Newsletter

Indian Society for Quality

Contents	Page

Dear Readers ,

Greetings from ISQ!

We are pleased to bring you the ISQ Newsletter for Sept 2025.

We are amidst the festival season of 2025, it marks the end of our traditional financial year and new Samvat begins next day after Deepavali!

Wishing all our readers a great new Samvat ahead. Hope the new year brings an end to the wars around the globe and a renewed economic activity. 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.

This issue of the Newsletter brings you our usual features viz Vignettes from Mr Ramanathan, which brings a new perspective to the day-to-day challenges we face in business and Quiz from Ms Santoshi. Both these features have received very good feedback from the readers.

We have insightful articles from other contributors as well.

Our Editorial team tries to bring you valuable input that can be used to reset your strategies and ways of working.

We are all excited to attend the upcoming ANQ Congress Bengaluru 2025 starting Nov 4, 2025 in Bengaluru. Preparations are reaching a crescendo to make this mega event a great success. The Congress will see around 350 papers from all over the Asian countries and being graced by the greatest living guru Dr. Noriaki Kano and Prof. Yukihiro Ando among other speakers of same stature in the field of business.

Please register as soon as possible to make the most of this once-in-a-lifetime kind of opportunity.

We look forward to your valuable suggestions to make the Newsletter more loved platform for sharing knowledge.

Enjoy reading!

Regards.

Ved Parkash
Editor in chief
ISQ Newsletter

ISQ Newsletter team: Ved Parkash – Editor in chief,
Editorial Members: Sarika V. Joshi, B. Sundara Rajan, R. Santoshi

Missing the TQM Bus - Twice

Quality in Modern India: The First Rise

Mahalanobis is regarded the father of statistics in India. In 1931 he founded the Indian Statistical Institute (ISI), and in 1933 started the journal Sankhya, which still runs. In 1936, he investigated the technique of largescale surveys with interpenetrating samples.

Though his proposal of a sample survey of jute crop in Bengal was initially resisted, Ronald Fisher visited ISI in 1938, and his support led to an actual survey in 1940. Fisher would visit the institute eight times till 1962, the year he died.

Arguably, Walter Shewhart was the father of Statistical Quality Control. On the invitation of Mahalanobis to ISI, Shewhart arrived in India on 13 December 1947, and stayed for three months. He visited thirty-three factories and gave advice to their managers and proprietors. He also met with industrialists and government officials besides attending a session of the Indian Science Congress at Patna. ISI held a conference on Standardization and Quality Control in Calcutta, and Shewhart addressed 180 delegates on the technique of SQC and its applications.

In 1953, ISI established the SQC & OR Division, which now operates from eight centres.

In his second visit in 1954, Shewhart collaborated with C.R. Rao and Ronald Fisher, and undertook lecturing tours. He met Jawaharlal Nehru. And in his third visit in 1962, ISI conferred an honorary doctorate on him.

In 1947, invited by Mahalanobis, W. Edwards Deming came as consultant in sampling to the Government of India. He was a delegate from the American Association for the Advancement of Science to the Annual Session of the Indian Science Congress, New Delhi, January 3~8, 1947, with Jawaharlal Nehru as General President. This was months before India's independence, and long before his epochal visit to Japan in 1950. Deming came again in 1951 in the same capacity. In his third visit, at the invitation of ISI, Deming gave a keynote speech at the All-India Conference on Quality Control held in New Delhi on 17th March 1971. The title of his talk was Some Statistical Logic in the Management of Quality. His speech anticipated much of what he wrote from 1980 onwards. As an aside, Deming's basement office at his home overflowed with stacks of Sankhya issues.

In 1954-55, Genichi Taguchi was at ISI, doing research on experimental design and orthogonal arrays.

Yasutoshi Washio, so well-known in India for his seminal contributions to many a Deming Prize- winning company, spent five months in 1966-67 at ISI as a visiting scholar. Some years ago, he joked with me that his only complaint was that ISI would not let him bring beer into the campus!

Missing the Bus – Round one

In the early 1950s Indian industry was just shaking off the colonial past, and half the industry was in British expatriate hands. But 1971 could have been the moment for India to make a breakthrough of the kind Japan made in 1950. India missed the bus.

What happened?

Dwijendra Tripathi, reputed historian of Indian Business, attributes the deleterious effects of the license-permit Raj to the period 1970-1984, when the public sector entered non-core areas, foreign investment was practically shut, and licensing rules choked Indian businesses. The three wars from 1962 to 1971 and the droughts of 1966 and 1967 added to the financial challenges. India had priorities other than quality. The stellar work of ISI got dissipated in the crises of the day.

It was only in 1983 that Maruti Suzuki became operational, and other automotive joint ventures started up. Then in 1991, a full-blown crisis in foreign currency forced a revision of economic policies, with some bitter medicine thrown in.

