

ASQ Worcester Gazette



Editor: Janice Sioui

Message from Section Chair, Jay Patel

Dear ASQ Worcester members,

We look forward to this New Year, 2021, we wish to share our gratitude for work of the 2020 Executive team and their work to keep us all 'in the know';

- Srilata Thirunagari
- Sean Ferry
- Larry Clockedile
- Brian Izzio
- Jay P. Patel
- Frances Eagle
- Rajesh Kasbekar
- Paparao Gundavaram
- Tom Falzoi
- Zach Morin
- Johnson Quartey



Never before has our work in Quality been so important, and staying connected in new ways crucial to our industry and our growth. We encourage you to consider all the changes you made this last year; in your business work, connections, and professional development. Where has your work in Quality helped you grow through this time and help others do the same?

2021 promises one thing—more change. We are uniquely qualified to handle change and teach those who struggle. In this season of giving, I encourage you to step into your work and earn a new certification this year, support ASQ to bring more of what you need, and volunteer. Join us for monthly online meetings to share your wisdom and build on your knowledge. It has never been more important to build on your skills and establish yourself as an



expert. Not only to further your career goals in the field of quality but in the support of others starting out and struggling. As a proponent of the power of knowledge, I am looking forward to being the Section Chair for ASQ Worcester in 2021 and excited to work with our passionate group of people.

We have a very capable team that will lead the section through the coming year, though we need you to make it successful. **If you haven't completed our survey, please click [HERE](#) to offer your feedback and ideas.** This is your chapter!

Happy Holidays! I look forward to seeing you all online in January. May your New Year be bright!



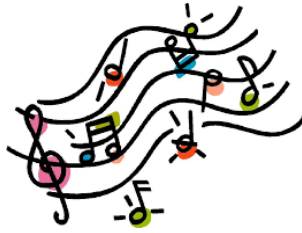
Sincerely,
Jay P. Patel, Section Chair

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Happy Holidays from ASQ NJ...

The 14 Days of KAIZEN

by Ed May, ASQ CSSBB



On the first day of Kaizen, my Champion sent to me, a Sensei using SPC.

On the second day of Kaizen, my Leader sent to me, two tailed tests, and a Sensei using SPC.

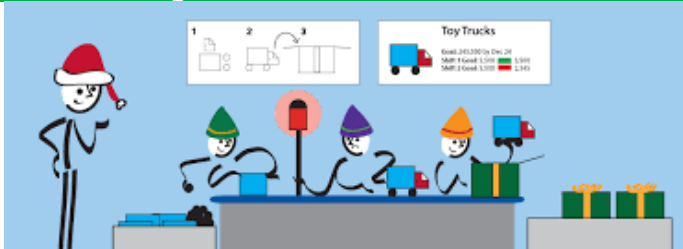
On the third day of Kaizen, my Big Boss sent to me, three Gemba visits, two tailed tests, and a Sensei using SPC.

On the fourth day of Kaizen, my Teacher sent to me, four Jidoka, three Gemba visits, two tailed tests, and a Sensei using SPC.

On the fifth day of Kaizen, my Teammates sent to me, five questions "Why", four Jidoka, three Gemba visits, two tailed tests, and a Sensei using SPC.

On the sixth day of Kaizen, my Student sent to me, Six Sigma sayings, five questions "Why", four Jidoka, three Gemba visits, two tailed tests, and a Sensei using SPC.

On the seventh day of Kaizen, my Green Belt sent to me, seven Muda wastings, Six Sigma sayings, five questions "Why", four Jidoka, three Gemba visits, two tailed tests, and a Sensei using SPC.



The 2021 Online Meetings Program

2021 Noon Lunch Hour on [ZOOM](#)

[Meeting Link](#)

Details: Meeting ID: 894 3789 5409

Passcode: 123456

[iCalendar Link](#)

January 21: Design of Experiments using MINITAB, by Jack Reardon

February 18: Lean & Quality for the 21st Century Supply Chain, by Richard Bivins

March 18: Business Writing that Works! by Janice Sioui

April 22: Registration of Class II 510(K) Medical Devices

May 20: CyberSecurity Challenges by BCS365

June 17: Recent Developments in Remote Audiitng by Panel of Experts

First Up:

DOE Using MINITAB 19

12:00pm to 1:00pm on January 21, 2021

by Jack Reardon

Jack Reardon joins us for a virtual training on doing Design of Experiments in the new MINITAB 19. DOE is a systematic approach to understanding how process and product parameters affect response variables. How, when and why do you use it? Don't miss how DOE can make your job easier!



