp the concepts.</p> <p>Also, different research papers can be studied for summarizing the findings based on experiments done in different fields and the areas where no research is done yet can be tapped with further research. eg: Smart classroom was successful tool in teaching maths to grade 12 students then it can be used for teaching other subjects to different grade students.</p>
2	Standards Gap	<p>Extensive surveys to understand the requirements of customers are required and accordingly resources should be planned. Here customers mean the students as well as employers.</p> <p>Employer requirements are taken yearly during the Board of Studies meeting and student requirements are taken through a survey asking them whether they are interested in placements, enrolling in Higher Education or becoming entrepreneurs. Curriculum which means syllabus and extra curricular activities focusing on physical,spiritual/emotional ,mental/cognitive and social development as mentioned in (Futurelearn) is updated based on employer needs.</p> <p>The syllabus is updated for expected learning outcomes based on newer demands made by employers. Hence, syllabus in itself is a dynamic document and simultaneously teaching methodology, the content of notes is also updated.</p> <p>It is essential to reduce implied requirements and increase the number of explicit requirements.</p>



# Applications of GAP Model in Educational Sector

contd\_\_

3	Delivery Gap	Regular audits are the mechanisms which can check whether the institute is adhering to standards or not and what is promised is delivered.
4	Internal Communication Gap	Regular surveys can be done internally asking placement cell team members to check whether what is being delivered is as per promise made or not. Eg: The placement cell team can be asked whether the mentioned 10 or 20 sector employers have visited the campus for placements or conducted placement drives .If the answer is a “no” then the marketing team can refrain from mentioning the specific sector in the brochure consisting of placement statistics. The reason for no visit by the specific sector can also be mentioned which may be recession in the specific sector or anything else. Also the marketing department can be made aware of (ASCI) code so that all promises are made and advertised as per guidelines.
5	Perception Gap	Conducting awareness campaigns for parents and students and employers can be a solution so that they evaluate the services received correctly. The conducted student and employer surveys can tell us where they have a wrong perception about the services received.eg: They can be asked a question about whether they believe XYZ college is NBA accredited. If they say yes then they can be told that NBA accreditation is not for all courses and the courses for which accreditation is received can be mentioned.
6	Interpretation Gap	It is desirable to reduce implied requirements and ensure that all requirements are explicit so that there is no confusion in understanding of requirements. Delphi method can also be used to achieve a common consensus as mentioned in (Raman & Sharma, 2004).
7	Service Gap	Yearly satisfaction surveys should be conducted where customers(students/parents, employers) should be asked whether their expectations are fulfilled. In case any expectation is not fulfilled the causes of same can be analyzed and action plan can be prepared and corrective and preventive actions can be taken so that in future the non-fulfillment is not there.

### 3.Conclusion

The above solution strategies and the use of quality assurance tools (basic and advanced) will go hand in hand. For example the root cause analysis can be done using why-why analysis, Ishikawa diagram and failure mode effect analysis for defining actions for occurrence and non-detection of a gap for technical as well as managerial problem. Statistical Process Control can be implemented where the performance of students is stable over the years. However, the above tools can be extensively used if people in the organization are trained to use them and also there is a top management focus towards quality.

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### About the author:

Dr. Joohi Chaturvedi has completed her Ph.D in HR Management and Quality Management from IIS(Deemed to be ) University, Jaipur. And Currently she is working with JECRC University, Jaipur as an Assistant Professor since 18th September 2023 in the Jaipur School of Business. Earlier she has worked with organizations like Abhinav Arts NATA Academy, Jaipur , Whirlpool of India Limited, Pune, IIM Indore ,JECRC College, Jaipur and Global Institute of Technology, Jaipur and Bosch Limited, Jaipur . She has also worked as a faculty of Environmental Management System for the BITS-Pilani WILP. She is also a visiting faculty at HCM-RIPA, Jaipur. Being a lifetime member of Indian Society for Quality and Institute of Scholars, Bangalore her broad areas of interests are Quality Management, HR Management and Mechanical Engineering.