Quality in Modern India: The Second Rise

The Quality Circle Forum of India (QCFI) was founded in 1982, importing the practice, not from Japan, but from USA (as the name Quality circles, not QC circles, shows). In 1984, Janak Mehta ushered a watershed event with his Nashik Experiment on the practice of TQC under the banner of CII (then AIEI). This led, following a visit of Kaoru Ishikawa, to the formation in 1988 of the CII TQM Division.

The 1990s marked the beginning of TQM in India in some real sense. The TQM division took groups of Indian leaders annually to Japan for 2-week training courses by JUSE. CII and Exim Bank launched a Business Excellence Award based on the EFQM model. CII also formed a cluster of Tier 1 suppliers to Maruti to promote TQM vigorously under the guidance of Yoshikazu Tsuda. This led to the era of Indian companies winning the Deming Prize (31 Deming and 9 Grand Prizes to date). CII also tied up with JIPM to advance TPM. Vikram Cement secured the first TPM award in 1992. Today the combined TPM awards stand at 534. In 2004 Shoji Shiba commenced annual batches of a CII program called Visionary Leaders for Manufacturing..

On the face of it, it might seem that all was well with Quality in India. Was it?

This was also the period when America abandoned TQM and embraced Six Sigma, followed by Lean Six Sigma. The eminent guru Joseph Juran had always held that improvement was possible only project by project. He naturally aligned himself to the ways of Six Sigma, and deprecated TQM as "not measurable or as business focused as needed."1 The statement shocks me as it appears to be unfounded.

Prizes are a Beginning, not a Destination:

A Deming Prize or equivalent award is only a license to start the journey to becoming extraordinary. It is not a recognition of being extraordinary already. Likewise, a Deming Grand Prize confirms that a company is maintaining its trajectory. But there is still a long way to go. We know that many prize-winning companies stagnate at a certain level of capability, some deteriorate. Only a select few keep progressing. Prize-winning companies are in the best position to practice and evolve TQM. If they don't, much will be lost to India as a whole.

Missing the Bus – Round Two

In the current century, influenced by western consulting firms and business-school wisdom, many CEOs and top managers find that Quality no longer attracts them. Quality has, it would seem, lost the hearing of top leaders. Some of them say that 'quality is a given' and that they are looking now at innovation, AI, and so on.

Really? When quality is treated as a given, it is dead. After all, the world changes, and customers and society have new requirements. Besides, it is not as if companies have already achieved near-perfection even within the existing situation. They have their share of chronic claims, failed product launches, breakdowns, safety incidents and a plethora of muda waiting to be discovered. Satisfied too early with their modest progress, leaders are diluting, if not abandoning Quality.

It is incumbent on all professionals to rise as one, learn deeply, and take a pledge to create extraordinary organizations, nothing less. India does not have the luxury of missing the TQM bus a second time.

N. Ramanathan

1 Juran, J. M. (2017). Chapter 3: Quality and business performance. In J. A. De Feo (Ed.), Juran's quality handbook: The complete guide to performance excellence (7th ed., p. 74). McGraw-Hill Education.

* N. (Ram) Ramanathan (2020): *Embedding sustainability concerns into quality assurance*, Total Quality Management & Business Excellence. https://doi.org/10.1080/14783363.2020.1858712

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). Mr. 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.

Article

Strategic Experimentation:

Getting the Right Data in the Right Amount at the Right Time

Ron Snee
Academician, IAQ

A constant vigil on problem solving and improvement is required to maintain quality in all aspects of our work. The basis for such work is data collection. An effective way to collect quality data is using planned experimentation. A strategy is needed to get the right data in the right amount at the right time. This article describes a strategy which satisfies the needs of a wide variety of experimental studies. The following paragraphs provide important details on the strategy.

Right Data are the data that are required to solve the problem, get the desired answer, discover the right knowledge, etc. Hoerl and Snee (2019) refer to this as quality data.

Right Amount refers to the amount of data required to answer the questions investigated in the study. Here we are thinking about getting results with the desired precision. This is the sample size issue regarding both the total sample size and studying the factor effects at the right levels.

We often see researchers collecting all kinds of data with the view that they will need it sometime later in the investigation. This is a wasteful way to collect data, particularly when a more efficient and effective strategy is possible and available.

Right Time addresses considering what questions are to be answered short term versus those that are to be answered longer term. For example, if you don't know which variables are the most important, then it doesn't make sense to estimate the variable nonlinearities and interaction effects in the beginning of an investigation. A better approach is to screen a larger number of variables to find the most important variables to be studied further as needed. There will be more on this later.

The appropriate experimental plan depends on the experimental environment as summarized in Table 1. The three environments are screening, characterization and optimization. The strategy includes guidance on critical considerations such as the number of factors to be studied, desired information, response model form, experiment design and

typical test sizes. This strategy was developed at DuPont in the mid-1960s. The author has successfully used this strategy since joining DuPont in 1968 (Snee 2010). The experimental designs mentioned in Table 1 can be found in design of experiments books such as Montgomery (2019).

