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Dear Readers ,

Greetings from ISQ !

Welcome to the 2nd Quarter Newsletter from ISQ!

This edition holds special significance as we celebrate a century since the introduction of Control Charts and Statistical Process Control (SPC) by Dr. Walter Shewhart on May 16th, 1924.



Dr. Shewhart's pioneering work revolutionized quality management practices globally, continuing to drive efficiency, improve processes, and reduce variations across industries even after 100 years. We owe a profound debt to him, alongside Quality luminaries like Dr. Deming and Dr. Juran, whose advocacy has cemented these tools as indispensable in modern business practices.

On the domestic front, following the conclusion of the General Elections, we anticipate stability in government policies, allowing industries to sustain their growth momentum.

In our last issue, we introduced two new features: a Quiz and Book Review. The positive response from you, our readers, has been heartening, and we eagerly await more of your feedback to further enhance the Newsletter's value as a beacon of knowledge and wisdom.

ISQ's activities continue to scale new heights. The Bengaluru Chapter's hybrid Knowledge Sharing Session at RVCE showcased remarkable engagement and awareness among students, underscoring the growing popularity of our student chapters.

We are pleased to announce the successful completion of the CEO through TQM training program in Chennai in June 2024, with high demand prompting its scheduling in Delhi on 19-21, July 2024. Registration has already reached the capacity!

Looking ahead, we invite your active participation in the upcoming Symposium on Quality 4.0 organized by the Bengaluru Chapter. The organising committee will share the details on paper submissions and the event schedule can be found in this Newsletter.

ISQ is excited to announce hosting of the ANQ Congress 2025, in India at Bengaluru in November 2025. This promises to be a grand event that you won't want to miss.

In a recent development, our Annual Conference will now be held in Bengaluru on December 13-14, 2024, serving as a rehearsal for the ANQ Congress 2025. Kindly adjust your travel and accommodation plans accordingly. We apologize for any inconvenience caused by this change.

Continuing our commitment to providing practical insights, the Editorial Committee has introduced actual case studies from industry in this issue. We encourage you to read and share your thoughts with us.

Enjoy the read this monsoon season!

Warm Regards,
Ved Parkash

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



Vignettes
from Ram

Eighty Per cent Upstream

Some eighty per cent of troubles are embedded upstream in the process, product, or service, before a single piece or gram of product is made or used and any unit of service availed.

This is not a scientifically proven number but is a reliable rule of the thumb. Pervasive firefighting in organizations may be treated as evidence.

Quality, cost, and quantity are all primarily set upstream as are the safety of processes and freedom from discomfort for employees.



By upstream we mean activities during design and development of products and services, process planning, selection of facilities, suppliers, project management and start-up. Downstream activities include purchasing, storing, transporting, manufacturing, maintaining, inspecting, service delivery installing, field-servicing, complaint-handling, and so on.

Let us now explore the kinds of errors in upstream stages.

Product Decisions: Errors may occur with respect to choice of location, product, technology, equipment, or capacity. Take the location of Bengaluru airport, commissioned in 2008. It was far away from everyone and near no one. It is situated close to an Airforce runway, and building a second runway became a challenge. Transportation to and from the airport was left to after-thoughts and remains a gap. Its capacity perpetually runs behind demand.

The choice of product is an important upstream decision. Colgate launched a frozen dinner line in 1982, even as its customers thought it might taste like toothpaste. A product under development may be heading for obsolescence - superior film-cameras in an era when digital cameras were rising in stature, for example. To compete with Airbus, Boeing took a shortsighted decision to build a new aircraft around the framework of the hugely successful Boeing 737 (introduced in 1967) instead of developing an all-new aircraft, which the situation demanded.

On the positive side, in the 1950s, Xerox overruled the findings of Arthur D Little that pegged the eventual world population of copiers at 50 (yes, 50) and developed the copier business. But in the era of computers, having developed both a Graphical User Interface and the Mouse, Xerox let them go. What is the cost of a good product not launched?

Design and Development: The first source of error is in not listening to the voice of the customer to grasp important needs. Conventional market surveys are not of much help in this. An unmemorable 'wrong product' was the so-called 'New Coke.' The failure of Google Glass (2013) might well have been an instance of not appreciating true customer needs.

On the other hand, exceptional design practices in IKEA enable them to get do-it-yourself furniture outsourced and to deliver attractive and popular products.

The Microsoft Windows Vista might have been an example of unsatisfactory development. The Nokia N-Gauge combining gaming and phones (2003) may have been ahead of its times, but Nokia was possibly working with immature technologies.

Often, development activities are the source of downstream failures and malfunctions, or even low durability. In such a situation, the manufacturing function often cops the blame, and the real source of troubles remains obscure. Errors include incorrect specifications, and inadequate testing, especially for endurance. Sometimes, the designs are cumbersome, and prone to difficulties in manufacturing, or assembly, or maintenance, or ease of use. There are many preventive techniques available, including FMEA and FTA, but they have to be used and used right.



In informal surveys during programs I conduct, some eight out of ten participants report manufacturing and market troubles with new products, and difficulties in developing and launching blockbuster products.

