

QUALITY CONNECTIONS



Section Honors Volunteers at Recognition Night

One of the special events of our annual program is the Section's "Recognition Night". It is the one time during the year, that we honor those individuals and organizations for their contributions to advancing **QUALITY** in South Jersey. Those honored include:

John E. Kampmeyer – For the past fourteen years, John has served as the Regional Director for the Philadelphia Regional Future City Competition. John also presides over the Special Awards portion of the National Competition that is held in Washington, DC each year. For those not familiar with the Future City Competition, it is a national engineer based team competition for 7th and 8th Grade students. Without going into detail, it is simply a wonderful program for students. More information about the program is available at www.futurecity.org ***Our children in South Jersey Thank You!***

Royce Gaudet – Roy received the Sections Volunteer Excellence Award for his years of service to the Section. As a past Chair, Vice Chair, Program Chair and Membership Chair, he has served the Section in many capacities over the year. This year's recognition is long overdue. ***Thanks Roy!***

Michael Meads – Mike recently returned from an eighteen-month tour of duty in Iraq. What more can be said? ***From all of us, Thanks Mike!***

The Section also recognized those members that had received their ASQ Certifications during the past year and those volunteers that served on the Section's Executive Committee. Photos of the event have been posted on the Section's website.

The Section's next monthly meeting will be held in September with a topic and location yet to be determined. Have a Good Summer and we'll see in September.

Region 5 Conference to be Held in Fall 2007

Regional Director ***Rick Litts*** announced that Region 5 is planning to hold a Region 5 Conference at the Johns Hopkins Applied Physics Laboratory in Baltimore in the Fall of 2007. ***Jim Cooper*** (Deputy Regional Director from the Baltimore Section) will serve as the Conference Chairman.

They have asked that each section provide two volunteers to assist with the conference planning that will be accomplished via teleconferencing. Although they asked for two, I'm sure that welcome anyone that is interested in getting involved or possibly making a presentation. Anyone interested in assisting with the conference planning is requested to contact ***Francois Thery***. Francois' contact information is provided on the last page of the newsletter.

ASQ Changes Email Policy

The ASQ application requires members to indicate whether or not they want to receive email. Until recently, ASQ policy prevented Sections from sending emails to members unless they specifically indicated on their ASQ application that they would accept email. Failure to check either block meant you would not receive email. ASQ's policy now requires members to "opt out" of email, rather than "opt in".

While this may appear subtle, this change allows the Section to send email to an additional forty-five members that were previously not received email. We no longer send hardcopy newsletters and communicate with our members exclusively through our monthly newsletters and our website. However if you wish not to receive further emails from ASQ's Southern Jersey section, please advise tom.mudge@wgint.com

Planning for the 2006-2007 Membership Year

The Section holds Section meetings each month from September to November and from January to May. No Section meetings are held during the Summer months. It is during this time that the Executive Committee develops its plans for the coming year. This planning involves the development of an Annual Business Plan (initiatives and events), annual budget and program schedule.

One of primary tasks is to develop a program schedule for our dinner meetings and plant tours. We would welcome any suggestions concerning a topic of interest or a suggested plant tour. Our goal is to satisfy your needs, but we need your input.

Looking for a Job? ASQ's Career Center

The ASQ Career Center is designed to connect employers with ASQ members, the largest, most qualified audience of quality professionals.

By connecting members and employers online, ASQ will be your leading resource for Quality jobs.

With continuing education always a focus for ASQ's members, employers are certain to reach the most dedicated, qualified, and experienced quality professionals from across the country and around the world.

A free service for members, this unique opportunity to connect with the quality industry's best employers is ideal for both employer and employee.

The job board features member-only access, a weekly e-mail with new job posting updates, a password protected account, a resume database from which prospective employers can view members' resumes, and more.

The ASQ Career Center is also a source for career advice, featuring career-related articles.

Get your résumé's prepared and check out ASQ's Career Center @ www.asq.org/career/index.html

Call For Volunteers

As you can see on page 8, the Section currently has several positions available on the Executive Committee. If you are interested in getting involved, please contact anyone on the Executive Committee (see page 8) for information.

You don't need any experience, ASQ offers training materials for all positions. In addition to earning points for recertification, you'll get more out of your membership.

EMPLOYMENT SERVICES

Are you trying to fill an opening in your QA/QC group?

One of the most important services that we can provide to our members is assistance in finding employment, especially in today's economy when a lot of companies are downsizing. If your company is looking for quality professionals, please provide the pertinent information to **Mike McCarroll at mccarroll@shapesllc.com** and we'll post it on our web page at **NO CHARGE**. Although we'll also include the information in our next newsletter, the web page information will be posted almost immediately.