Table 1. Strategy of Experimentation Showing Experiment Design Characteristics for Three Different Experimentation Environments

Environment Characteristic	Screening	Characterization	Optimization
No. Factors	More than 6	3-6	2-5
Desired Information	Critical Factors	Understand How System Works	Prediction Equation Optimization Operating Window
Model Form	Linear or Main Effects	Linear and Interaction Effects	Linear, Interaction and Curvilinear Effects
Experiment Design	Plackett-Burman Fractional-Factorials	Full and Fractional Factorials	Response Surface
No. of Runs	8-32	12-32	12-40

Article

Strategic Experimentation:

Getting the Right Data in the Right Amount at the Right Time

The **screening phase** is used when it is desired to identify the major effects of six or more factors. Experience has shown that typically 3-6 factors are most important for a given process (Snee and Bailey 2023). Screening designs will identify the critical factors.

The **characterization phase** is useful when you want to understand how a system works, particularly in identifying important interactions between 3-6 factors.

The **optimization phase** is used when you want to develop prediction equations to optimize a process to identify a critical operating window and conduct process robustness studies. The prediction equation typically contains linear, interaction and curvilinear terms.

The three phases can be used in combinations, creating seven different sub-strategies as shown in Table 2. Strategy 1 is, of course, Screening followed by Characterization and then Optimization.

A popular strategy is Screening followed by Optimization. Zaho et al. (2017) discussed a fermentation optimization study in which 12 factors were studied in a 16-run Plackett-Burman screening design. Four important factors were identified. These factors were further studied in a 16-run Optimization experiment. The two experiments involving 32 runs increased enzyme activity (process yield) by 54%. A major gain using only 32 tests.

Hendrix (1980) performed a robustness study of a polymer sheet production process involving 15 factors in 16 runs using a Plackett-Burman design. Two important factors were identified which greatly influenced the cold-cracked resistance of the manufactured polymer sheet. These findings helped define how the levels of the factors in the process, particularly solvent, were to be controlled.

Be Bold but Not Reckless. An effective problem-solving strategy is to start with Screening experiments. As mentioned above Hendrix (1980) used a screening experiment to solve an important process problem. Screening designs are more useful than one might think. Success results when the screening design contains many factors – you don't want to miss any important factors – and the factor ranges are large. The guidance is to "be bold but not reckless". I've seen several problems successfully solved by using just a screening experiment.

Table 2. Sub-Strategies Using Sequential Combinations of the Screening, Characterization and Optimization Phases of Experimentation.

Strategy	Screening	Characterization	Optimization	Take Action
1	X	X	X	X
2	X		X	X
3	X	X		X
4		X	X	X
5	X			X
6		X		X
7			X	X

Article

Strategic Experimentation:

Getting the Right Data in the Right Amount at the Right Time

The next case study discussed by Snee (2009) illustrates the value of an optimization experiment. A lab director used a "critical test" strategy which assumes subject matter expertise and a few tests will identify a better product. After 54 tests a better product design was not found, and the importance of the factors was not identified.

Using strategy of experimentation (Table 1), it was decided to run an optimization experiment as there were only three factors involved. A 15-run response surface design was used which included 8 replica tests. Analysis of the resulting 23 tests showed that increasing the active ingredient of the formulation had no effect on impurity so the minimum level tested was chosen for the product reducing the product cost. The analysis also showed that there is a combination of the other two factors that would minimize impurity of this formulation by about 50% lower than that of the current product. A bonus was the developed model accurately predicted the impurity of the old formulation which suggested that the model could be used to develop future formulations for other applications.

The strategy of experimentation shown in Table 1 works for all types of experimental environments such as process improvement and product development studies. The author extended the strategy to work for mixture and formulation studies. The details can be found in Snee and Hoerl (2016). The sub-strategies summarized in Table 2 add flexibility to address different experimental environments.

The author has effectively used this approach in a variety of environments for more than 55 years. You are encouraged to consider using this approach in your experimental studies.

References

Hendrix, C. D. (1980) "Through the Response Surface with Test Tube and Pipe Wrench," Chemtech, August 1980, pp. 488-497.

Hoerl, R. W. and R. D. Snee (2019) "Show Me the Pedigree: Part of Evaluating the Quality of Data Includes Analyzing Its Origin and History", Quality Progress, January 2019, 16-23.

Montgomery, D. C. (2019) Design and Analysis of Experiments, 10th Edition, John Wiley and Sons, Hoboken, NJ

Snee, R. D. (2009) "Raising Your Batting Average: Remember the Importance of Sequence in Experimentation", Quality Progress, December 2009, 64-68.

Snee, R. D. (2010) "Experimental Strategies for Implementing Quality by Design", Pharmaceutical Processing, April 2010, 12-16.