Process Planning: Strategic errors upstream include selecting inappropriate manufacturing technologies (usually for cost reasons) that cannot deliver the required quality or quantity. Many companies are under the mercy of equipment suppliers who aggressively sell the technology they have adopted. Sometimes, a new facility ought to be built using Lean principles, but decisions get taken in favour of large-scale capacities, which result in a perpetual high-cost condition. Here again, preventive techniques are important.

Project Management: Here, management seems to lose all patience. All they want is speed. In the process, poor equipment decisions get taken. FMEA or 'Maintenance prevention design' are missed out. Equipment becomes expensive, its installation complex, and it does not shed its initial troubles quickly enough. Some of the errors in this phase cannot practically be corrected. A cramped layout without room for flow or a busy hotel with too few elevators are examples.

Start-up: Frequently, the speed of the equipment (and hence quantity) turns out to be misjudged, and maintenance problems are not foreseen. Waste and yield issues crop up. Early-stage instabilities are characterized by comprehensive abnormalities, which have to be removed one by one. Start of production gets delayed, and 'teething troubles' persist. Process capability lags. Vertical startups, originally dreamt of, remain dreams. Delay in realizing the planned throughput, quality and cost can knock back what once might have looked an attractive internal rate of return (IRR).

Paradoxically, managements spend eighty per cent of their time and effort on their unending troubles in operations, while being in a tearing hurry when they are working on the upstream steps. There is 'no time' to get the upstream right but all the time in the world is available for firefighting downstream.

The reason this happens is that managements lack the knowledge to connect their day-to-day troubles to the failures upstream. There is not even a terminology in most companies to assign claims from the market to product or process development. Claims are habitually classified as 'technical' and 'commercial,' and manufacturing is made responsible for the technical part. In many organizations, the Quality Assurance function is fixated only on manufacturing and does not relate to product development. Product developers seldom even come to know that there are claims in the marketplace which originate from the development stage.

Eighty per cent is made or unmade upstream. Just realizing this will save companies much avoidable grief.

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 twelve 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.



Unveiling the Alignment:

Deming Examination Criteria and the Value Pyramid



After dedicating more than two decades to the promotion of Total Quality Management (TQM) in various organizations, I found myself continuously contemplating the underlying message conveyed by Deming Examination criteria as outlined in the Deming Prize guidelines by JUSE. It became apparent to me that these criteria are intricately aligned with the Plan-Do-Check-Act (PDCA) cycle, wherein each organization is tasked with strategizing what to achieve and how to achieve it (A. Business objectives and Strategies - Plan), implementing TQM across various processes in accordance with these objectives, and identifying both challenging and foundational strategies (B. Suitable utilization and implementation of TQM - Do), as well as assessing the impacts and identifying areas for improvement to take appropriate action (C. Effects of TQM - Check & Act).

This initial understanding, however, now appears to me as merely scratching the surface. Only after delving into the concept of the "Pyramid of Value" did I grasp the true essence and objective behind these examination criteria. The overarching goal is to enhance the value of organizations preparing for the Deming examination or, in a broader sense, to foster TQM practices that contribute significant value to business.

Today, I aim to elucidate my comprehension of the "Value Pyramid" and how the Deming Prize examination criteria are structured around it.



The Value Pyramid comprises four distinct levels:

1) Capabilities: This serves as the foundational level of the pyramid and can be considered the origin of value. Organizations, particularly their management, must consistently invest in building capabilities across various facets such as technology, systems, human resource competencies/skills, standardization, management practices, and digitalization.

The Deming examination criterion "C. Effects of TQM" addresses this very aspect. By evaluating the effects of TQM initiatives in alignment with identified business objectives and strategies, organizations can discern both successes and shortcomings. This, in turn, enables them to ascertain the existing capabilities and those needed for future endeavors. Organizations should diligently document both their current capabilities and those required, with a focus on retaining existing strengths while concurrently developing new ones.

2) Processes: Processes are the engines behind the creation of products and services within an organization, and their efficiency relies heavily on the capabilities that the organization has cultivated. Value generation is intricately tied to key drivers, particularly cost when it comes to processes. Essentially, the organization's ability to effectively translate its capabilities into operational processes determines its success.



Unveiling the Alignment:

Deming Examination Criteria and the Value Pyramid

The Deming examination criterion "B. Suitable utilization and implementation of TQM" underscores the importance of applying Total Quality Management methodologies and tools to enhance the efficiency and effectiveness of these processes. Streamlining processes not only aids in reducing or eliminating various types of losses but also provides the organization with a competitive edge in today's challenging business landscape. This criterion specifically emphasizes the creation of new value by understanding customer and societal needs and innovating technology and business models (Criteria B.III.2).

All sub-criteria within Criterion B.III of the Deming Prize examination, whether they pertain to strategic deployment, quality management and improvement, cross-functional management, information collection and analysis, or proactive societal initiatives, either necessitate the utilization of existing capabilities or prompt the development of new ones.

3) Strategy: This tier of the "Value Pyramid" centers on harnessing competitiveness by crafting features that clients are willing to pay a premium for. Through innovation and continuous process improvements, efficiency and novelty are achieved, enabling companies to carve out a robust position in the fiercely competitive business landscape. Securing business through competitiveness generates revenue for the organization.

