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Editor's Notebook
Reaching the Summit

Nature provides many obstacles that can inspire the human spirit of achievement and serve as role models for the workplace. Such is the case with Mt. Everest, which has been recognized for many years as one of the greatest climbing challenges in the world because of its height—29,029 feet above sea level.

Seasoned mountain climbers are recorded as trying to reach Mt. Everest's summit in the early 1920s, but Tenzing Norgay and Edmund Hillary did not make the first official ascent of Everest until 1953. Stories of the trials and tribulations of previous expeditions probably added to the mystique associated with ascending this mountain. For instance, George Mallory and Andrew Irvine were attempting to reach the summit on June 8, 1924, but they disappeared. For years there was a debate whether they actually were the first climbers to reach the top, but Mallory's body finally was found on the north face of the mountain in 1999, ending the speculation.

Seasoned climbers contend Mt. Everest actually does not pose substantial technical issues; however, the journey is complicated by many other problems and dangers. For example, for many years Nepal, which is where the standard route from the southeast begins, did not permit access to foreigners, so the early expeditions had to launch from Tibet on the north side. This politically oriented issue certainly seems to fit obstacles found with many workplace initiatives.

Other challenges include altitude sickness and weather-related issues including unpredictable winds. These are similar to the environmental and cultural factors that create barriers in many organizations that are trying to change and improve.

Furthermore, there are many hazards to overcome during the climb, including the Khumbu Icefall and avalanches. These parallel the path for innovation when risk aversion and an unhealthy adherence to inflexible standards may be so daunting the climb is abandoned before it even begins.

In this issue, we focus on the need to overcome obstacles to create success. Different approaches are shared, and they offer insightful ways to address the challenges that are inherent in the change process. Here are a few quotes from Hillary that may be worth considering before beginning to climb the next workplace summit.

- "It is not the mountain we conquer but ourselves."

- "People do not decide to become extraordinary. They decide to accomplish extraordinary things."

- "While on top of Everest, I looked across the valley towards the great peak Makalu and mentally worked out a route about how it could be climbed. It showed me that even though I was standing on top of the world, it wasn't the end of everything. I was still looking beyond to other interesting challenges."

- "Good planning is important. I've also regarded a sense of humor as one of the most important things on a big expedition. When you're in a difficult or dangerous situation, or when you're depressed about the chances of success, someone who can make you laugh eases the tension."

Deborah Hopen

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Deborah Hopen

Recognizing and resolving workplace obstacles that impede success are everyday considerations, but what about the hindrances associated with our own personal practices?

Why We Don't Become the Person We Want to Be

Marshall Goldsmith

For several years, I've performed what some might consider an unusual daily ritual. At a prearranged time, I get a phone call from a person who I have hired solely for the purpose of listening to me report my scores on a brief self-test. The questions (29 of them at last count), which I wrote myself, function as a simple checklist of my life's main priorities. They ask whether I've done my best to exercise, set goals, have positive interactions with others, etc. My caller listens politely, perhaps offers a few general words of encouragement, and then hangs up the phone. What's the purpose of this self-rating? This process, which I call

the "daily questions," keeps me focused on becoming a happier, healthier person. It provides discipline I sorely need in my chaotic working life as an executive coach, teacher, and speaker, which involves traveling 180 days out of the year to countries all over the globe.

At the seminars I teach, I encourage students to try it for themselves by writing their own questions. Most of them are eager to participate. To date, almost 3,000 people have completed an online version of the daily questions. Many others have emailed me seeking guidance on how to write questions of their own.

When I encounter a skeptic, he or she usually asks why I need to pay another person to remind me of such simple things—the list even includes whether I flossed my teeth. Shouldn't I, a fully functional adult, remember to do that on my own? Of course I should, and so should we all, but as I argue in my latest book, *Triggers: Becoming the Person You Want to Be* (with Mark Reiter), simple, daily behaviors are among the hardest things about our lives to control or change. Taken together, they can make the difference between a life well-lived and a life gone hopelessly off course.

Perhaps because our culture lionizes willpower and independence, most of us believe that we aren't supposed to need help with these fundamentals. Instead, we tend to believe help is warranted only for difficult, complex problems. From this perspective, the daily questions seem pointless at best. Why take a test for which I wrote the questions and to which I already know the answers? Not only that, I merely ask whether I've done my best to achieve my goals—that's a pretty soft standard. The only scale of success is, "Did I try?" It sounds too easy, but after years of dedication to this process, I now hold the counterintuitive belief that the daily questions are, in fact, a very tough test, one of the hardest I'll ever take.

To understand why, you first need to grasp a basic truth of human behavior—changing is hard, very hard. When I ask people in my seminars about the hardest change they've ever made, they invariably list their biggest accomplishments: making it through medical school, running a marathon, creating a perfect soufflé, etc.

These are indeed impressive. I probably couldn't do any of those things! On the other hand, behavioral change is even harder. Accomplishing a goal is like climbing a mountain, standing for an exhilarating moment or two at the summit, and then heading back down to the world secure in the knowledge of your achievement. Changing a behavior means climbing up that mountain, climbing down—and then climbing back up again every single day for the rest of your conscious existence.

For example, if you're going to eat right—a behavior—you can't just do it once. You have to do it every day, all day, for the rest of your life. The same goes for being more patient, becoming a better listener, or staying away from cigarettes.

I liken behavioral changes to mountain climbing because it feels just as difficult, especially at first. Only with repetition does the new behavior take on a sense of inevitability. It will eventually become easier to follow the pattern than to break it, but this takes time and incredible fortitude. I like to say that behavioral change is just about the hardest thing for sentient human beings to accomplish.