Snee, R. D. and R. W. Hoerl (2016) Strategies for Formulations Development: A Step-by-Step Guide using JMP, SAS Press, Cary, NC

Snee, R. D and S. P. Bailey (2023) "Effective Use of Screening Experiments: Some Practical Uses", Applied Stochastic Models in Business and Industry, p1-23, http://doi.org/10.1002/asmb.2768

Zhao A, Chen F, Ning C, Wu H, Song H, Wu Y, et al. (2017) Use of real-time cellular analysis and Plackett-Burman design to develop the serum-free media for PC-3 prostate cancer cells. PLOS ONE 12(9): e0185470. https://doi.org/10.1371/journal.pone.0185470

About the author:

Ronald D. Snee is founder and President of Snee Associates LLC in Greenville, DE. He received a doctorate in applied and mathematical statistics from Rutgers University in New Brunswick, NJ. Snee is an Honorary Member of American Society for Quality (ASQ) and has received ASQ's Shewhart, Grant and Distinguished Service Medals. He is an ASQ fellow and an academician at the International Academy for Quality. Ron is a Fellow of American Statistical Association (ASA) and has received ASA's Deming Lecture, Wilfred J. Dixon Consulting Excellence and Gerry Hahn Quality and Productivity Achievement Awards.

Coming up....

Dates: **November 3rd to 7th 2025**
Venue**: M S Ramaiah University of Applied Sciences,**
M S R Nagar, Bengaluru 560054, India

Registrations open. Visit www.anq2025.in

3rd Nov, Monday	CEC Meeting (based on invitation only)
4th Nov, Tuesday	ANQ Board Meeting (based on invitation only) Pre-conference seminars
5th & 6th Nov, Wednesday, Thursday	ANQ Congress – paper presentations, keynote addresses, Awards
6th Nov, Thursday	Networking and Gala Dinner
7th Nov, Friday	Industry visit in Bengaluru (optional)

The Congress will feature keynote addresses by global experts, technical paper sessions, and recognition of excellence in quality. With participants from across Asia, it promises to be a premier gathering of professionals dedicated to driving meaningful change.

The call for technical papers has received good responses. It is going to be 6 to 7 parallel sessions with participation from speakers (paper presenters) across the globe.

With great keynote speakers sharing their insight, it is going to be a great value addition.

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

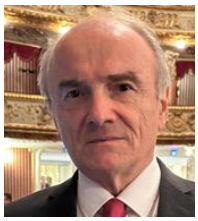
Yukihiro Ando
President Elect - IAQ

Dr. Ayed Alamri
President,
Saudi Quality Council

Prof. Shu Yamada
Hon. Director - ANQ

Kiran Deshmukh
Former CTO, Sona BLW
Precision Forgings Ltd.

Wang Lin
Vice President- CAQ



Dr. sc. Miroslav Drljača
IAQ – Board member

ISQ events July to September 2025

TQM for Errorfree Manufacturing

a Practical Approach by **Mahesh Hegde**

Organised by ISQ Bengaluru Chapter

17-18 July, 2025
Venue: Taj Yeshwantpur, Tumkur Road, Bangalore

ISQ Bengaluru Chapter organised the program for manufacturing, TQM Counsellors, and Quality & Business Excellence professionals.
The program was conducted by **Mr. Mahesh Hegde pro-bono** on behalf of ISQ.

The program was participated by 40 delegates from different industries. It was a well received and highly appreciated program with high value addition to the participants.

On popular demand, the next session of the program is organized in Pune in February 2026.

CEO THROUGH ≫ TQM

Creating the **E**xtraordinary **O**rganization through **T**otal **Q**uality **M**anagement

a 2.5 day program for TOP Managers

Organised by ISQ Pune Chapter

7~9 August, 2025
Venue: Tata Management Training Centre
TMTC Campus, 1, Mangaldas Road, Pune

Mr. Ramanathan conceptualized the "CEO Through TQM" program for senior management and has been conducting the 2.5-day workshop **pro bono** since 2019, significantly benefiting ISQ. The ninth edition of the program was held in Pune earlier this year, drawing a record 50 participants from diverse industries. With each iteration, the program's popularity has grown steadily. Widely acclaimed for its depth and relevance, the latest session once again received enthusiastic feedback, sparking fresh thinking on building extraordinary organizations.
For those who senior executives who want to be future ready, have not yet had the opportunity to attend, ISQ looks forward to presenting the 10th edition of the program soon.,

Quality for Academia & Small Industries – an **online** program organized by NCR Chapter to build a strong base in Quality in students to be industry ready and participants from small industries of the program.
Dates: 28 June 25, 12 July 25, 26 July 25 & 23 Aug 25.

Mr. Atul Shrivastava, President NCR Chapter, Mr. Javed Afaque, Founder & Principal Consultant, Équipe Quality Consultants, Mr. Virendra Atre, AGM, Centre of Excellence and Mr. Sachin Gupta, HOD- BE & TQM at Tata Power-DDL were the faculty who took each session of the 4 session program.
About 280 participants registered for the program.
Participants who had attended all the 4 sessions and successfully completed the test of each session were given the certificates.