4) Vision/Value: Vision serves as a compelling statement that inspires organizations to continually enhance business value by identifying and actualizing opportunities, often requiring significant efforts to challenge the status quo. However, pursuing such endeavors carries inherent risks, including the potential for failure due to the challenges of implementation and resource constraints. To mitigate these risks, it is advisable to establish mechanisms enabling organizations to track their progress over time and assess the value they create. Such mechanisms should incorporate performance indicators at various levels.

The Deming Prize criteria "A. Establishment of Business objectives, strategies and leadership" aligns with tiers 3 and 4 of the value pyramids, guiding organizations to formulate proactive, customer-centric business objectives and strategies while emphasizing the pivotal role of leadership in this process. By adhering to these principles, organizations can effectively realize their vision, thereby creating value for their shareholders.

After gaining clarity on this matter, I now feel more assured about why Total Quality Management (TQM) contributes to business growth. Implementing TQM or striving for the Deming Grand Prize isn't just about seeking recognition; it's about enhancing the overall capability of the organization. This, in turn, empowers the organization to thrive in competitive business environments by prioritizing customer-centricity in their products and services.

Hope you will like this read.

Thank you!

Vishwadeepak Khandelwal

About the author:

Vishwadeepak Khandelwal, Head of TQM & Workmen Skill Development at TVS Sundaram Clayton Ltd. (TVS-SCL), brings over 20 years of experience in leading TQM initiatives and driving progress in Deming and Deming Grand journeys across multiple organizations. Prior to TVS-SCL, he played key roles in advancing TQM practices at M & MLtd.'s tractor division in Jaipur, Chandigarh, and Pant Nagar Plants, as well as at Ashok Leyland Ltd.'s Pant Nagar plant and Apollo Tyres Ltd.'s Chennai plant. Vishwadeepak holds TPM facilitator certification from CII and contributed significantly to TPM Excellence and Consistency awards at Mahindra & Mahindra Ltd. He has extensive training in various TQM domains, including Policy Management, DWM, Improvement Management, Standardization, Vertical Evaluation, Application of QA Matrix, and Four Student Analysis. Vishwadeepak gained practical experience under esteemed Japanese TQM experts such as Dr. Noriaki Kano, Prof. Yukihiko Ando, Prof. Y. Washio, and Prof. Kubota San. He has trained and guided over 500 QC Story and improvement projects, significantly enhancing organizational performance. He also actively contributes to the executive committee of the ISQ Chennai chapter.



Quiz Quest

1. **Which quality tool helps in identifying the relationship between two variables?**
 - a) Control Chart
 - b) Scatter Diagram
 - c) Histogram
 - d) Flowchart

2. **What is the primary focus of Lean manufacturing?**
 - a) Increasing product variety
 - b) Reducing waste
 - c) Enhancing employee benefits
 - d) Expanding market share

3. **Which of the following is a primary principle of Total Quality Management (TQM)?**
 - a) Cost reduction
 - b) Employee empowerment
 - c) Increase in production speed
 - d) Decreasing employee training

4. **Six Sigma primarily aims to:**
 - a) Increase product variety
 - b) Improve customer satisfaction
 - c) Reduce defects and variability
 - d) Accelerate product development

5. **A Pareto Chart is used to prioritize problems or causes of defects to identify the most significant ones.**
 - True
 - False

6. **In a Six Sigma project, a Black Belt has a higher level of expertise than a Green Belt.**
 - True
 - False

7. **Benchmarking is the process of comparing one's business processes and performance metrics to industry bests or best practices from other industries.**
 - True
 - False

8. **Benchmarking is only useful for comparing financial performance.**
 - True
 - False

9. **Failure Mode and Effects Analysis (FMEA) is a proactive tool used to identify potential failures and their impacts.**
 - True
 - False

10. **Total Productive Maintenance (TPM) focuses solely on maintaining equipment.**
 - True
 - False

To know the answers, please refer page no.



CASE STUDY

ACE Electrical Energy Efficiency

Tejas Shah

Mahindra Logistics Limited



Project and contact details

Project Title - To reduce electrical energy consumption (Measured in KWH) by 25% in FY 23 measured against the baseline of previous years (FY 22) across the 100 sites governed & managed by MLL

Contact Person: Tejas S Shah

Email: shah.tejas@mahindralogistics.com

Project Sponsor: - Rampraveen Swaminathan, MD & CEO - Mahindra Logistics

Project Mentor: - Rajesh Shetty, VP - Operations Excellence

Project Team: - Vishwas Jadhav, Kanishka Yadav, Ganesh Patil, Kajal Mudpe, Project site team leads, Regional Champions

Company: **Mahindra Logistics Limited**

Rationale for Project Selection: - Mahindra Logistics Limited (MLL) is an integrated third-party logistics (3PL) service provider specializing in supply chain management and enterprise mobility. With a customer base of over 400 clients, MLL caters to various industries including Automobile, Engineering, Consumer Goods, and E-commerce, Last Mile Delivery. The company follows an "asset-light" business model, offering customized and technology-enabled solutions that cover the entire supply chain and people mobility services.

