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Editorial Team
NCR chapter

Welcome Mr. Girish Garg from NCR chapter to the Editorial committee

Girish graduated with his bachelor's degree in Mechanical engineering from Maharishi Dayanand University in the year 2007. He is a young & qualified management professional with over 13 years of rich experience in automotive industry in quality assurance & leading various projects of New product development, Process planning, business excellence, Cost reduction & localization across organizational hierarchy.

He has been associated with world's leading, renowned & prestigious brands like Honda Cars India Limited, Motherson Sumi Systems Limited & Robert Bosch India Limited & well versed with the latest trends & technologies.

Being a certified Internal Auditor for ISO 9001:2015 & ISO TS16949:2009 from TUV India, he bears extensive knowledge of designing & developing quality systems. He is contributing to "Indian Society for Quality" since the year 2012 as a life member. He is also actively associated with other prominent societies like "International Association of Engineers" (Hong Kong), & "Indian Society for Mechanical Engineers" (India).

Indian Society for Quality

Editorial Message

Dear Readers ,

Greetings from ISQ !

I hope and wish you all along with families are safe in this pandemic !

The second wave has hit the country hard and people have suffered immense pain having lost their near and dear ones and due to the difficulties in getting treatment.

Thankfully the downturn cycle is equally steep and vaccination drive getting momentum at the same time, we hope to be returning to a reasonable normalcy.

ISQ had its moment of pride during this quarter when Mr. N Ramanathan, who needs no introduction to Quality community world over, was awarded “Edwards Medal” by ASQ (American Society for Quality), the number one society in this field. In fact it’s a reason for the whole Quality fraternity in the country to feel proud of this recognition bestowed on Mr. Ramanathan.

As a consequence, this pandemic is resulting in fundamental changes in business models and processes leading to rapid growth of consumption driven manufacturing , infra , transport, service and health care needs et al. This development is taking a toll on the environment consequently there is an increasing concern for environment protection and sustainability is taking prominence even in boardrooms.

To align ISQ activities with new imperatives a need was felt to visit its Vision and Mission relevant to the emerging needs. Our Governing Council has deliberated at length and has come out with new Vision , Mission statements – details are being shared in this issue.

In this issue Mr. Ramanathan has , in his serial “Vignettes from Ram” has brought out a very interesting issue of ethics in Quality profession , do read it to get a glimpse of his deep insights in the topic.

Our endeavor is to bring you more knowledge and information in the Newsletter and in this pursuit, we are expanding the editorial team.

Mr. Girish Garg from NCR chapter has volunteered to be a part of this team. I am sure his contributions will be helpful in making this publication a great read.

Please join me in extending him a warm welcome to the team !

I also call upon interested volunteers from Pune and Bengaluru chapters as well.

Do drop me a line or contact Mr. Prabhakar Shettigar in case you want to be part of this editorial team.

Enjoy reading , stay safe !

Best Regards,

Ved Parkash

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Edwards Medal (2021) presented to Mr. N. Ramanathan

It gives us great pleasure to inform you that N. Ramanathan (Ram) has been awarded the Edwards Medal by ASQ for his contribution to quality movement. It is a matter of great pride that ISQ has such a dedicated, knowledgeable and humble professional in its true sense as a mentor who fully deserves such a recognition from a prestigious organization outside of India.

Citation reads as follows.



EDWARDS MEDAL

N. (Ram) Ramanathan, SRF Limited, Gurugram, India

Edwards Medal presented to N. (Ram) Ramanathan, SRF Limited, Gurugram, India -"For decades of faithfully serving as a counselor and advisor on quality matters; for exceptional advancement of quality in India and beyond; and for farsighted thought leadership in challenging the global quality community to expand its horizons by the inclusion of sustainability and egalitarianism in its considerations to deliver quality-based management that benefits humanity."

