

Improvement Initiatives

Inside this issue

For the Luv of Six Sigma 1
New Year, New Beginnings 1
Don't Dismiss D-M-A-I-C 2
Mentoring: A 2-way Street 3

FREE NEWSLETTER

February 2010

**6 sigma, 7 sigma...
whatever it takes!**



For the Luv of Six Sigma

by Mikel Harrv. PhD

"Is 7 sigma possible?"

Dr. Harry's Answer: Don't know, never been there – I'm still striving for 5-sigma (at least on a personal level). Given where the world is right now, many followers of Six Sigma (including myself) would say that a capability of 7-sigma is pessimistically possible, but not pragmatically probable. Maybe when I hit a 5-sigma level of capability, I can look out to the horizon and see past 6-sigma. But

from my current vantage point, I cannot comprehend what life must be like at 7-sigma.

Imagine having only 1 disagreement with your spouse every 4,298 days (or about every 12 years). This would be a 5-sigma level of performance. A capability of 6-sigma would be 1 argument every 298,048 days, or 805 years! Realizing a 4-sigma level of capability would translate to 1 dispute every 161 days, whereas a 3-sigma level of capability would develop a

[continued on next page](#)

New Year, New Beginnings, New Thinking (Part 2 of 2)

by Jay Watson

... your budget for research and development is less than a nickel.

Disney's answer was to draw his characters on large rubber bands: He could easily stretch and move the creature's body parts by pulling at the rubber band. It gave him ideas on how to create the motion vividly in animation.

To break a project into manageable steps, Disney invented a technique we know

today as storyboarding: using pictures to represent key events in a cartoon, movie, or commercial.

For us, storyboarding can also help visualize the steps in a manufacturing process or administrative function. It can also help plan a more dynamic training session, sales presentation, speech, or can help your team identify and eliminate unnecessary steps or parts of the problem.

[continued on page four](#)

Meet Gina Trapani

"Lifehacker"



[Gina Trapani](#) is a freelance web programmer and technology writer who builds Firefox extensions and web sites.

The founding editor of [www.Lifehacker.com](#), a weblog on software and personal productivity, Gina authored a book compiling the best hacks from the site's archives, entitled *Lifehacker: 88 Tech Tricks to Turbo charge Your Day* (Wiley, 2006).

A second edition of the book, *Upgrade Your Life: The Lifehacker Guide to Working Smarter, Faster, Better*, was published in 2008 by Wiley.



For the Luv of Six Sigma (continued from page 1)

momentum of 1 occurrence out of every 15 days. On the downside of things, we should recognize that a 2-sigma level of capability translates to 1 fight every 3 days. Do we dare go lower?

Alas, we find romanticism in the practice of Six Sigma – what more could you want?

Perhaps a 7-sigma level of companionship would be considered “eternal love,” where as 5-sigma level would be deemed a “life-time love.” Maybe a 3-sigma level constitutes the need for counseling. Perhaps now we can all better understand why I (and others) have paid little attention to what is beyond a 6-sigma level of quality. Thus, we have paid tribute to the phrase “elevating your aim”

while concurrently constraining ourselves to a “sigma value” far less than the number 7.

In closing, we should be reminded of the wisdom given to us by Franklin P. Jones: “Love doesn't make the world go round. Love is what makes the ride worthwhile.”

To this end, I implore us to imagine a world where everyone gets more than 300,000 rides – truly a Six Sigma life.”

author spotlight

Mikel Harry was the co-founder and chief executive of the Six Sigma Academy, Inc. He was one of the original architects of Six Sigma while working at Motorola in the 1980s. He later served as Corporate Vice President at Asea Brown Boveri Ltd. Today he is Chief Knowledge Office for SSA & Company in Scottsdale, Az. He received his B.S. and M.A. in electronics from Ball State University and Ph.D. at Arizona State University in Tempe, Az.

Don't Dismiss D-M-A-I-C ! (as just another pretty phase)

Part 1 of 2

The acronym "DMAIC" represents the five phases in the project-focused problem solving methodology. They are Define, Measure, Analyze, Improve, and Control.