The 2021 Executive Committee



NAME	POSITION	EMAIL
Jay Patel	Chair/Program Chair	jayp@qpsinc.com
Brian Izzio	Treasurer	bizzio@allegromicro.com
Rajesh Kasbekar	Secretary/VOC Chair	rkasbekar@gmail.com
SrilataThirunagari	Membership & Nominations	srilata.t@gmail.com
Frances Eagle	Arrangement Chair	franeagle@yahoo.com
PJ Jain	Auditing Chair	pjain@townisp.com
Zach Morin	Scholarship Chair	zmorin@fiberoptix.com
Sean Ferry	Publicity Chair	seanferry@charter.net
Johnson Quartey	Education Chair	reagan.quartey@gmail.com
Tom Falzoi	Auditing Committee	tfalzoi@townisp.com
Paparao Gundavaram	Scholarship Committee	paparaog@gmail.com

Here's your chance to give your two cents!

Noontime Executive Committee Meetings

All section members can attend and observe executive meetings besides providing inputs on topics, as requested. Our ultimate goal is to improve service to our members by providing education, networking, and communication on quality-related topics. We meet online on the 2nd Friday of each month; email jayp@qpsinc.com if you would like to attend so he can add you to the agenda!

Launching in 2021...the NEW ASQ Worcester Website!

Plans are in place to roll it out soon, so get your suggestions in! Please offer your input on what we can do to spread the word, share wisdom and grow the community!

WHAT?? You bet, it's time for our

**We make a living by what we get, but we
 make a life by what we give.
 - Winston Churchill**

A Quality Consultant's Viewpoint

by

[Ed May](#), ASQ CSSBB

QPSINC.com, edm@qpsinc.com



“QUALITY” is an elusive word. Your company wants it. Your customers demand it. You expect your suppliers to deliver it. But few people know what it is!

None-the-less “Quality” is everywhere. We hire Quality Assurance Directors, Quality Control Managers, Quality Engineers, Quality Technicians, and Quality Inspectors. We install Quality Management Systems. We write Quality Manuals, Quality Policies, and Quality Objectives. We invest in Quality Improvement. We pursue Quality Awards. And when we are confused, we hire a Quality Consultant.

I confess to being one of those quality consultants; and this is my viewpoint.

Recently I went into a manufacturing company that had heard about “Quality” and wanted to get some for itself. More accurately, their customer thought that they should start shipping “Quality”. One look around, and I told that company to call me back once they had “safety”. They needed “OSHA” more than “ISO”.

Other companies want ISO 9001, Six Sigma, Lean, 5S, Baldrige, Deming, DOE, SPC, FMEA, QFD, TRIZ, or whatever else they just read about in a Quality Magazine or online blog.

So what then is “Quality”? There are, of course, many valid definitions. Naturally, the American Society for Quality has one. (A long one.) Almost every Quality Guru from Taylor to Shewhart to Deming to Juran to Crosby had a definition of “Quality”. Crosby’s Title was “Quality is Free” (but the book was not.)

I think the best definition of Quality is “meeting requirements”. It is that simple.

ISO 9001 starts out with understanding customer requirements and finishes up with measuring customer satisfaction. Customers should be satisfied if you meet their requirements. ISO 9001 puts a big emphasis on “contract review” and wants you to be proactive in understanding customer requirements so that you can satisfy them.

Six Sigma is based on near perfect compliance to requirements (specifications). Unlike the slogan “Zero Defects”, Six Sigma settles for 3.4 defects per million or 99.99966 %.

The Malcolm Baldrige Award is a checklist that measures your organization’s quality in seven categories on a total scale of 0 to 1,000 points. There is also the Deming Prize.

What ISO 9001, Lean, Six Sigma, Baldrige and the Deming prize have in common is the idea of PROCESS. Quality is really about “meeting requirements” by improving the process. Hitting the target with minimum variation, says Taguchi.