Dear Ram,

On behalf of ISQ I complement you on being awarded the Edwards Medal by ASQ, an excellent recognition for your effort over many decades. You are the brightest Quality Star from India sharing your knowledge and wisdom around the world. You make India and ISQ proud in a humble way. Your guidance is needed in India and I believe it will make considerable contribution towards India's journey for socio-economic prosperity for which quality is an essential component.

Wish you many years of sound health and look forward to your continued contribution to the cause of quality and ISQ.

Janak Kumar Mehta,
President,
Indian Society for Quality

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News:

A new mission, vision, objectives and execution plan for ISQ

Governing Council formally approved a new vision, mission and its execution plan on 11th February 2021 in a special GC Meeting . The draft document was prepared by Mr. N. Ramanathan, former President of ISQ and life member and refined in discussion with Mr. Janak Kumar Mehta, President ISQ and put forth for approval in GCM. The approved vision mission was then presented to a team of seniors and experts in the field of quality for their suggestions.

The new mission and vision of ISQ after the systematic review is as stated below.

Mission

Contribute to the thriving of humanity in a healthy planet

Vision 2025

Be the principal national forum for leaders, professionals, and academics for exchange of knowledge on delivering quality that benefits humanity

Towards execution plan of the mission, vision and objectives, ISQ has proposed to form forums, committees and divisions. Senior quality professionals across India are expected to join ISQ to lead them.

Good news is that for the following committee, eminent quality professionals mentioned below have voluntarily accepted to lead.

Awards Committee: Mr. Sunil Sinha, Resident Director, MENA region, Tata Sons has kindly consented to be the Chair of Awards & Recognition Committee. Mr. Vivek Talwar, Founder Director of Chrysalis and former BE & Transformation Head, Tata Power and Mr. Sunil Kaul, Member, ANAND Executive Board, Group President and Chief Technology Officer are the executive members in the committee.

Quality Earth Forum: Mr. Vijay Kalra, Head, Mahindra Institute for Quality has gladly accepted to lead the Quality Earth Forum. The members are Snehilkumar, independent TPM counsellor, Harsh H Dhagamwar, Head Sustainability, Tata Steels, Nasir Deshmukh, VP Mfg Operations M& M, Head, Chakan, Aditya Srivastava, Sr Vice President & Head of Operations , VE Commercial Vehicle Ltd, Manish Manek, Chief Plant Officer, MG Motors Ltd, Hitesh Kataria, Sr. Manager Sustainability, M&M are the members.

Quality Innovation Forum: Mr. Kiran Deshmukh, Group CTO, Sona Comstar is leading the forum as the Chair, Mr. Ram Mohan, Quality Counsellor and consultant is the executive committee member of the forum.

Forums	Committees	Divisions
Quality Earth Forum	Awards Committee	Manufacturing
Digitisation forum	Bylaws & Organisational Systems	Service (IT, Healthcare, Hospitality)
TQM/BE Coordinators forum	Education & Certification Committee	MSME
Innovation forum	Membership Committee	Information Technology

Interested ISQ members with appropriate skill and knowledge may apply for the membership of the forums. The membership for the first forum will be free. Beyond one, a nominal fee will be applicable to apply for membership.

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eLearning Programs

ISQ, Pune Chapter conducted two eLearning Programs for the members and quality fraternity as follows. The sessions were well attended and appreciated by the participants.

Date	Topic	Faculty	Participants
10 th April 2021	Case study on Energy cost reduction using Six Sigma	Mr. Vivek Gupta, Tata Motors Ltd, Pantnagar	202
5 th June 2021	Effective Learning Methods	Mr. Mahesh Hegde, Founder, Learnex Consulting	170

International News:



International Academy for Quality

Quality Sustainability Award 2021



Quality
Sustainability
Award

International Academy for Quality

The national and international competition of Quality Sustainability Awards 2021 has already been announced in the first year of ISQ becoming the national partner. The last date for receiving the application is 30th June 2021.