ISQ events

Best practices in

Daily Work Management (DWM/ DRM)

Venue: AU TVS Centre for Quality Management, Anna University, Chennai – 600 025

Date: 20 09 2025

ISQ Chennai Chapter, for the first time, a program to showcase the best practices in DWM/ DRM to provide a collaborative platform for organizations to share their DWM/DRM journeys, highlight best practices, and learn from peers. The initiative aims to foster the adoption and enhancement of effective work management practices across industries.

The event was successful in its objectives and it was unique in following ways.

1. The first time it was a open house programme with interplant participants
2. Was designed to be a learning/benchmarking event and non competitive.
3. Modelled on the Deming Prize.

The tone for the day was set by **Mr N Ramanathan** (Our mentor) , who had sent a message of greetings to all, via a video recording. The valedictory function was graced by **Smt. Gowri Kailasam**, Chief Executive Officer- Steering and Linkage Division (SLD) and Rane Light Metal Castings India Division (LMCI). from the Rane Group, another great practitioner and proponent of TQM.

What is Daily Work Management?

- DWM refers to the structured approach to managing routine operations and ensuring consistent performance through:
- Standardization of work processes, Monitoring of key performance indicators (KPIs), Timely problem-solving and corrective actions, Engagement of all employees in continuous improvement.

Participation

58 participants from 16 organisations presented their best practices in DWM during the event.
41 delegates attended from different organisations to witness the speeches and presentations of case studies from the industries.
Totally around 120 people participated in the event.
The session was successful towards its objective of spreading the awareness of importance of DWM for implementation across industries.

TOPS Convention Pune 2025

TOPS Convention Pune 2025 had a participation of all time high of 79 teams with around 300 participants participating.
Detailed report will be published in the next issue.

International

IAQ Quality Sustainability Award 2025

The National Final Round of presentations was held on 11th October 2025 virtually. 9 teams were present. 5 Projects were declared as the National Winners (Gold) and will now are eligible to compete in the global contest being organised by IAQ. and 4 projects were declared winners in Silver category.

Sl No	Project Description	Organisation	Result
1	Iron Ore Extraction from Grinding waste (Hazardous waste recycled in to Iron Ore Raw material)	Ashok Leyland Limited	Gold
2	Smart CBG-Fired Galvanizing System For Sustainable Manufacturing and Emission Reduction	Larsen & Toubro Limited	Gold
3	CTP improvement through SEED (Sustainable Energy Environment and Decarbonisation) initiative: a case study of injecting by-product gas into the sintering bed	JSW Steel Limited	Gold
4	GHG Emissions Reduction through Optimized Engine Test Cycles and Energy Management	Cummins India Limited	Gold
5	Driving Sustainability through Low-Carbon footprint Material Innovations for TATA vehicles	Tata motors Limited, Pune	Gold
6	Farm to Plate – Global food security	Wipro Limited	Silver
7	Rice husk based high dispersible silica for tyre applications	Tata Chemicals Limited	Silver
8	Reduction of Green House Gas (CO2) Emission in Mini Blast Furnaces	JSW Steel Limited, Salem Works	Silver
9	Reduction in service water consumption at Mundra Thermal Power Station	The Tata Power Co Limited	Silver

A total of 39 projects from 26 organizations across India were registered for the IAQ Quality Sustainability Award 2025. These entries were evaluated through a rigorous three-stage assessment process by an experienced panel of Jury members.

Following the initial round, 16 projects advanced to the second stage, from which 10 were shortlisted for the final presentation round. The remaining six teams, though not selected for the finals, are eligible to receive Merit Certificates in recognition of their commendable efforts.

Quiz Quest by R Santoshi

Quiz Quest

1. **Which of the following quality concepts originated from Toyota Production System?**
a) Just-in-Time (JIT)
b) Six Sigma
c) Zero Defects
d) Theory of Constraints

2. **In Six Sigma, which statistical tool is commonly used to identify root causes of variation in a process?**
a) Control Chart
b) Pareto Analysis
c) Fishbone Diagram
d) Design of Experiments (DOE)

3. **In Failure Mode and Effects Analysis (FMEA), what does the "RPN" stand for, and how is it calculated?**
a) Risk Probability Number = Severity × Occurrence
b) Risk Priority Number = Severity × Occurrence × Detection
c) Reliability Performance Number = Reliability × Variability
d) Root-cause Probability Number = Detection × Occurrence

4. **"Cost of Quality" (CoQ) is often broken into 4 categories. Which of the following is NOT one of them?**
a) Prevention Cost
b) Appraisal Cost
c) Failure Cost
d) Productivity Cost

5. **Which famous quote is attributed to Deming?**
a) "What gets measured gets improved."
b) "In God we trust, all others bring data."
c) "Do it right the first time."
d) "Zero defects is the only quality standard."