In alignment with the overall sustainability goals of the Mahindra Group, Chairman Anand Mahindra announced at the Global Climate Action Summit (GCAS) that the entire group aims to achieve **carbon neutrality** by 2040. As part of this commitment, **MLL** is one of the **20 Mahindra Group** companies that have signed up for the Science-Based Targets initiative (SBTi).

This initiative involves setting specific and measurable targets to reduce greenhouse gas emissions in line with scientific consensus on climate change mitigation. Through their participation in the SBTi & adoption of sustainable practices, MLL & Mahindra Group demonstrate their dedication to environmental stewardship and addressing climate change concerns in the logistics industry.

Problem Statement-

1. Electricity (KWH) Consumption Reduction by 25% in FY 23 against the baseline of previous year (~75 Lac KWH in FY 22) across 100+ MLL managed & governed sites there by reduction CO2 Equivalent emission by 1600 Tons, translating to an equivalent of protecting ~9580 trees.

Approach & Methodology adopted: - Team undertook DMAIC (Define, Measure, Analyze, Improve, Control) approach to drive the project.

1. DEFINE: -

- a) We began by defining the **Project Charter, Project Team, Project plan** and Key Baselines.
- b) We defined key matrices (KPI) for improvement through the application of various methodologies such as 4W-1H, 3G, brainstorming, and benchmarking.
- c) We conducted **Road Shows** for doing detailed Process Walk through at **top 30 locations pan India** to identify the deviations / abnormalities and identified Quick Wins for improvement. Same was signed off with the site leads for immediate implementation through Kaizens.

a. Examples: - At sites we observed the below abnormalities for which Kaizens were implemented.

- I. No fixed time defined for ON / OFF time of Warehouse lights
- II. No fixed time defined for charging of the MHE's and taking benefits of the incentives from state governments in EB Bills
- III. Low level of understanding on the use of TIME OF DAY (TOD) in EB Bills
- IV. Low awareness on use of optimum temperature for HVAC
- V. Power factor values on EB Bills were not as per desired
- VI. Entire sets of LED lights used to be used across the roof of warehouse and there was limited arrangement for alternate lighting etc.



CASE STUDY

ACE Electrical Energy Efficiency

2. MEASURE: -

- To gather data on site-wise actual kWh consumption, we utilized check sheets and performed data collation. Additionally, we employed **data stratification techniques** based on asset class and business type, along with **descriptive statistics and box plots**.
- We collated all the data points to assess the AS IS Level in the data across Top 30 sites to start with.
- Created detailed **Process Maps** and did **VA / NVA analysis** along with application of **CAT Tool** (Cause Analysis Table) to identify the probable causes

3. ANALYSE: -

- For **Top 30 locations** team created an **2x2 matrix for Energy KWH parameter on Stability vs Customer Specifications** and Mapped the Top 30 locations on the 2x2 grid matrix. Thereby initiating actions for DWMS, Yellow Belt projects
 - Post making the matrix it was found that out of the Top 30 locations, 23 locations were not stable and not capable.
 - Daily management activity was started asap where in every site leader from Top 30 locations used to input daily KWH consumption in the central trackers and started plotting I-MR chart to detect abnormalities post which PDCA was started for deviations.
- Created detailed Process Maps and did VA / NVA analysis along with application of CAT Tool (Cause Analysis Table) to identify the probable causes & Root causes
- Team conducted **Normality test, Run Charts, box plots, Histograms** on the AS IS Data to understand the trend, variation etc.
- Team identified the **Special and Common cause through IMR Control Charts, Pp and Ppk Capability** analysis and implemented Kaizens
- Conducted analysis through **Scatter plot, Multiple Regression, 1T & 2T tests, Box plots, Capability Analysis Six Pack, Anderson darling Normality test, non-Normal data analysis (Weibull Distribution)**
 - Examples -
 - Scatter plot for Daily working hours of sites vs Energy (KWH) consumption
 - Scatter plot for Daily Manpower deployed vs Energy (KWH) consumption
 - Box plot of category wise, shift wise, site wise Energy (KWH) consumption
- 3-Tier Approach** for driving improvement (**L1 – Quick Wins, L2 – Electromechanical Devices like Energy meters, smart meters, motion sensors, timer with contactor, L3 – AI & IOT devices with Bosch, RIL JIO**)

4. IMPROVE & CONTROL: -

- Developed unique Org Structure to drive improvements Pan India across Top 100 sites. Team formed 4 regional heads for Energy efficiency, Energy champions in each and every business along with site champions at Top 30 sites.
- Energy Efficiency Reviews through the Steering Committee on a monthly basis were done whereby the Company Leadership Team members provided their valuable guidance, inputs & support.
- Team implemented the actions to address the root causes to higher energy consumption across warehouse lighting, Dock Lighting, Warehouse HVAC utilization, Energy consumption for machinery Charging, Cold Storage facilities etc.
- Team monitored the I-MR Control Charts daily to ensure the sustenance of the performance and established Pp and Ppk Capability analysis
- To institutionalize the solutions, replicate and share best practices, and acknowledge good kaizens, we did horizontal deployment of Kaizens and implemented 20 Kaizens unique across top 30 sites.
 - Overall, we identified more than 30+ solutions. Out of which we implemented 20 kaizens across top 30 sites.
- These measures helped us ensure sustainability and continuous improvement of our processes.