Visit <https://www.isqnet.org/category/events/international/index.html> for brochure and application forms.



Coming Up

ANQ CONGRESS 2021

Theme: Relentless Pursuit of Quality in a VUCA World"



SINGAPORE
QUALITY
INSTITUTE

Dates:

(Volatile, Uncertain, Complex, Ambiguous)

20 – 21, October 2021 Organised by: Singapore Quality Institute through Zoom

Last date to submit the abstract for ANQ Congress 2021 has been extended to 30th June 2021.

The abstracts for the papers from India will be received and evaluated by ISQ. The abstracts may be sent to events@isqnet.org. Refer international events section of www.isqnet.org for details

Authors of selected abstracts will be eligible for submitting full paper to ANQ Congress 2021 directly through website www.anq2021.org

Coming up shortly

Quality Innovation Award – 2021



QUALITY
INNOVATION
AWARD

Indian Society for Quality

ISQ annual conference 2021



9-11, December 2021



Delhi/ NCR

Theme: Rebooting Quality for Competitive India

For updates stay in touch with www.isqnet.org

ISQ Symposium 2022



4-5, February 2022



Being finalised

2-Day program with presentation of papers on the theme by industry and academia

An event to advance quality management by providing a common platform for both **academicians & industry practitioners** to present the research / implementations through technical & scientific papers of higher order in the field of quality.

Theme: Driving excellence through quality management

Objectives

To advance the discipline of quality by providing a platform for both academicians and practitioners to present original, high-standard technical and scientific papers describing their research or practical implementation in the field of quality. Papers involving advanced use of techniques and tools, as well as formulation of systems and methods are encouraged. Academics can present their thesis work, or postdoctoral work. Industrial practitioners can present actual case studies backed by literature review and the skilful use of methods and techniques.

Who should attend?

- Quality practitioners
- Researchers, counsellors
- Engineering, Management and research scholars
- Executives from industries, IT and health sectors, research institutions etc.

Be in touch with us for details

Coming up

TOPS Convention 2021

Quality Month Celebrations, November 2021

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Vignettes from Ram:

QUALITY AND ETHICS



In his lectures in 1954 in Japan, Joseph Juran declared: “Quality is the ethical imperative of the senior executive.” Thus, to not deliver quality is, to a degree, an ethical issue too.

Since then there have been some rather high-profile quality failures that have shaken the world. Some of them clearly smell of deficient ethics.

Perhaps the most damaging was the global financial crisis of 2008 which had its origins in sub-prime housing mortgages in the U.S. being bundled into bonds and dubiously assigned good credit ratings. There was chicanery involved among banks, credit rating agencies and investment firms. And when the inevitable blow-up happened, governments helped patch it all up. No one was punished. As it happens when dramatic events occur, movies get made. The star-studded movie, *The Big Short*, was one such.

Pharmaceutical companies have their trail of fiascos too. The painkiller *Vioxx* by Merck was approved by FDA in 1999. Incidents of heart attacks and deaths started hitting the news. Were increased adverse events significant at 95%? Is 95% significance an appropriate method when it comes to judging death rates? Merck, after fighting lawsuits for years, settled by paying 4.85 billion dollars to thousands of plaintiffs.

Thalidomide, first marketed in West Germany in 1957 as an over-the-counter drug, was ingested by an estimated 10,000 pregnant women, 40% of whom delivered still births while the other children had severe disorders for life. The advertisements had claimed complete safety for pregnant women and nursing mothers.

In 2003, there was a well reported tragedy relating to infants fed soy-milk baby food. The manufacturer had neglected, perhaps to cut costs, to add Thiamine (Vitamin B1) in the feed. Three babies died, and most other children later exhibited major language impairments.