Check our website <http://home.comcast.net/~asq0508/> for the most current listings.

Unemployed or Retired ? – Take Advantage of These Discounts

I'm unemployed, what should I do?

ASQ offers assistance to members through the **Unemployment Program**. Call ASQ for an application, item number **B0690**, or [print a form](#) from ASQ.org (<http://www.asq.org/members/leadership/mbrapp/index.html>).

- ✓ Members receive a 50% discount on their membership renewal if they have 1-4 consecutive years of membership (They must complete their first year as a Regular Member before applying for this option).
- ✓ Members receive a 100% discount if they have 5+ consecutive years of membership.

ASQ.org features a career center at <http://www.asq.org/career/index.html>.

I'm retired, do I have to pay my dues?

ASQ's **Retirement Program** provides assistance to completely retired regular members. Members should fill out an application, item# **B0488** to receive a discount on their membership renewal. Call ASQ for the form [or print it from ASQ.org](#) (<http://www.asq.org/members/leadership/mbrapp/index.html>)

- ✓ Members receive a 25% discount on their membership renewal if they have 10-19 consecutive years of membership.
- ✓ Members receive a 50% discount if they have 20-29 consecutive years of membership.
- ✓ Members receive a 100% discount if they have 30+ consecutive years of membership.

Ten “Commandments” for Facilitating Six Sigma Projects

by [M. M. Kapadia](#), [S. Hemanth](#), [K. P. Kapadia](#)

Like any other Six Sigma initiative, our voyage at [Tata Toyo Radiators](#) (TTR) in Pune, India, began with management approval and identification of a set of problems needing attention. We followed the traditional Six Sigma deployment roadmap, including implementation kickoff and project identification; naming and training champions and Green Belts (GBs); and project launches, meetings, and reviews. On paper our plan looked absolutely straightforward and simple.

From our first round of projects, however, we discovered that facilitating GBs through individual projects in the plant is certainly not as easy as teaching them about the DMAIC methodology and Six Sigma tools in the classroom. Companies embarking on the Six Sigma journey for the first time and new Green Belts may thus benefit from learning of our on-the-job experiences while facilitating the first wave of projects at TTR.

Lead belt as facilitator

A Six Sigma BB's or GB's role extends far beyond the application of tools and methodology. During any project, a lead belt's role keeps changing from “team driver” to “team member” to “out-of-the-box thinker.” The lead belt must forewarn, appraise, and report, all the while serving as the liaison between team activities and top management. Therefore, facilitation skills are paramount to project success.

In fact, our documentation of TTR's first wave of projects revealed that our lead belts spent about 70% of their time facilitating people and culture change and only about 30% on the application of tools and techniques. To reflect the importance of the role of “project facilitator,” we developed a set of guidelines for new belts to follow throughout the various stages of their projects. Known at TTR as our “Ten Commandments of Facilitating Six Sigma Projects,” these guidelines to a great extent have been structured phase-wise, but some of them are definitely generic in nature. Admittedly, their scope is vast and readers might find some of them obvious. However, we found documenting and emphasizing these points extremely beneficial during Six Sigma project facilitation.

Although we call our guidelines “commandments,” we do not mean to imply that they are inflexible and permanent. We may add to or revise them as our initiative matures, and we realize that there could be other points not covered here but equally crucial for facilitating Six Sigma projects. Nevertheless, we find that simply having rigorous guidelines in the form of commandments in place early on can be important as GBs are still learning the art of facilitation.

Our ten “commandments”

1. **Work with the project champion and top management in defining the project.** Always work closely with your project champion in precisely defining the problem statement, project objective, and scope of the project. Half the battle is won if you know exactly what problem you are trying to solve.

Our experience: If the correct project is chosen, along with top management will have no supporting it, as successful completion of the have a direct impact on the champion's job and business goals. Most often the champion problem and instruct a Six Sigma belt to take up the project.

Take projects that the champion is interested in completing.

the champion hesitation in project would performance on would identify a

- 2. Start the project with the customer (external or internal).** Personally go to your customers and spend time understanding their issues and expectations. If this is not practically possible, then use survey results, regular feedback, or some other formal communication from the customer.

Our experience: Too often we are busy looking at our own predicaments and forget our customers. The ultimate goal of all Six Sigma projects is to improve customer satisfaction.

- 3. Look at the monetary benefit from the project.** When the company makes the conscious decision to dedicate resources for your project, make sure it is a profitable one. Work with your organization's financial controller to get written agreement on the estimated monetary benefits during the initial stages of the project.