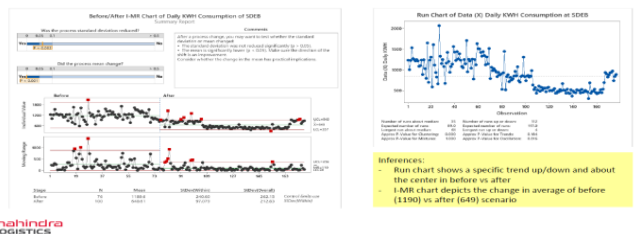
Below are some examples of site level actions taken along with BEFORE and AFTER results.

Key Actions – Initiatives implemented – Alternate warehouse lights, Dock lights, AC temp set at 24 Deg & Energy meters installed. Shift wise Daily KWH monitoring started from 12th Apr 2022.

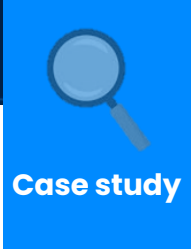
AMXL - SDEB, Luhari - Case Study

Igniting Success ▶▶

Before/After Daily I-MR Chart and Run Chart of Daily KWh Consumption

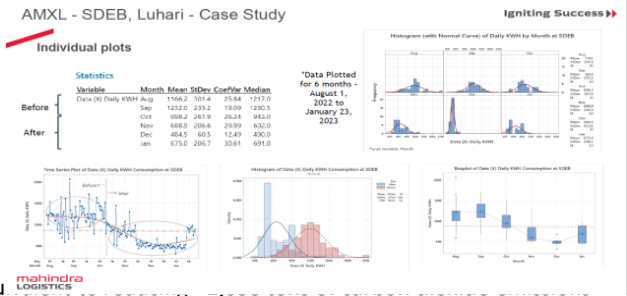
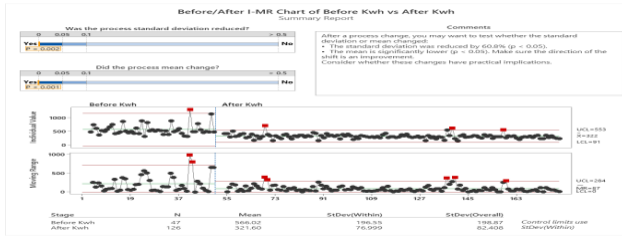


mahindra
LOGISTICS



CASE STUDY

ACE Electrical Energy Efficiency



Results-

Electrical energy saving of approximately ~22 lakh kWh, which is equivalent and is comparable to the conservation of ~9,809 trees.

1. Additionally, we have achieved cost savings of INR ~2.34 crore in FY 23. Project handed over to Sustainability team & Business Champions for routine drive and sustenance from FY 24 onwards
2. Implemented 20 Nos of Kaizens and horizontally deployed across MLL
3. Trained 400+ participants across MLL on Energy Efficiency modules
4. Implemented IMR Control Charts across Top 30 locations to make processes stable and capable
5. Conducted Normality, 2T Test, Box plot, Before & After I-MR Chart, Capability 6 pack analysis - Top 30 sites
6. 2x2 matrix for Stability vs Customer Specifications for Top 30 locations
7. Knowledge series & orientation to 700+ employees on various topics of Energy efficiency
8. Benefited over 55 employees through a dedicated R&R program across various categories (Awards for H2 FY 23 and FY 23 Annual level are under review at the time of making this document)

Below are some of the glimpses of various aspects of the Project: -

• Road Show sample pics:-



• R&R Emalers, Knowledge series, and Kaizens being published:-



• Awareness emalers, Knowledge series, training sessions:-



Awards Won.

- Team won 1st prize Platinum Award at the CII Awards in FY 23 for this Project
- Team won 1st prize Gold Award at the IIM Mumbai, QJAC Competition FY 23 for this

About the author:

Mr. Tejas Shah is a result oriented Lean Six Sigma Black Belt professional with over 18 years of experience in Strategic Business Management, Business Transformation, Automation, Cost optimization, NPD in Logistics & Supply Chain and Auto Industry. He is a Graduate in Mechanical Engg and he has completed his PGDQM, Ex-PGDBM. He has worked for 2+ years with McKinsey & Co. team for Business overall project and currently working Mahindra logistics as General Manager Business Excellence. His Area of expertise include Gross Margin Improvement, Business Transformation, Industry 4.0 Automation Tech solutions, Leading start up incubation and Innovation program, Product Design to Development cycle. He has co-created and developed many innovative products across multiple domains of technology, EV and Mechanization. Served as Project Leader for Implementing IMS across entire organization. Mr Shah is a Recipient of multiple awards from CII, IIM Mumbai, QCFI, Mahindra Corporate under Low Cost Automation, Quality, Innovation and Energy Efficiency Sustainability category.

H O P E THROUGH QUALITY

HEALTH OF PLANET EARTH

Integrating Quality and Sustainability

For everyone concerned with the challenges of keeping the planet healthy and humanity thriving, Mr. N. Ramanathan gave a talk online which was organized by ISQ Quality Earth Forum on **27th April 2024** online. Mr. Ramanathan has been conducting this program every year which has been attracting good participation and awareness on planet earth concerns, countermeasures to prevent harm and Quality-based management approaches to making improvements to sustainability. He also provided guidance to the prospective applicants for the Quality Sustainability Award 2024.