In 2016, Oxford Dictionaries declared the term *post-truth* as the international word of the year. But the practice of deception is old. Yuval Noah Harari even calls *homo sapiens* a post-truth species. In common view, advertisers have been masters of ‘post-truths’. A synthetic soft drink won’t make you younger or healthier, but the advertisement links the product to youth and health. A sunflower oil pack may claim to make your heart healthy, but does it? Especially after being hot-pressed and treated with chemicals like phosphoric acid, sodium hydroxide, and bleaching agents?

A horror story relating to new digital technologies utilizing sensors is about the twin crashes of Boeing 737 Max that cost 346 lives. The ethical questions should be about whether adequate risk prevention methods were applied during design, and whether pilot training dealt with the situation that led to the accidents. But a New York Times headline (02 October 2019) proclaimed: “Boeing 737 Max Safety System was vetoed, engineer says.”

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Another software story is about the computerized Horizon accounting system installed in 1999 in British post offices. It threw up fraud accusations on hundreds of sub-post masters, many of whom were convicted. BBC News (11 December 2020) reported that the convictions are being belatedly quashed after finding the computer system faulty. With AI round the corner, should we fear more such miscarriages of justice?

In a lighter vein, we can recite the story of how “Indian housewives must carefully glean the rice of the local bazaar to sort out stones of the same colour and shape which have been intentionally added to the rice.” This priceless quote is from the Nobel Prize winning Economist George Akerlof’s famous 1970 article *The Market for “Lemons”*.

The six tragic stories and the three other examples do raise ethical misgivings, but they may make us believe that these are just exceptions in an otherwise decent world. But the ethical problems relating to quality are more pervasive than that. We are not referring to underworld businesses or the sellers of spurious products. We are talking of reputed organizations, whose CEOs might regard themselves perfectly ethical, and committed to quality.

We have all heard chief executives and top managers telling us that these days quality is a ‘given’ - that it is a hygiene item. There are deep, underlying problems associated with such an assertion. Do these managers believe that defects and user dissatisfactions either do not exist or are trivial? Companies do track warranty claims. But just because a replacement is made or a refund given, does the problem vanish? And then, what about post-warranty failures? Is the product meant to last only for the warranty period? So, even the assumption of good hygiene quality may be delusory.

But ‘must-be’ qualities are just the basics. What about one-dimensional ones which must be continuously improved? What about performance, features, ease of use, economy in use, sensory and emotional attributes, or durability? What about attractive quality features? And service quality dimensions? Is manufacturing quality hunky-dory? And we haven’t even mentioned sustainability issues. It does sound outlandish to claim that all these are ‘given’. If management is ignorant of the existence of requirements beyond hygiene, there is an issue of negligence. When negligence crosses a threshold, it acquires connotations of unethical conduct. So, it is time our managements become humble, and pursue quality with as an inalienable fundamental of business.

Finally, a little on honey. The environmental activist Sunita Narain, Director-General of the Centre for Science and Environment, recently claimed that major honey brands in India were adulterated with a Chinese sugar syrup that bypasses Indian standards for testing purity of honey. The companies have denied the accusation. There the matter rests, set to be forgotten.

Shall we, as quality professionals, rise as one to speak for quality?

About the author:

Mr. N. Ramanathan is a senior counsellor and advisor of TQM. He was awarded the prestigious Edwards Medal from ASQ recently for his contribution to quality movement. He is a Mechanical Engineer with Masters from IIM, Ahmedabad(1969) with 50 years of experience in industry, and in teaching and counselling. Ram has received awards internationally for his work, as well as receiving the Dronacharya Award in 2018 by ISQ for his contributions to teaching and counselling on quality. 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.

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BECOMING WORLD CLASS - Lessons from 'Made in Japan'

Excerpts of an interview with author, Prof. Prem Motwani.

Interviewer: Snehil Kumar

Newsletter March 2021 we published an introduction to the book "Becoming World Class" by Prof. Motwani.

In continuation, we are happy to bring the excerpts of an interview of Prof. Motwani by Mr. Snehil Kumar a well known TPM Counsellor.