6. **In Lean, "SMED" refers to a technique aimed at reducing:**
a) Scrap and Material Excess Defects
b) Single-Minute Exchange of Dies
c) Standardized Methods for Error Detection
d) Statistical Measurement of Efficiency & Defects

7. **What is the primary purpose of Design for Six Sigma (DFSS) compared to traditional Six Sigma?**
a) To reduce variation in existing processes
b) To improve customer complaint resolution time
c) To design products/processes right the first time to meet customer needs
d) To implement ISO 9001 standards

8. **In a Control Chart, what does a point beyond the Upper Control Limit (UCL) typically** indicate?
a) A common cause variation
b) A special cause variation
c) A random fluctuation
d) Measurement system error only

9. **Which quality principle is common to both ISO 9001 and the Malcolm Baldrige Criteria for Performance Excellence**?
a) Risk-based thinking
b) Leadership commitment
c) Supplier relationship management
d) Knowledge management

10. **Which of the following best describes "Poka-Yoke"?**
a) A statistical sampling method
b) An error-proofing mechanism in a process
c) A continuous improvement cycle
d) A Japanese reward system for quality circles

To know the answers, please refer page no. **20**

Article

Why Don't People Take Ownership?

What Business Leaders Need to Think

Introduction: The Universal Complaint

Kishore Kumar Das

"People just don't take ownership or accountability anymore" — this is a familiar refrain I've heard across industries for over a decade, voiced by CEOs, promoters, and senior leaders alike. But this persistent complaint reveals more than a behavioural gap. In most cases, the issue is not a lack of willingness — it's the absence of the right environment. Ownership and accountability don't happen by default; they must be designed, enabled, and sustained by leadership.

Taking ownership means proactively taking responsibility for one's work — without waiting to be told. It's about being accountable for both success and failure, focusing on solutions rather than excuses, and staying committed until results are achieved.

In the Indian context, accountability is often externally imposed rather than internally inspired — ignoring the foundational concept of Iccha, the inner drive or willingness to act. True ownership emerges from intrinsic motivation and thrives in cultures that foster initiative, judgment, and responsibility — not just obedience.

While some individuals are naturally proactive, many are not. Taking ownership is a mindset — shaped by how one interprets challenges and opportunities. Even individuals with a strong sense of ownership can lose it if the organizational context doesn't support or reward it.

Leaders often observe that while day-to-day tasks are completed, employees frequently avoid taking ownership of improvement efforts — such as driving change, solving problems

or initiating innovation. This is especially common in founder-led or hierarchical setups, where ownership is confused with loyalty to authority, dissent is discouraged, and initiative is stifled.

To build a culture of real ownership and accountability, organizations must align leadership mindsets, systems, structures, and culture — and help individuals shift from passive compliance to active contribution.

This article shares practical insights from years of observing and enabling change — focusing on what helps or hinders people from taking ownership and being truly accountable.

What Holds People Back from Taking Accountability?

In my journey as both a corporate leader and consultant, I've seen a clear pattern: a small segment of people are naturally wired for ownership. They take initiative, operate with an internal drive, and seek to make a meaningful impact — regardless of the environment. But when these intrinsically motivated individuals encounter systems that ignore or stifle their efforts, they don't linger. They move on, in search of purpose, recognition, and influence.

For organizations to build a culture of accountability, it's not enough to tweak structures or enforce rules. They must ignite the inner will — the Iccha — in their people, and support it with enabling systems, empowering leadership, and aligned organizational design.

1. **Philosophy First: The Emotional Core of Accountability**

True accountability doesn't come from rules or pressure — it starts with a shared philosophy. When an organization's purpose and values are authentic and visibly practiced, they create emotional alignment. Employees begin to see their work not just as tasks, but as contributions to something meaningful. This sense of connection fosters pride, deeper engagement, and a natural sense of ownership. Without this alignment, work becomes routine, engagement weakens, and accountability fades into formality. Leaders must ensure that values are not just stated, but lived — through decisions, actions, and daily interactions.

.

Article

Why Don't People Take Ownership? Contd__

What Business Leaders Need to Think

Kishore Kumar Das

2. **Leadership Mindsets: The First Blocker**

One of the biggest barriers to accountability lies at the top — when leaders fail to see that they might be part of the problem. If the leadership team operates from a mindset of blame — focused on what others should fix — they model a culture of external locus of control. Ownership cannot thrive in such conditions.

Wishing or complaining won't help. Leaders must internalize a fundamental truth: enabling accountability is not a side job — it is their primary responsibility. They must actively design the culture, systems, and behaviours that promote ownership at every level.

3. **Weak Organizational Structure**

Structure is the backbone of accountability — it defines how responsibilities flow, who makes decisions, and how outcomes are measured. A good structure will have the right numbers and the right talent, with clearly defined roles, responsibilities, and accountability for each position. In many SMEs, structures are often informal, outdated, or unclear, leading to role ambiguity, workflow confusion, poor goal alignment, and limited career visibility. This results in people staying busy without being truly accountable.

Often, organizations operate with two parallel structures: a formal one defined by org charts and job descriptions, and an informal one driven by influence and proximity to leadership. When these diverge, people follow influence over role, and accountability breaks down.