Our experience: One of the biggest differences between Six Sigma and other improvement systems is the link to the bottom line. Highlighting this important linkage and making a business case for your project will convince top management that it is a good project.

- 4. Manage your teams.** The better you lead (by injecting enthusiasm in your team), organize, and understand the complexity of dealing with people, the better the outcome of your project will be.

Our experience: The real challenge for the belt is not in understanding statistics in any Six Sigma project, but how well he or she can manage, drive, and motivate the improvement teams.

Your soft skills can make or break your project.

- 5. Adhere to the DMAIC route with a formalized plan.** Be honest in following steps and in achieving the objectives of each phase. Maintain a time schedule of tasks to be performed for each phase, present the plan to everyone—especially the champion—and formalize a written contract officially signed by all stakeholders. Formalize and obtain up-front written agreement on your detailed project timeline, including formal project review dates with champions. Communicate changes to the original project plan and keep everyone updated.

Our experience: Teams that meticulously think (without taking shortcuts) meeting the objectives of each more successful in the long run. Without a good project will drift aimlessly. Project timeline face of tremendous production pressure is also a team members, including the champion and financial controller, will at some point have difficulties owning up to their individual time commitments causing project delays.

Everyone must consciously commit time for Six Sigma.

through (without phase come out project plan, the adherence in the challenge. All

- 6. Ensure the quality of data and keep eyes and ears on Customer Y and Project Y.** Insist on conducting detailed Measurement System Analysis (MSA) to verify reliability of all your project measurements. Teams should never move ahead without "satisfactory" measurement systems.

Make dashboards for each of your Customer and Project Ys and post them where everyone can see them. A dashboard can be as simple as a time series run chart for Project Y. Make dashboards as visible as possible, as these "report cards" are a great means for creating awareness and providing continuous feedback to the team and management.

Our experience: Data is the Six Sigma project; hence, it is reliable. Ensure you rely on “good” when they do not have a robust in place. Having ensured reliability of that everyone in the team feels the metrics.

Remember that a picture is worth a thousand words; however, a graph placed strategically in the work area is worth ten thousand.

backbone of any imperative that it is data. Teams waver measuring system data, it is essential pulse of the project

7. **Find every linkage between root cause and the effect.** Follow the guidelines for cause and effect analysis until you are sure you have uncovered root causes. Remember also that “keep moving” is the rule of the game.

Our experience: The easiest part of analysis can become very tough to facilitate. Incorrectly identifying root causes is the biggest failing for any Six Sigma project. A missed cause will be difficult to reckon with later on in the project.

If asking “why” does not get a good response, try asking “what.”

Another issue that we have found common with our teams is that participants many times identify potential root causes as lack of solutions, as they already have a solution in mind. Be careful of causes described as “lack of training,” “lack of system,” and “no operator.” These phrases indicate “lack of solutions” and at times can mislead teams from actual root causes. For example, if one of the participants states a cause as “No Standard Operating Procedure (SOP),” asking “Why no SOP?” might not work. In this case, try asking “What belongs in SOP?” to move things forward.

8. **Verify the causes and document the findings.** Facilitate and finalize the cause verification methodology with the team. You must thoroughly plan and supervise each cause verification experiment, validating through reliable and unbiased data the relation between the potential causes (Xs) brainstormed by the team and the effect (Y).

Our experience: People like to complain. opportunity to identify causes during a session, some team members will air their is where the role of facilitator becomes important: he or she needs to use reliable the real causes from the emotional biases on the job.

Establishing through data “Y = f (X)” is one of the biggest contributions a Six Sigma worker can make to a project.

Thus, given an brainstorming frustrations. This extremely data to separate and frustrations

9. **Work to an improvement plan.** Make a detailed activity-wise plan for improvement actions with the help of process owners and the team. A useful counteraction is easily understandable and very specific. Also list down who, what, and when for each improvement action. Wherever needed, mention what kind of support is required to complete the action item. Stick to the timeline, raise alarm, and seek help in case of any slippage.

Our experience: Ideally, process owners take over the project from the improve phase. The job of the Six Sigma worker now becomes more of a reviewer and a team member.

10. **Recognize the criticality of controls.** Use active control tools like error proofing and sensors rather than passive tools like SOP and visual controls. Design controls in agreement with your process owner and team members.

Our experience: Quality of controls can make or destroy a project. Often results are sustained until project closure but start drifting as the limelight shifts to another process. The control phase is the most difficult phase. Giving it extra attention is well worth the effort in the long run. Integrate a control plan with quality systems like QS 9000 for long-term sustenance of project gains.