About the author:

Prof. Prem Motwani retired from the Jawaharlal Nehru University in 2019. After 40 years of service in the Japanese Department, School of language, literature and culture studies. Visited Japan nearly 80 times and spent about 6 years in that country including visiting professorship at the Hiroshima University in 2011-12. Prof. Motwani was conferred the 'Order of the Rising sun', Gold Rays with Neck Ribbon's by the Government of Japan in the 2020 Autumn Decorations in recognition of his contributions to promoting academic exchange and mutual understanding between Japan and India. He has authored many books including four published in Japan.

Snehil Kumar: Snehil Kumar is a TQM counselor based at Jaipur. He is an engineer with 10 years of experience as practicing manager in Tata Steel and 22 years of counseling with organizations as part of CII and as an independent counselor. He has counseled over 100 companies to steer them towards organizational excellence including Deming award winning organizations. He is a JIPM TPM trained instructor.

Snehil Kumar

What motivated you to write the book?

Prof. Motwani

I had studied about Japanese management as a part of my study on post-war Japanese economy but was fortunate (because no outsiders are allowed to attend an audit) to work as interpreter for most of the TPM and TQM audits since the very beginning in 1990s and based on the recommendation of TQM auditors I attended several courses on TQM at JUSE to have a deeper understanding of the subject and visited Japanese companies practicing TQM/TPM at the highest level through JIPM/JMAC or other Japanese friends each time I visited Japan. This gave me a good grounding in Japanese Management Practices (JMPs). I was a visiting professor in the Hiroshima University in 2011 and 2012. I visited Mazda which is based in Hiroshima few times and studied how they had gone about the world class award in their Hiroshima engine plant. I could see the big difference in Indian and Japanese companies in the way they approached the JMPs. I started feeling that I should pen down how Japan goes about them and where India is faltering. In India many people have theoretical knowledge about these methodologies and tools but they are unable to make them work to a large extent due to a variety of reasons explained in detail in the book. I have tried to bring out in my book where all the gaps exist and tried to present a practical workable model for India.



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Snehil Kumar

You have given a good commentary on Indian manufacturing in the book. You have also emphasized the need for industry bodies, government and people coming together to transform Indian Manufacturing. what in your view should be done at this stage?

Prof. Motwani:

Let us talk of “Make in India” and “Atmanirbhar Bharat” that Indian government is trying to achieve in manufacturing. To make ‘Atmanirbhar Bharat’ work, we need to be competitive in QCD vis-à-vis China or other countries from where cheaper products are being imported. The targets have to be set and those products need to be better in QCD for which productivity improvement and innovation must happen. The policy has been launched but there is no discussion on these aspects between the stakeholders. I have given some good examples in my book, and one of them is the Japanese government telling the Japanese industry way back in 1950s that it may import the first machinery, but the second one has to be produced within Japan. It led to the development of Japanese industrial machinery which is one of the best in the world and most large companies produce more than 50% of machinery in-house.

Snehil Kumar

What can be done in your view with all the SMEs? They account for a large chunk of our economy which gives employment.

Prof. Motwani

Unless there is policy support for SMEs instead of simply raising import tariffs to discourage imports, SMEs will never be able to improve and compete and in turn OEMs will not be able to improve their QCD. I have even suggested in my book that India receives highest ODA (Official Development Assistance) from Japan since 2004 and the Indian Government can utilize Japanese ODA to extend support to SMEs by bringing Japanese experts to teach SMEs on JMPs so as to improve their QCD, productivity and innovation to make their products viable vis-à-vis cheaper imports. This alone can make Atmanirbhar Bharat possible in the medium term.

Snehil Kumar

In your book you’ve written extensively about leadership mindset what can be done to change the leadership mindset?