It is a structured, disciplined, and rigorous approach to the continuous improvement process. A universal methodology, which utilizes data and statistical tools to systematically sustain improvement through 5S teams, Kaizen events, Lean/Green and Black Belt projects.

ensures that resources are in place for the improvement initiatives to succeed. This phase sets the expectations of improvement and maintains focus on meeting and/or exceeding requirements.

Outputs of this phase may include:

- Clear statement of the intended improvement (Charter with Problem Statement and Objective)
- High-level process map (SIPOC)
- Financial Benefits model/ analysis
- Key Performance Measures

The **Define** phase identifies the product and/ or process to be improved and

The **Measure** phase starts to

Mentoring: A Two-way Street ... (Part 2 of 2)



As the project progresses, Networking works.

Project leaders, check with other Green / Lean or Black Belts, and determine if they have experienced similar issues. If they have, collaborate to support each other in the completion of projects.

Mentors, use the help of other Champions, Black Belts, and Master Black Belts. Everyone has their own strengths --- use them to your advantage, and be sure to praise them for their assistance, both privately and publicly.

As the project closes: Patience is a virtue

Project leaders, be patient, and continue promoting benefits. Although not all projects will have tangible dollar savings – a completed project with hard dollar savings will often change attitudes and support. Mentors, continue to ask questions. Recognize, reward, and celebrate both success and effort.

Mentors and project leaders, our future is built on successes you deliver together. Champion the cause – encourage mentoring!

It's a two-way street.

	<u>Mentor</u>	<u>Coach</u>
Focus	Individual	Performance
Role	Facilitator with no agenda	Specific agenda
Relationship	Self-selecting	Comes with the job
Source of influence	Perceived value	Position
Personal returns	Affirmation /learning	Teamwork /performance
Arena	Life	Task related

Mentor vs. Coach

Mentoring is a power free, two-way mutually beneficial relationship. Mentors are facilitators and teachers allowing the protégée to discover their own direction.

"They let me struggle so I could learn."

"Never provided solutions—always asking questions to surface my own thinking and let me find my own solutions."

A coach has a set agenda to reinforce or change skills and behaviors. The coach has an objective/goal for each discussion. In our study, the top four words chosen to best describe their mentor's dominant style were—friend/confidant, direct, logical, questioner.



Do you know who said ...

"People working together as a group can accomplish things which no individual acting alone could ever hope to bring about."

- a) Tom Peters
- b) Martin Luther King
- c) FDR
- d) Gandhi

c) President Franklin D. Roosevelt managed to pull Americans out of the Great Depression and lead them to victory in World War II. His support of an active federal government shaped American politics through the remainder of the 20th century. FDR was a Democrat, and his package of federally supported public works and social programs was known collectively as the New Deal. Roosevelt was so popular he was elected four times -- a lengthy run, which led to the passage of the 22nd Amendment, restricting U.S. presidents to two terms. He died in office only a few months into his fourth term.

**Top 10 things
women should
know about
personal safety**

by Darren and Beth Laur

The following points are ten things that every woman should know about personal safety, and are covered in the Laurs' newly published book, Total Awareness: A Woman's Safety Book:

1. Awareness
2. Use Your Sixth Sense
3. Self-Defense Training
4. Escape
5. Your Right to Fight
6. Pepper Spray
7. Home Invasions
8. Avoiding Car-jacking
9. A Travel Tip
10. Safety in Cyberspace

Learn more at
<http://womentodaymagazine.com/family/safety.html>

New Year, New Beginnings (cont from page 1)



Disney the Critic – If the dreamer conceives the ideas and the realist develops them; it is the critic who decides if they are worth pursuing. To be a truly effective critic of your own work, you need psychological distance. Disney was notoriously merciless when evaluating the creative output of Disney Studios: to do it, he played the role of someone in the audience.

Have you been in the customer's shoes? Try it sometime and see if you (or your department, group, or company) are really producing the quality you want.

New thinking helps. Innovate and improve!

• **Who was Mortimer Mouse?**

The first was created by [Floyd Gottfredson](#) for [The Walt Disney Company](#). He was [Minnie Mouse](#)'s ranch-owning cattleman uncle. He first appeared in the comic strip [Mickey Mouse in Death Valley](#) (1930). After that, he appeared in many Mickey Mouse [comic strip](#) adventures in the early 1930s. He is named after the original name Disney gave Mickey. (There were others...)