Email Id- [joohichaturvedi2001@gmail.com](mailto:joohichaturvedi2001@gmail.com) ; [joohi.chaturvedi@jecrcu.edu.in](mailto:joohi.chaturvedi@jecrcu.edu.in)



# Metrology and Customer Connect – Measuring Trust, Delivering Excellence

by M. Naghalingam – Head of Corporate Quality & TQM  
Bimetal Bearings Ltd. , Chennai

## Abstract :

Modern business is not only about delivery. Customers buy predictability and performance. Every tolerance respected and every measurement made with discipline strengthens the brand. In medicine, aviation or automotive – a small error in measurement can become a major failure. In such cases, metrology is a promise of safety.

This article captures the essence of how Metrology can be converted from a Passive support department to a source of Competitive advantage.



M. Naghalingam

## Metrology Builds Trust

Metrology is far more than measurement & numbers.

It is the **invisible backbone** of industry. Whether it is the dimension of an automotive part, the precision of a medical device, or the weighing scale at a grocery store, measurement ensures reliability. There is a saying: *“You cannot control what you cannot measure.”*

The reverse is also true: **accurate measurement fulfils accurate expectations.**

When we measure precisely, customers gain confidence in both **our process and our product.**

\*\*\*\*\*

## Experience speaks

Many years ago, I visited a customer in Pune for a complaint in an NPD part. Inside the standards room, the customer team struggled to check a component on their form tester. Though I went there for a complaint, the metrology engineer in me wanted to help. I suggested a method, they tried it, and the result was successful. After that, the metrology team always welcomed me warmly. Even though, as a supplier, we usually expect tough reception when we visit a customer with a Complaint, **metrology created a connection.**

\*\*\*\*\*

## Customer Connect Is Strategic

Customer connect is often misunderstood as meetings, visits or transactions. In reality, it is a **strategic relationship**. How do we translate metrology excellence into customer connection?

## Customization

- Use measurement insights to provide solutions.
- Move from “one size fits all” to **“just right for you”**.

## Common Gauging

- If special gauges are used, provide one or request the customer to buy one.
- Common measuring methods prevent confusion.

## Feedback Loop

- Encourage feedback and validate using metrology.
- When we measure better, we serve better.

Sometimes cross-checking our parts at our end and at the customer end, and using them as **reference masters**, helps. The key here is **periodic correlation**, not a one-time activity.



# Metrology and Customer Connect – Measuring Trust, Delivering Excellence – contd\_\_

## Align with the Customer

A vital point is **alignment**. It is not enough that our measurement is correct. **Both customer and supplier must measure in the same way.**

Two examples:

### 1. Shaft OD Rk

Both sides checked Ra and approved the part. It failed in engine tests because **Rk value** was the issue. Once grinding parameters and hardness were corrected, the part passed. We learnt and added capability.

### 2. Temperature Sensor

Customer checked the sensor with an inappropriate method and stopped despatch. Calibrated sensors were shipped overnight, and investigation showed the **method was wrong**. This could have been avoided by aligning standards earlier.

The message is simple: our **measurement method should match the customer's method** ( and both should preferably align with an international standard)

## Strategic Advantage

In today's data-driven world, metrology is no longer just compliance. It is a **competitive advantage**. – You get New business if you have better measurement capability.

## Final Thoughts

Metrology is not only checking a dimension. It is **the language of trust**. When we say, "You can count on us down to the last micron," it becomes a commitment.

Precision in manufacturing requires precision in measurement. A great machine gives precision, but a great **metrology lab ensures the produced parts meet the mean.**

## About the author:

**M. Naghalingam** is a Mechanical Engineer with over 4 decades of Industrial experience in Automotive Component Manufacturing sector with Hands on Experience in Metrology, QMS, TPM and TQM. He is also a member of the ISQ

# International



## IAQ Quality Sustainability Award 2025



The National Final Round of presentations was held on 11<sup>th</sup> October 2025 virtually, 5 projects mentioned below were declared as the National Winners (Gold) and happy to note that all the 5 winners subsequently participated in the global competition organised by IAQ virtually.