Prof Motwani

I think HR practices in companies are the biggest stumbling blocks. In my opinion, white collar employees give themselves five years’ time in a company (excluding some big names like Tatas, TVS or Mahindras where many people work for lifetime) and if nothing comes their way, they switch jobs. This needs to be changed for the success of JMPs. The Japanese model has good practice such as promoting employees only through the internal promotion system, i.e.no lateral hiring. Even the concept of mentorship does not exist in India. We have HR Dept for the white collar and IR Dept for the blue collar employees. They need to work together for JMPs to succeed. Some of the best practices in Japan which were largely behind the success of ‘Made in Japan’ have been explained in detail in the book. If Indian companies are serious about JMPs some of these practices that worked so well in Japan must be adapted to the Indian situation.

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From JMPs perspective, the most serious problem is with respect to the blue-collar employees. Majority are contract workers and even the regular workers do not get the opportunity to rise up the ladder, with very few exceptions. Training the vendors is also not very systematic. In Japan only 200 odd companies got TQM certification in last 70 years. For instance, Toyota got the Deming Prize in 1966, TPM in 1967 and the JQM in 1970. TPS was developed around the same time. Through the Keiretsu (Group of companies), Toyota engineers went and installed TPS (working model of JMPs) at vendors' place although some of them were encouraged to challenge the certification of TQM/TPM themselves. OEMs need to work with everyone in the value chain and develop leaders at each level for the JMPs to be successful.

Snehil Kumar

Many companies now in India also have gone for TQM and TPM awards and application of TPS. How do we, in your view, create an Indian model?

Prof. Motwani

The biggest gap in India in my opinion is that there is no cross learning. The sharing of information is missing in India. Even in the automotive sector where most TQM/TPM certified companies are, information on the best practices established by them is not available in the public domain. We do not have a forum or a magazine/ journal. Companies should be encouraged to come forward and share the best practices developed for the larger good. In other words, whatever these companies have learnt in the process remains with them only and individual companies benefit from it but the industry and the nation do not.

Snehil Kumar

My experience has been that unless you have long term programs, you don't have in-depth knowledge of the subject, especially the management programs or mindset changing programs. What do you have to say about it?

Prof. Motwani

Precisely. Let me talk about TPM. As you know, Jishu Hozen (autonomous maintenance) is the most important pillar of TPM and it involves the operators. It has the sublime theme 'I operate, I maintain, I manage' i.e. operators have to take up maintenance in the first stage and ultimately manage the JH circle activities by the end of Step 7. Companies need to train, empower and develop strong OJT program for operators under the supervision of maintenance engineers and quality professionals but majority of companies switch to some other program without giving enough time for JH to change the mindset of the critical mass.

India has practiced TPM for long (over 25 years) but how many companies have been able to achieve the above speaks for itself.

Snehil Kumar

You talked about a lot of Japanese books, which are in Japanese and are not translated in English. Yes. What possibly can be done to bring this knowledge?

Prof. Motwani

I have worked with MIQ and translated many books with the help of my students which were meant for internal consumption (training at MIQ). I have also translated two books for the TPM Club, CII. A similar initiative can be undertaken on a larger scale to bring the best of the books from Japan and translated into English. There are enough language experts in the country who can be gainfully involved in this.

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Snehil Kumar

In the last chapter you explained in detail how to roll out TPM from zero to the World class level. What did you have in mind?

Prof. Motwani

TPM has five stages of awards and three phases. I have explained in the book how to implement each phase in a staggered manner with templates for goals and targets (KMI/KPI/KAI) and the broad concepts behind each stage/phase.

Snehil Kumar

You also mentioned and explained about different kaizen concepts like point kaizen to line kaizen, cubic kaizen and plain kaizen. You also mentioned that understanding of kaizen lacks clarity in India. It was very interesting to read.