Leaders must realign formal structures to reflect operational reality — creating clarity, consistency, and fairness across the organization.

4**. Lack of Clarity on Goals, Roles, and Ownership**

Accountability breaks down when people lack clarity about what they are expected to achieve, the decisions they can make, and how success is defined. In many organizations, goals are vague or top-down, roles overlap, and KRAs/KPIs are missing or misaligned. This leads to confusion, disengagement, and minimal ownership.

When goals are co-created, roles are well-defined, and decision rights are clear, people feel empowered. Clarity fuels accountability; co-creation drives commitment.

5. **Weak Consequence Management and Dysfunctional PMS**

Accountability suffers when performance has no real consequences. In many organizations, excellence goes unrecognized, underperformance is tolerated, and reviews are infrequent, one-sided, or demotivating. This leads to disengagement and weakens ownership.

Often, the Performance Management System (PMS) fails to reinforce desired behaviours or link growth, rewards, and recognition to actual contribution — undermining motivation and accountability.

It's essential to understand that appraisal is only one part of PMS. An effective PMS is a holistic process that starts with goal setting — covering regular and strategic priorities cascading from leadership. It includes goal deployment, identifying key action points, and supporting individuals through training, coaching, and resources.

A strong PMS involves regular reviews, constructive feedback, and ongoing monitoring to ensure alignment and progress. It should culminate in recognition and reward — monetary and non-monetary — tied to contribution, behaviour, and development.

Without such an integrated system, accountability becomes a mechanical exercise, disconnected from purpose and performance.

6. **Insufficient Knowledge and Capability**

People often don't take ownership — not because they're unwilling, but because they lack the skills, tools, or confidence. Without these, they tend to avoid challenges and defer responsibility.

Article

Why Don't People Take Ownership? Contd__

What Business Leaders Need to Think

Kishore Kumar Das

Accountability requires more than intent; it demands role clarity, problem-solving ability, and the courage to act. To build this, organizations must foster a culture of continuous learning — because true transformation begins with awareness.

However, many organizations still treat training as a one-time intervention. In reality, building ownership requires ongoing capability development — embedded in the culture through regular learning, mentoring, coaching, and hands-on application.

As Indian philosophy teaches: from Avidya (ignorance) to Jnana (knowledge) lies the path to liberation. The same holds true in organizations — transformation starts with awareness, and ownership emerges as people grow more competent and confident in their roles.

7. **Lack of Ambition and Talent Development**

Many SMEs face not just skill gaps, but ambition gaps. They struggle to attract or develop self-driven talent, and rarely invest in nurturing potential. As a result, even capable individuals stagnate.

To break this cycle, organizations must actively awaken ambition — through self-discovery, stretch assignments, mentoring, and learning pathways. Give people space to explore their aspirations, even beyond their current roles. Ambition isn't assigned — it's awakened.

8. **Lack of Voice and Influence**

When people feel unheard, they disengage from ownership. In top-down cultures, they avoid input, feel excluded, and do the minimum.

Accountability grows through co-creation. Involve employees in goal-setting and decisions. Leaders must shift from command to conversation — enabling real dialogue and shared ownership.

9. Job Insecurity

Fear silently kills ownership. When people feel insecure, they retreat into survival mode — avoiding risks, staying silent, and doing the bare minimum to stay employed.

In competitive job markets like India, this fear is amplified, leading to compliance over commitment and invisibility over initiative.

10. Fear of Blame

In blame-heavy cultures, people play safe — they conform, hide mistakes, and avoid initiative. Fear stifles innovation and erodes ownership.

To build accountability, organizations must replace punishment with learning. Mistakes should be discussed constructively, separated from identity, and treated as opportunities for growth. When people feel safe to fail, they begin to take bold ownership.

11. Micromanagement and Overcentralisation

In many founder-led or family-run businesses, tightly centralized decision-making and lack of trust in mid-level managers stifle accountability. Employees stop thinking independently, do only what they're told, and fear taking initiative. Over time, this breeds obedience — not ownership.

To reverse this, leaders must delegate authority with responsibility, trust the system, and empower experimentation — even if it means accepting mistakes. Micromanagement builds followers; empowerment builds leaders.

.