TOPS Convention 2024, Bengaluru – a report

The first in the series of TOPS Convention 2024 was held in at BMS College of Engineering, Basavanagudi, Bengaluru with a record participation of 54 teams.



ISQ Bengaluru Chapter in association with Department of IEM, B.M.S. College of Engineering, Bengaluru successfully conducted the first TOPS Convention 2024. a contest of Team Oriented Problem Solving projects for executives from OEMs, Tier-1 and Tier-2 manufacturing companies, process industry, academia and service sector.

Date: 24th May 2024

Venue: BMS College of Engineering, Basavanagudi, Bengaluru

[Click here](#) for the complete report and to know about the winners of the contest.

CEO THROUGH TQM Chennai a report

Creating the **Extraordinary Organization through Total Quality Management**

13~15 June 2024. Venue: IC & SR, IIT Madras, Chennai



Sixth edition of the popular program CEO through TQM was organised by ISQ Chennai Chapter. Thanks to Mr. N. Ramanathan's (NR) kind gesture and passion on spreading the knowledge on TQM; he has been conducting the program since 2019 pro-bono for ISQ and to the benefit of senior management of the organisations. 41 delegates which included senior executives from industries, consultants and academicians participated in the program. Read more [here](#).

Problem Solving Methods and Tools by Mr. Mahesh Hegde – Program organized by ISQ RVCE Students chapter, Bengaluru

About 70 students, professors and few from industries participated in the program organized at R V College of Engineering, Mysore Road, Bengaluru on 22nd June 2024. 75 students, professors and few from industries attended the 2.5 –hour program. it was an insightful experience that portrayed the importance of structured approach to problem-solving which was well appreciated by the participants.



Annual Conference 2024

ISQ Pune and Bengaluru Chapter are happy to announce the Annual Conference 2024 in Bengaluru.



12th December to 14th December 2024



Dwaraka Auditorium,
M. S. Ramaiah Medical College Campus
M S Ramaiah Nagar, Mathikere, Bengaluru, 560054

Block your dates now. Be in touch with us for updates through www.isqnet.org or write to info@isqnet.org

Other online knowledge sharing sessions

Date/ Organised by	Knowledges sharing session	Speaker	Details
25 05 2024 / Pune Chapter	The 12 Building Blocks of Organizational Culture	Grace Duffy Management & Performance Systems, USA	https://tinyurl.com/ 2apw8pbr
01 06 2024 / Quality Earth Forum	6-point Understanding of Climate Change & Corrective Actions	Prof. Chetan Singh Solanki IIT Bombay I Founder, Energy Swaraj Foundation, Solar Man	https://tinyurl.com/ 2s3b5www
23 06 2024 / Jamshedpur Chapter	Basics of SPC and Control Charts	Nishith K Sinha, Tata Steel	
28 06 2024	Future-Proofing Through Incremental Innovation: A Blueprint for Tech Excellence	Supantha Banerjee, COO of Technology Partners, USA	https://tinyurl.com/ 4phxc33d

Upcoming programs - National

Event	Date	Location	Organised by
CEO through TQM	19 ~21, July 2024	Crowne Plaza, Rohini, Delhi	ISQ NCR Chapter
Quality Month Lectures 2024	9, 16, 23, 30 Nov 2024	Virtual – through MS Teams	ISQ GC
TOPS Convention 2024	Being finalized	Pune, NCR, Chennai	ISQ chapters
Best practice on TPM	28, September 2024	NCR region	ISQ NCR Chapter
Quality 4.0 symposium	Being finalised	Bengaluru	ISQ Bengaluru Chapter

International ANQ CONGRESS 2024

Date	16-17, September 2024 - ANQ CEC & ANQ Board meeting 18-19, September 2024 - ANQ Congress 2024 20, September 2024 - Site Visit
Place	Yokohama, Keio University, Japan
Host organisation	Japanese Society for Quality Control (JSQC)
Mode	Physical

The important dates are (Call for Paper)

Last date for early bird registration	July 15, 2024
Deadline for Full Paper Submission	July 31, 2024

Note: Visit <https://pub.confit.atlas.jp/en/event/anq2024> for updates



IAQ Quality Sustainability Award 2024



Last date to submit the applications has been extended to 15th July 2024

IAQ is proud to announce the launch of the fifth Quality Sustainability Award. In previous years over 200 projects have been applying for this prestigious award, that wants to promote the use of quality management to improve the sustainability of organizations. Many excellent projects have competed.

ISQ is a local partner to the award from India along with CAQ (China), Israel (IIQIE) and Peru (PUCP). Philippine Society for Quality (PSQ) is the latest partner for the award.