Prof. Motwani

Kaizen in India is mostly viewed as improvement i.e. a problem occurred and you corrected it after the fact. However, in TPM you have the zero concept i.e. in the first phase you achieve zero forced deterioration or the reactive cases and establish recurrence prevention and then move to prevention of defects/breakdowns/accidents etc. in the second and third phase. Kaizen also has two categories i.e. problem solving and task achieving. There has to be a proactive plan at the beginning of the year in phase two and beyond with a mix of both types and align them with cost and profit targets so as to achieve those goals and targets as per plan. Some of the TQM companies are doing a good job of it but very few TPM companies have achieved such level.

The Indian approach to kaizen, as explained above, means you are 'wise after the event' which does not really help in reducing the cost. Also in India cost data is not shared beyond a closed loop. Hence, kaizen is bound to become a piecemeal approach.

And then there is also the approach of 'raising the bar' as well as widening and deepening the scope of TPM. To be more precise, you start with a machine but do not stop there. Next stage go to the entire line, then to the entire shop and the entire factory and gradually the entire value chain by the world class award.

Companies need to take a hard look in the mirror how much of it they are practicing.

Snehil Kumar

It is amazing how the whole ecosystem works for continuous education and learning in Japan. These stories are not even known in India.

Prof. Motwani

The purpose of the book is precisely that. We have been practicing JMPs for nearly 30 years but majority of companies have not been able to go beyond the basics i.e. reaping only the low hanging fruits. There are hardly any companies that are willing to experiment with their ecosystem. Hence, they hit a roadblock sooner or later and that is the foremost reason behind the failure of JMPs. Higher level of awards call for indigenous application of concepts and philosophies of JMPs but the management is either not willing to do so or perhaps there is lack of understanding of those concepts/philosophies what they are capable of delivering.

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Snehil Kumar

You've shared the data very adequately. So, what will be your key message, for government or Industry Association or industry leaders?

Prof. Motwani

1. Government needs to come out of 'shoot and forget' approach to policies.
2. In Japan dependence on school/formal education is not there at all. Industry organizations like JUSE, JMA, JSA, AOTS etc. run courses that impart theoretical training for all layers and employees sponsored by companies undergo training and experiment with the things learnt when they return to their company based on a strong OJT and life-long training system linked to various projects that companies undertake at all times. I think Indian industry associations and companies have a lot to learn from Japan in this regard to overcome the problem of serious skill gap that we have in India.

Snehil Kumar

You've been visiting a lot of companies. Many are following American practices like Six Sigma which are no more than project-based approaches. There is some short-term gain that they can make out of these practices, what is the impact that you foresee?

Prof. Motwani

We should stick to one of the methodologies- TQM, TPM or Lean for a considerable length of time. It should be used as the umbrella and best practices of other methodologies should be gainfully adapted to it. Companies in India switch from one tool to the other every few years. TPM, for instance, is practiced on an average by Indian companies for 5-6 years which goes largely in installing the system and when the time comes for developing the ecosystem and altering the work culture, they shy away from it and move to some other methodology. For your information, Japanese companies have stuck to one of the methodologies of the JMPs for 50 years or more and as explained in the book, have developed their indigenous production system based on them to the extent that post-1990 most managers do not talk of TQM or TPM but their indigenous (Toyota, Honda, Hitachi or Nissan) production system. That is the reason that Japanese management of the Japanese OEMs in India Suzuki, Honda or Toyota do not talk of TQM or TPM but their indigenous practices. My advice to the companies is to spend enough time in selecting the right methodology to be used as the umbrella for at least a 10-15 years span. We tend to make a hasty start in this regard without a long-term perspective and hence end up abandoning them also too soon.

Snehil Kumar

Last 10/15 days I was reading this book and preparing for this interview. It is a very engaging book and it was also a great experience talking to you.

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The Mystique of Operational Definitions

By B Sundara Rajan

“Sir, I think what we need is an operational definition for Operational definition “.

This comment from a Gen Y participant in a session on DWM jolted me on my tracks. I could brush off this question as typical impetuosity but this youngster had just put a mirror to my face and popped up a topic which many of us try to answer at best with more theory and at worst completely evade, hoping it will vaporise before the next meeting.