Article

Why Don't People Take Ownership? Contd__

What Business Leaders Need to Think

Kishore Kumar Das

10 Key Takeaways for Leaders

1. **Ownership Grows in the Right Context:** People don't resist ownership — they need a system that enables it. Leaders must create environments that nurture *Iccha*, the inner drive to act. Understand, design, and develop the right context like a good architect.
2. **Leadership Mindset Shapes Culture:** Leaders must move from blame to responsibility. Ownership starts at the top — through self-awareness, intention, and behaviour modelling. Ask: What can I do? — not What should others do?
3. **Establish the Right Structure with Clear Roles, Goals, and Authority:** Ambiguity kills accountability. Clearly define what success looks like, who is responsible, and what decisions individuals are empowered to make.
4. **Build a Meaningful PMS and a Regular, Healthy Review System:** A strong Performance Management System should reward both results and behaviours. Reviews must be regular, developmental, and based on the PDCA approach. Focus on identifying root causes and supporting others to grow.
5. **Co-Create Goals to Inspire Commitment and Long**-Term Orientation: When people co-create goals, they commit to them emotionally. Use structured methodologies for goal setting and deployment. Involve people and focus on root causes to define the right means.
6. **Invest Continuously in Capability**: Lack of skill creates hesitation. Ownership requires confidence — build it through structured learning, mentoring, and meaningful stretch assignments. Talent in SMEs and MSMEs especially needs greater exposure and development. Train and support people to focus on what they can influence.
7. **Create Psychological Safety**: Fear blocks initiative. Build a culture where mistakes are seen as learning opportunities. Acknowledge intent and effort, even when outcomes fall short. Encourage open dialogue and dissenting views.
8. **Stop Micromanaging, Start Empowering**: Centralized decision-making suffocates accountability. Delegate authority, trust your teams, and support experimentation. Know the difference between driving efficiency and controlling tasks.
9. **Develop Ambition from Within**: Talent without aspiration is wasted. Help people discover their inner goals. Create platforms that encourage self-reflection, purpose alignment, and personal visioning.
10. **Align Values with Everyday Practice:** Ownership thrives when purpose is lived, not just stated. Define your organization's philosophy and principles clearly — then communicate and demonstrate them daily through decisions and behaviours.

Driving accountability is a leadership responsibility — not an excuse to blame people. Every leader must reflect on whether they are creating the right context for others to take ownership and nurturing Iccha — the inner drive.

Building a culture of accountability requires more than instructions or performance pressure. It demands a holistic, systems-thinking approach that integrates both soft elements — such as the transformation of individual mindsets and leadership behaviours — and hard elements like structure, systems, and infrastructure.

About the author:

Kishore Kumar Das is an independent management consultant and trainer, operating under ROOTs Consultancy. He is also the Co-Founder and Director at UniTol.in, which provides training and technology solutions in the field of learning and development. An alumnus of XLRI (HRM) and BIT Mesra (Production Engineering), Kishore brings over 33 years of industry experience. His core strengths include HR transformation (including the TQM Way), Leadership development, Talent strategy, Change management, and Building learning organizations.

He has successfully facilitated transformation and development programs across large, medium, and small organizations, primarily in the manufacturing sector.

Kishore has also served as a visiting faculty at prestigious institutions such as XLRI (NCR Campus), IIM Lucknow, MDI Gurgaon, and IMI Delhi. Outside of work, he is passionate about sports and music.

Be a member of ISQ

Download the membership form here

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

Name	Designation	Organisation
Palash Chatterjee	Country Manager	Hexagon Capability Centre India Pvt Limited
Anand Kumar Nethala	O S D (Officer on Special Duty)	Self employed
Jaijagadish Jagannatha Vahvle	GM Quality India	Nexteer Automotive India Pvt. ltd.
Raghuram K	Director	SEEDS Consulting Group
Prajwala Yogesh Gaikwad	Deputy General Manager, Engineering Quality	Tata Motors
Belsam Jeba Ananth	Professor/ Department Of Mechatronics Engineering	SRM Institute Of Science And Technology
Nitin Bhatia	AVP Quality Assurance	Ashirvad by Aliaxis
Manas Deep	Head & General Manager - Aggregate Business	Tata Motors Limited

Be a member of ISQ

Download the membership form here

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 Annual Members

Name	Designation	Organisation
Sandeep Kailasrao Chandegavkar	Asst General Manager	Anand Automotive India Pvt Ltd
H C Kumar Swamy	Chief Technical Officer	Pearlite Liners Private Limited
Prakash Badiger	Manager - Quality	Macer Automotive Systems Pvt. Ltd.
SRINIVAS G	AVP - Process Excellence	HDFC Life Insurance Company Limited
Nagasubramanian Kothandaraman	Deputy General Manager	Tata Electronics Private Limited
Jeyarani	General Manager	Tata Electronics Pvt Ltd
Gautam Lahiri	Vice President	Tata Electronics Pvt Ltd
Varun Bharti	Entrepreneur	Awiros (Awidit Systems Private Limited)
H C Kumar Swamy	Chief Technical Officer,	Pearlite Liners Private Limited
Prakash Badiger	Manager - Quality	Macer Automotive Systems Pvt. Ltd.
SRINIVAS G	AVP - Process Excellence	HDFC Life Insurance Company Limited
Nagasubramanian Kothandaraman	Deputy General Manager	Tata Electronics Private Limited
Jeyarani	General Manager	Tata Electronics Pvt Ltd
Gautam Lahiri	Vice President	Tata Electronics Pvt Ltd
Varun Bharti	Entrepreneur	Awiros (Awidit Systems Private Limited)

Answers to the Quiz Quest

1. A
2. D
3. B
4. D
5. B
6. B
7. C
8. B
9. B
10. B