Flow	Comment	Timeline
Apply for the QSA	Indian applicants send the application to partner ISQ	15 th July 2024
Local evaluation + ROW	"Evaluation"	End: September 15
Local award winners + ROW selected for global		Local Awards ROW selected October 1
Confirm participation to global award by selected applicants	Application and one page summary in English + a high resolution team picture + a 10 min video to be send to IAQ	October 15
Prepare presentation video send all info to IAQ		November 15
Presentation & Award Ceremony Announcing the Global Winner(s)		December



Quiz Quest (answers in bold)

- Which quality tool helps in identifying the relationship between two variables?**
 - a) Control Chart
 - b) **Scatter Diagram**
 - c) Histogram
 - d) Flowchart
- What is the primary focus of Lean manufacturing?**
 - a) Increasing product variety
 - b) **Reducing waste**
 - c) Enhancing employee benefits
 - d) Expanding market share
- Which of the following is a primary principle of Total Quality Management (TQM)?**
 - a) Cost reduction
 - b) **Employee empowerment**
 - c) Increase in production speed
 - d) Decreasing employee training
- Six Sigma primarily aims to:**
 - a) Increase product variety
 - b) Improve customer satisfaction
 - c) **Reduce defects and variability**
 - d) Accelerate product development
- A Pareto Chart is used to prioritize problems or causes of defects to identify the most significant ones.**
 - a) **True**
 - b) False
- In a Six Sigma project, a Black Belt has a higher level of expertise than a Green Belt.**
 - a) **True**
 - b) False
- Benchmarking is the process of comparing one's business processes and performance metrics to industry bests or best practices from other industries.**
 - a) **True**
 - b) False
- Benchmarking is only useful for comparing financial performance.**
 - a) True
 - b) **False**
- Failure Mode and Effects Analysis (FMEA) is a proactive tool used to identify potential failures and their impacts.**
 - a) **True**
 - b) False
- Total Productive Maintenance (TPM) focuses solely on maintaining equipment.**
 - a) True
 - b) **False**

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Jimit Niyogi Joshi	Sr. Manager	Mahindra & Mahindra Ltd, Mumbai
Bhuvanewari M	Deputy General Manager – R&D	Schneider Electric India Pvt. Ltd, Navi Mumbai
Vikrant Deshpande	General Manager QBM- (Business Excellence)	CEAT LTD Mumbai
Dr. Ravi Veeraraghavan	Director	Xavier Institute of Management & Entrepreneurship, Kanchipuram
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Barathkumar Sekar	Lead Engineer Quality Assurance	SQuAD Forging India Pvt. Ltd, Belgaum
Manikannan S	Plant Head & MR	PRK Ancillaries India Pvt. Ltd., Bangalore
Krishnamurthy Nagesh Prakash	Consultant	Self employed
Prashant Alekar	Director	QLeNPro Consulting & Training LLP, Pune
Lalit Kumar Verma	GM (PROBLEM SOLVING)	MAHLE ANAND Filter Systems Private Limited, Gurgaon
Kumar R	Head Quality Management	Bosch Limited, Bengaluru
Joydeep Chatterjee	Sr. GM Corp. Quality	Cummins India Ltd, Pune
Akash Diwakarrao Somkuwar	GM Head QA	VST Tillers Tractors Ltd, Hosur
K. V. S. S. Iyer	Sr. Consultant QSAS	Quality Evaluation and Systems Team Pvt Ltd, Bengaluru
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Ganga Ram Yadav	VP- Operations	Sona BLW Precision Forgings Ltd, NCR
Gurpreet Kaur	Manager	Tata Power Delhi Distribution Limited, Delhi
Kapil Dev	Sr. Mgr	Tata Power Delhi Distribution Limited, Delhi
Rajesh Bahl	Sr.G M - Chief (Operations & Safety)	Tata Power Delhi Distribution Limited, Delhi
Suranjit Mishra	G M - Chief Finance Officer	Tata Power Delhi Distribution Limited, Delhi

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Manish Goel	Addnl. GM - Head(Enforcement, Security & D)	Tata Power Delhi Distribution Limited, Delhi
Major Pola Bhaskar	Addnl. GM - Head(Town Circle & City Circle)	Tata Power Delhi Distribution Limited, Delhi
S S Vashishth	Sr. GM (Electrical) - Chief(Enforcement & DOSEC)	Tata Power Delhi Distribution Limited, Delhi
V K Saxena	GM(Electrical) - Head(Safety)	Tata Power Delhi Distribution Limited, Delhi
Kunal Pareek	D G M - HoD (BE & TQM)	Tata Power Delhi Distribution Limited, Delhi
Joydip Roy	GM - Head(RCM & CWG)	Tata Power Delhi Distribution Limited, Delhi
Subhadip R	Addnl. GM - Head(NEG,PE,EAG,GIS & Smart Mt)	Tata Power Delhi Distribution Limited, Delhi
Nikhil Pathak	Addnl. GM - Head(TS, QA, Sustainability)	Tata Power Delhi Distribution Limited, Delhi
Jitender Dahiya	Addnl. G M-Head(Urban Circle)	Tata Power Delhi Distribution Limited, Delhi
Priyanka Sagar Vij	Sr. Manager-HoG(Strategy & CEO Cell)	Tata Power Delhi Distribution Limited, Delhi
Pradeep K Sharma	HoG (TQMEC)	Tata Power Delhi Distribution Limited, Delhi
Uchit Kumar	Sr.Manager(CEG - MMG Enforcement)	Tata Power Delhi Distribution Limited, Delhi
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Gaurav Arora	AGM Comml.(MMG Stores,Testing	Tata Power Delhi Distribution Limited, Delhi
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Shivansh Saxena	Team Member - IT	Tata Power Delhi Distribution Limited, Delhi
Pankaj Goel	TA to CFO	Tata Power Delhi Distribution Limited, Delhi
Disha Sharma	Manager-TA to Chief(NS)	Tata Power Delhi Distribution Limited, Delhi
Amit Arya	AGM-HoG (NEG - III)	Tata Power Delhi Distribution Limited, Delhi
Manisha Taneja	Manager - TA to Chief(Regulatory, PM & Legal)	Tata Power Delhi Distribution Limited, Delhi
Shubhi Vashishth	Manager - Regulatory	Tata Power Delhi Distribution Limited, Delhi
Simran Kaur	AGM-HoG (Tech & Center of Excellence)	Tata Power Delhi Distribution Limited, Delhi
Pragati Sharma	AGM- HoG (Real Time Power Mgmt, Reliability)	Tata Power Delhi Distribution Limited, Delhi
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Keshav Raghav	HoD (EAC - Recovery)	Tata Power Delhi Distribution Limited, Delhi
Anurag Khurana	HoD (RRG,MRG,RCG Front Off, PB & LS)	Tata Power Delhi Distribution Limited, Delhi