The importance of operational definitions is clear. And equally clear are the consequences that can result when a team fails to well-define a working definition.

If you want to understand “Operational Definition“ just go down the memory lane to your childhood :

1. When your father gave a command _ I want you here “immediately “
2. When your Mom told you “Clear up the mess” and you can go out “.
3. Be back home early from your evening games.

The Operational definitions for these terms were unstated but were learnt by a trial of fire !. Or if you were lucky watching your elder sibling getting roasted!! Moreover, we realised that the operational definition for each of this was unique to the family. For me “Immediately “meant before the need for next call, Clear up meant “ all junk cleaned up and left in the dustbin “, Early meant before the lights were switched on. As we grow older the Operational definition may change but there is always one that governs our actions.

The world of business started feeling the need for Operational definitions when product feature defined in abstract terms- smooth , shiny , coarse , glossy – which were open to interpretation (or misinterpretation) became the bone of contention resulting in huge quality issues . Even more difficult was in the service industry which saw the frequent use of abstract quality features such as “courtesy,” “timeliness,” “friendliness”. But the feather in the cap should definitely go to “World Class” so often found in Vision statements , which always leaves employees a bit flummoxed.

Ever since Dr Deming eulogised the importance of an Operational definition in the book “Out of the Crisis” , the concept gained ground not only for products but across various facets of business management , wherever KPIs are the cornerstone eg Daily Work management , 6 Sigma projects . In my opinion, one of the barriers to continuous improvement is the use of words without clearly defined and mutually agreed upon meanings. When objectives like the ones given below are taken.

- improve efficiency (or productivity)
- create a more flexible process
- reduce rejections
- improve customer satisfaction
- reduce cycle time

Without the formal use of an operational definition no one can understand if the destiny is reached or still elusive.

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Theoretically, an operational definition can be defined as a clear and understandable description of what is to be observed and measured, such that different people collecting, using and interpreting the characteristic/KPI will do so consistently.

But how is this to be put into practice??

For example, a flexible process should be defined as one which accommodates more than X nos products types. A sharper one may go on to add that “changeover from one product to another can happen within Y minutes.

Similarly how to define “Friendly / Courteous” service – it’s a toughie and that’s what has proliferated the use of satisfaction surveys which aim to quantify a qualitative term using a scalar measurement. It’s very important when such scales are used what is the level that must be achieved minimum to qualify.

There is no single right way to write an operational definition, only what people agree to use for a specific purpose. So for such abstract terms, engage with your Customer (Internal or external) (especially if it’s your boss), discuss at length and arrive at a common description and measurement for the term. Document and signoff if required. It may do well for the organization to even publish a glossary of Operational Definitions as a common document.

All of this leads to the real point of this article – that business practitioners can take a lesson from childhood about operational definitions. Parents are pretty good at taking the abstract and breaking it into pieces that kids can understand and relate to. So, the next time you have a difficulty about operational definition the solution is simple
“THINK LIKE YOUR MOM”

About the author:

Mr. Sundara Rajan has guided more than 30 clients in the Medium and Large-scale organizations in the implementation of any one or a synergistic framework of the major business excellence systems viz TQM/TPM or TFM(Lean). His clients’ sector span includes Automotive, Component Manufacturing , Consumer Goods, Chemical Process & Service Sectors and are spread across India.

He has been an associate consultant with Senior Japanese & Indian Counsellors and facilitated 5 Companies in the successful challenge of Deming Prize or Deming Grand Prize. He has conducted more than 250 Training sessions on TQM and nearly 60 sessions on “Systematic problem Solving & Improvement.”

Mr. Sundara Rajan is a regular trainer with CII during Open House programs across a span of locations and has been Jury Panel member for various Kaizen Competitions held by CII- Southern Region. He has also been associated with ILO in their “SCORE” program to build capability at MSME level

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