### Organisations

- Ashok Leyland Limited
- Larsen & Toubro Limited
- JSW Steel Limited
- Cummins India Limited
- Tata motors Limited, Pune



ISQ is happy to announce that in the **Global Round competition** held by IAQ through online on 11 12 2025 **Larsen & Toubro Limited** from India was declared one of the global winners of Quality Sustainability Award 2025

The National Winners were awarded during the ISQ Awards Day on 13 12 2025 in Pune



The global award winner of 2024, Ashok Leyland were handed over the global award on the same day.

AQ Quality Sustainability Global award 2024





# Quiz Quest

 by R Santoshi**1. “Fitness for use” as a definition of quality was given by:**

- a) W. Edwards Deming
- b) Philip Crosby
- c) Joseph Juran
- d) Kaoru Ishikawa

**2. In TQM, prevention is preferred over inspection because:**

- a) Inspection is expensive
- b) Inspection does not add value
- c) Prevention reduces variability at the source
- d) All of the above

**3. Employee empowerment in TQM primarily helps to:**

- a) Increase supervision
- b) Improve compliance
- c) Enable ownership and problem-solving
- d) Reduce training requirements

**4. Which leadership behaviour best supports TQM?**

- a) Command and control
- b) Delegation of quality to QA
- c) Visible commitment and role modeling
- d) Focus only on targets

**5. Which of the following best reflects customer focus in TQM?**

- a) Meeting internal KPIs
- b) Adhering to SOPs
- c) Understanding customer CTQs
- d) Reducing rework

**6. A stable but incapable process means:**

- a) Process is under control but not meeting customer requirements
- b) Process meets specifications
- c) Process has no variation
- d) Process needs inspection only



# Quiz Quest

by R Santoshi

## 7. The TQM System Puzzle: “The Defect Factory”

### Scenario

You are managing a factory that produces **100 units per day**.

There are **three sequential processes**:

**Process A → Process B → Process C**

Each process has the following **First Pass Yield (FPY)**:

- **Process A:** 95%
- **Process B:** 90%
- **Process C:** 92%

Defective units are **not reworked** — they are scrapped immediately.

### Puzzle Questions

#### Q1.

How many **good units** will reach the customer at the end of Process C?

*(Hint: Multiply yields, not defects.)*

#### Q2.

Management says:

“Let’s improve **Process C** to **99%**, since it’s closest to the customer.”

If Process C improves to **99%**, but A and B remain unchanged, how many good units will be delivered?

#### Q3.

Instead, suppose you improve **Process A** from **95% to 98%**, keeping B and C unchanged.

How many good units will now reach the customer?

#### Q4. (Thinking Question – Core of TQM)

Which improvement gives **greater impact**, and **why**?

## Answers to Quiz Questions 1 to 6

**1 (c)**

**2 (d)**

**3 (c)**

**4 (c)**

**5 (c)**

**6 (a)**

## Answers to Puzzle Questions

### Answer 1: Overall Yield

Overall Yield =

$$95\% \times 90\% \times 92\% = 78.66\%$$

**Good units delivered = ~79 units**

*Even with “high-quality” individual processes, overall performance drops significantly.*

### Answer 2: Improve Process C to 99%

$$95\% \times 90\% \times 99\% = 84.65\%$$

**Good units = ~85 units**

→ Improvement = **+6 units**

### Answer 3: Improve Process A to 98%

$$98\% \times 90\% \times 92\% = 81.14\%$$

**Good units = ~81 units**

→ Improvement = **+2 units**

### Answer 4: The TQM Insight

Although improving the **upstream process (A)** improves fewer units than improving **C**, **TQM teaches us:**

🔑 *Local optimization is less effective than system optimization*

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ISQ look forward to you to introduce professionals with passion for quality, align with its objectives willing to contribute; as members of ISQ.

## Welcome to the new Life Members

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