**A project closed
without a full-fledged
"Control Plan" can have
disastrous
consequences.**

Better facilitating for project results

At TTR we have been successful in applying the above "Ten Commandments" in facilitating our projects. With the first-wave improvement projects nearing completion, TTR is currently planning to initiate the second wave. We have already improved the bottom line by at least US \$160,000, about 0.6% of annual sales revenue, during our first year of deployment.

Acknowledgements

The authors would like to acknowledge the help and support of R. Sundar, CEO – TTR, for regularly reviewing our projects and guiding us during our Six Sigma journey. We would also like to thank D. Bhandari, Ex-Director – TTR, for introducing and supporting the Six Sigma movement during his tenure as TTR's Director. We also would like to extend our sincere appreciation to Project Champions V. Sapatnekar, R. Shete, and A. Alur, and Green Belts S. Kulkarni, K. Shetty, P. Kamtekar, and S. Ayekar for their valuable contributions in our Six Sigma projects.

About the authors

M. M. Kapadia is Head of the Quality Engineering Group and a Corporate Six Sigma Master Black Belt at Tata Auto Comp Systems, Pune, India. He has a doctorate in Mechanical Engineering with specialization in Quality Engineering from the University of Mumbai, India. He also has a master's degree in Mechanical Engineering from Pennsylvania State University, USA, and a master's degree in Business Administration from St. Joseph's University in Philadelphia, USA. He has over eighteen years of experience in quality control and engineering in various industries in the USA and India. Dr. Kapadia is also an American Society for Quality (ASQ) certified quality and reliability engineer.

S. Hemanth was a member of the Quality Engineering Group and a Six Sigma Black Belt at Tata Auto Comp Systems, Pune, India. He has a bachelor's degree in Mechanical Engineering from Regional Engineering College, Surathkal, India. He also has a diploma in Total Quality Management from the University of Pune, India, and is a member of ASQ. Mr. Hemanth has been working in the field of quality for the last three years and has successfully completed several quality improvement projects.

K. P. Kapadia is Vice President of Operations and Management Champion of Six Sigma at Tata Toyo Radiators, Pune, India. He has a bachelor's degree in Mechanical Engineering from University of Mumbai, India. Mr. Kapadia has in all twenty-four years of operational experience in refrigerators, truck assemblies, scooters, and radiators manufacturing.

About Tata Toyo Radiators

Tata Toyo Radiators (TTR) is a group company of Tata AutoComp Systems (TACO), Pune, India, with a sales turnover per year of about Rs 1.25 billion (US \$28 million).

EXECUTIVE BOARD FOR 2006 - 2007

A complete listing of the Section's Executive Board for 2006 – 2007 is provided below. Individuals interested in getting involved with Section Leadership activities may contact anyone on the Executive Board. The term of the Executive Board runs until June 30, 2007.

Position	Name	Telephone	E-mail
Section Chairman	Francois Thery	856-327-4800 X4147	francois.thery@arc-intl.com
Vice Chair	Roy Gaudet	856-339-7019	Royce.gaudet@pseg.com
Secretary	Dorothy Smolen	609-569-9255	Smolend@enroute-computer.com
Treasurer	Joy Young	215-535-3000	joyy@amuneal.com
Membership Chair	Sharry Masarek	856-489-9453	smasarek@transcat.com
Past Chair	David Cranston	856-224-1120	davecranston@hpsseals.com
Program Chair	VACANT		
Auditing Chair	David Cranston	856-224-1120	davecranston@hpsseals.com
Examining Chair	Mary Dodds	856-241-6016	doddsme@precisetech.com
Education Chair	VACANT		
Re-certification Chair	Pam Thompson	856-455-1000 X348	psinger@clementpappas.com
Internet Liaison	Earl Ward	856-489-9453	calibrationdude@transcat.com
Newsletter Editor	Tom Mudge	609-720-2539	Tom.mudge@wgint.com
Area Director (AC)	Dorothy Smolen	609-569-9255	Smolend@enroute-computer.com
Placement Chair	Mike McCarroll	856-662-5500	mmccarroll@shapesllc.com
Historian	Michele Bradbury	856-339-3385	Michele.Bradbury@pseg.com
Nominating Chair	George Napuda	856-678-7825	gnapuda@waterw.com
SMP Chair	VACANT		

Volunteer contact information is posted solely for the use of those individuals wishing to contact a section leader for more information about this section, ASQ, its programs, and/or services. Use of volunteer contact information for solicitation purposes is prohibited.