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Dipanwita Ray	HoD (CEM, CSG, VAS & Eaas)	Tata Power Delhi Distribution Limited, Delhi
Meenakshi Arora	HoD (HRB, KCG, Express & PA)	Tata Power Delhi Distribution Limited, Delhi
Manisha Wadhwa	HoD (CEM & CSG)	Tata Power Delhi Distribution Limited, Delhi
Sanjeev Rana	HoD (Communication Tech & Architecture)	Tata Power Delhi Distribution Limited, Delhi
Shashank Sharma	HoD (G&I, NBS & Street Light Project)	Tata Power Delhi Distribution Limited, Delhi
Harleen Kaur	HoD (Talent Dev. & Emp Engagement)	Tata Power Delhi Distribution Limited, Delhi
Shrinjoy Bagchi	HoD (Automation & P & T Distribution)	Tata Power Delhi Distribution Limited, Delhi
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Surender Singh	G M Head(Distribution Operations)	Tata Power Delhi Distribution Limited, Delhi
Nitin Tyagi	Executive (BE - TQMEC)	Tata Power Delhi Distribution Limited, Delhi
Smitu Shree Mahapatra	Officer(BE - BEMI, CFM, KM & Audi)	Tata Power Delhi Distribution Limited, Delhi
Shishir Srivastava	MC- Metro Circle	Tata Power Delhi Distribution Limited, Delhi
Ritu Gupta	F&A - Financial Controlle	Tata Power Delhi Distribution Limited, Delhi
Vipin Kalia	TS - Switchgear, FLC & DT	Tata Power Delhi Distribution Limited, Delhi
Kapil Kumar	Power System Control	Tata Power Delhi Distribution Limited, Delhi
Shiva Kumar	Material Quality	Tata Power Delhi Distribution Limited, Delhi
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Geetanjali Tripathi	Social Impact Group	Tata Power Delhi Distribution Limited, Delhi
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Amit Taneja	IT - Infra, User Service	Tata Power Delhi Distribution Limited, Delhi
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KM Gajendra	Manager	Amara Raja Batteries Ltd, Chittoor
R.Satyanarayana Reddi	DGM	Amara Raja Batteries Ltd, Chittoor
N.Prasad Reddy	Sr.Manager	Amara Raja Batteries Ltd, Chittoor
S.Mohana lakshmi	Asst.Manager	Galla Foods Division Ltd, Chittoor
K.Doraswamy Pillai	Manager	Amara Raja Batteries Ltd, Chittoor
S.Sankara Narayanan	Sr.Manager	Amara Raja Electronics Ltd, Chittoor
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Shishupal Agarwal	Asst Manager QA	Tata Autocomp Hendrickson Suspensions Pvt. Ltd., Pune

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Sandeep Deodatta Priolkar	Retired as DGM/Head-Central Maintenance Department	Mahindra & Mahindra Ltd, Mumbai
M Sundar	Head Quality Assurance	Saaru Innovations Pvt Ltd, Ahmedabad
Jyoti	Sr. Officer - BE -TQMEC	Tata Power Delhi Distribution Limited, Delhi
Hariom Singh	HoD (F&A - F&A Operations & Ci)	Tata Power Delhi Distribution Limited, Delhi
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Anoop Nandi	HoD (HR - TD - BD & Colloborat)	Tata Power Delhi Distribution Limited, Delhi
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Manoj Kumar Sharma	HoD (EHV Projects)	Tata Power Delhi Distribution Limited, Delhi
Anil Kumar Meena	HoD Civil-(MC,TC & CC)	Tata Power Delhi Distribution Limited, Delhi
Anujesh Shahi	Power Mgmt	Tata Power Delhi Distribution Limited, Delhi
H C Sharma	G M - Chief (Tech Serv.,PM,PSC,Q&S,BD)	Tata Power Delhi Distribution Limited, Delhi
Praveen Agrawal	G M - Chief (HR & IR)	Tata Power Delhi Distribution Limited, Delhi
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