What is a process? Basically, anything with inputs and outputs. We can create an Input-Process-Output Chart and call it an IPO Chart. In Six Sigma we put Supplier at the beginning and Customer at the end and call it Supplier-Input-Process-Output-Customer or SIPOC. We can throw in requirements and call it SIRPORC.

How do we improve a process? There are basically only three ways. Locate the process more centrally within the specification, reduce the variation in the process and make the process less skewed (more symmetrical). If we do these things, we improve our Cpk (Capability of the Process Centered).

Strangely enough, when I go into a company that wants “Quality”, the Owner or Chief Executive is rarely aware that what he or she needs is ‘process improvement’. It is not about Certification, Belt Colors, or Awards. It is about the relentless, never-ending pursuit of process improvement.

Jack Welch at General Electric got it right when he tied executive bonuses to process improvement. If Quality is about process improvement, it is even more about the bottom line. Companies should do “Quality” to make more money. That is the true bottom line. For years the GE Annual Report spoke about Six Sigma because of all the money that Six Sigma teams were saving the company.

Some companies want “lean”. The American Society for Quality Six Sigma Black Belt Body of Knowledge includes “lean”. If basic Six Sigma is about improving “quality”, then lean is about getting quality faster. Lean is about increasing “velocity” by getting rid of “non-value-added activities”. Along the way we attack the 7 or 8 or 13 mudas (wastes).

Whether you go Six Sigma or Lean or Lean Six Sigma, most process improvement teams use the DMAIC. This stands for Define-Measure-Analyze-Improve-Control. The team goes through the stages of forming-storming-norming-performing-adjourning. (and partying!) The DMAIC evolved from the Taylor-Shewhart-Deming “Plan-Do-Check/Study-Act” cycle.

When I go into a company, I suggest that they first develop a Quality Management System such as ISO 9001, the current version of which is ISO 9001:2015. This provides a basic structure upon which to improve.

Then the company could add on additional requirements specific to its industry and go for certifications like AITF-16949 (Automotive), AS-9100 (Aerospace), etc.

All of these standards have a clause for continual/continuous improvement. This is where Six Sigma Quality might come into play. (Think of Six Sigma as new and improved ‘Total Quality Management’ or TQM on steroids.)

If the company gets its sigma level up, then think about applying for the Malcolm Baldrige National Quality Award (or the state equivalent, such as what used to be the New Jersey Governor’s Performance Award.)

How do you measure your sigma level? You start by defining your requirements. Anything that fails to meet a requirement is a defect. Multiply your defects by a million (numerator) and divide by the number of items measured times the number of opportunities for a defect on each item (denominator). This gives you Defects Per Million Opportunities (AKA DPMO). The lower the DPMO, the better the yield, and the higher the sigma level. Most companies are well below a six sigma quality level. So are most processes. Airline safety is (fortunately) almost seven sigma. Baggage handling is more like 3 sigma.

So where does that leave us?

Whether you do your own “Quality”, or hire a Consultant, to help you achieve better quality, you must focus on the process. High Level Process Maps, SIPOC’s, Flow Charts and Value Stream Maps can help. But the real key is listening to the “voice of the process”. This involves data gathering, especially from the process owners and operators. A little brainstorming with a cause-and-effect diagram would not hurt. You could also try Mind Mapping. Tools are wonderful. But the selection of the right tools is critical. Pyzdek says there are over 400 Quality Tools. You need someone to help with the selection of tools.

ASQ Certified Six Sigma Green Belts, Black Belts and Master Black Belts are process improvement experts trained and practiced in using quality tools for continuous improvement. Many companies produce their own Yellow, Green, Black, and other colored belts.

But before you can improve your quality system, you need a quality system to start with. ISO 9001 is the premier world-wide accepted quality management system. I would start there, assuming that your operating environment is safe to work in. And don’t simply declare yourself “ISO compliant”. The world will not believe you unless you are registered by an accredited Quality Registrar.

Management Commitment is more than a cliché. It is what your company needs to get started. But management needs to understand that “Quality” resulting in bottom line dollar improvements is all about identifying your key processes and then improving them.

Remember that Quality is a Journey, not a destination.

-EM

About ASQ

What is ASQ? With individual and organizational members around the world, ASQ has the reputation and reach to bring together the diverse quality champions who are transforming the world’s corporations, organizations and communities to meet tomorrow’s critical challenges.