D-M-A-I-C (continued from page 2)

understand and define the sources of variation, gathers basic information about the product and/or process and establishes and/or refines improvement goals. It defines the input and output variables of the process and validates the measurement system.

Outputs of this phase may include:

- Value Stream or Process Map
- Validated Measurement System Analysis
- Valid data on the process outputs (Y's) and the variables impacting the process (X's)
- Clearly defined process output measure (Baseline)
- Updated Problem Statement / Objective – w/ narrowed project scope

Like virtually everything else within the continuous improvement process domain, D-M-A-I-C requires necessary steps in a sequence, each of which is essential to achieving the desired outcome.

By following each step in the proper order, and completing the tasks of each, you can accurately understand, evaluate, and work on all aspects of the critical elements influencing the given process answer.

A- I - C to be continued in APRIL 2010 issue...

Improvement Initiatives LLC

2135 e. La Jolla Drive
Tempe, Az 85282

(480) 820-0877

improvementinit@yahoo.com

Off the page... History of Six Sigma (from isixsigma.com)

I deeply appreciate the desire and invitation for my involvement in this discussion forum. Of interest, this was the driving reason for my participation (on a temporary basis) in the "Ask Dr. Harry" forum (as presented on this isixsigma website). I provided answers to a substantial number of questions within this forum – covering a wide array of topics.

Since then, the iSixSigma staff has attached a search engine to make a general query more convenient, owing to the large volume of content. Nonetheless, I will attempt to address some of the "burning issues" that seem to dominate this website. One forum participant recently pondered about my perspective of Six Sigma's history.

At the on-set of Six Sigma, there were far more critics than supporters -- and even fewer contributors. Over the years this condition slowly reversed itself, to such an extent, Six Sigma became the "new wave" within industry. Throughout the mid 1980s, there were small bands of people (within each business unit of Motorola) that showed interest in the idea of Six Sigma.

These individuals (and ad-hoc teams) were helping to define the nature and path of Six Sigma. In this sense, it was much like a jigsaw puzzle that required a progressive series of exploratory "twists and turns." Many ideas and opinions were cross-pollinated in the hallways, cafes, and meeting places in an attempt to reach consensus (inter-personally and organizationally).

In 1984, the idea of DMAIC, black belts, and focused projects did not exist, just the quality goal of DPMO = 3.4. At that time, Six Sigma was little more than an extraordinary quality target that was envisioned by Mr. Bill Smith, accepted by Mr. Robert (Bob) Galvin, and latter driven by Mr. Jack Germaine. It was long on merit, but short on methodology. It was like having Oz without the proverbial "yellow brick road." There was no grand "system design" for Six Sigma at that time, only a "design concept."

In these early years, there were many fine contributors. Some of these individuals participated in the early development of Six Sigma – either directly or indirectly. Some were within the "inner circle" of Six Sigma at Motorola and others were not. Each had his or her own perspective of what should be done and how to do it. Some were granted formal power to achieve this aim, while others quietly labored in their corner of the corporation. Some ideas were based on facts and math, while others were based on conjecture and past practice. Some published their perspectives, while others did not. Some ideas were adopted and adapted, while others were not.

Naturally, we understand that history is a highly retrospective sport. History is written by those that "dig around" in the archives to expose certain types of artifacts (books, papers, presentations, etc.) – sources of documentation that are eventually assembled to form a postmortem understanding. Of course, it is usually the cumulative effect of such verifiable, fact-based, cross-referenced documentation that is ultimately used to validate the evolution of an idea or event. As we say in the practice of Six Sigma: "Let the facts do the talking."

Without saying, many subtleties emerge when the color of credible eyewitness reports is added to the black-and-white picture of facts. Without color, our understanding is often biased by the interpretation of a gray scale. In other words, eyewitnesses are used to fill-in-the-gaps, confirm, and supplement the spaces between the documents, and timelines thereof.

As the old saying goes: "Success has many fathers," not to mention the aunts, uncles, cousins, and nephews. What history has to say, it will say.

Sincerely,

Mikel J. Harry, Ph.D.