As an object lesson, think about a change you'd like to make. Now, think about how long you've been trying to make that change. I'm going to hazard a couple of bets: first, the change is something important to you (otherwise, you wouldn't bother to change it) and second, you've been trying for a long time—you'd probably measure that time in months or years rather than days or weeks.

At this point, you might be feeling a twinge—maybe even a stab—of regret, thinking about a talent you never used, the weight you never lost, or a child you never got in the habit of encouraging. The upshot is this: Our behaviors matter. Perhaps they matter more than our achievements. We don't live with our promotions and university degrees every day, but we do live with our choice to be better people.

The daily questions are so hard because, if we answer them honestly, they force us to face those choices. We wrote the questions ourselves, so we can't blame some outside entity for imposing goals that don't really matter to us. We are the only ones responsible for coming up with the right answers, so we can't say we didn't know what we were supposed to do. We only have to try to do what the questions ask; therefore, we can't write off the exercise as impossible. Even in the most straitened circumstances, there's always room for effort.

When you fail that kind of test, there are no excuses. In my years of answering daily questions, I have never yet had a perfect day. A very few have come close, but far, far more often I must report I failed somehow.

Why then do I put myself through such a tough exercise day after day? First, I believe it's well worth trying to come close to my goals, even if I don't always meet them. Even the small ones (flossing) add up to something important (like my good health). Second, asking the same questions every day forces the issue: if I fail too many days in a row, I'll either quit asking or finally do something decisive to fix the problem.

I'm proud to report one of my biggest successes along these lines. When my daughter, Kelly, was 11 and my son, Brian, was 9, I asked them how I could be a better father.

Kelly had this humbling answer: "Daddy, you travel a lot. But that's not what bothers me. What bothers me is how you act when you get home. You talk on the telephone; you watch sports. You don't spend much time with me. One time it was Saturday, and I wanted to go to a party at my friend's house. Mommy didn't let me go to that party. I had to stay home and spend time with you. And then you spent no time with me."

That hurt, so I decided to keep track of how many days I spent at least four hours with my kids. Here's a summary of my progress:

- 1991: 92 days
- 1992: 110 days
- 1993: 131 days
- 1994: 135 days

There is a happy twist to this story. I made more money in the year I spent 135 days with them than in the year I spent 20 days. The real proof of my success is that by 1995, when my kids were teenagers, they were starting to get a little sick of me. They said it was perfectly OK if I slacked off a little. My son suggested I aim for 50 days.

Spending more time with my family took sustained, daily effort, and it continues. As part of my daily questions ritual, I ask myself if I did my best to be a good husband, father, and grandfather.

At this point, you may be composing a mental list of your own questions. Excellent! I hope you will take up the daily questions habit yourself, and that it will improve your health and happiness as it has improved mine. I encourage you to create

the questions according to your own priorities, whatever those happen to be. I offer just a few suggestions to help you get the most out of it.

Whenever possible, it's helpful to make your questions active instead of passive, as shown by research I conducted with my daughter, Kelly (she's now Dr. Kelly Goldsmith, with a Ph.D. from Yale in behavioral marketing and a faculty position at Northwestern University's Kellogg School of Management).

Our research grew out of a discussion about "employee engagement," a term used in management circles to describe a state of active involvement in work that you might liken to an athlete being "in the zone." Kelly's key insight was this: If companies want their employees to be engaged, they should avoid handing out the typical surveys that ask workers what their bosses and managers can do to improve. These surveys aren't bad. They provide companies with many valuable suggestions, but they are diagnostic, not curative. They do nothing to put employees in an engaged mindset.

Only the employees themselves can do that— and a good way to remind them is to ask active questions about their working lives. For example, instead of asking the passive question, "Were you happy today?" (which invariably produces a laundry list of complaints), Kelly suggested asking an active question: "Did you do your best to be happy today?" The ball is now in the employees' court. They have to evaluate and take responsibility for their own actions.

This logic dovetailed with my daily questions process. Feeling that my personal questions were static and uninspiring, I tweaked several of them to reflect Kelly's active formulation. For example, I changed a few of my questions, as follows:

- From "Did I set clear goals?" to "Did I do my best to set clear goals?"
- From "How happy was I?" to "Did I do my best to be happy?"
- From "Did I avoid trying to prove I was right when it wasn't worth it?" to "Did I do my best to try to avoid proving I was right when it wasn't worth it?"

Suddenly, I wasn't asking how well I performed but rather how much I tried. The distinction is meaningful because in my original version, if I wasn't happy or I overate during the day, I could always blame it on some outside factor. I could

Triggers: Creating Behavior That Last— Becoming the Person You Want to Be
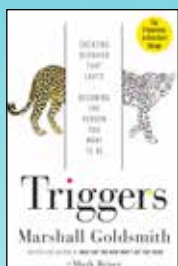
Author: Marshall Goldsmith

Abstract: In business, the right behaviors matter. Getting it right is tricky, however. Even when we acknowledge the need to change what we do and how we do it, life has a habit of getting in the way, upsetting even the best-laid plans. Just how do we manage those situations that can provoke even the most rational among us into behaving in ways we would rather forget? This book confronts the challenges of behavior and change head-on, looking at the external factors (or triggers)—both negative and positive—that affect our behaviors, awareness of when we need to change, willingness (or otherwise) to do so, and our ability to see the change through. The book invites us to understand how our beliefs and the environments in which we operate can trigger negative behaviors or a resistance to the need to change. It also offers some simple, practical advice to help us navigate the negative and make the most of the triggers that will help us to sustain positive change.

tell myself I wasn't happy because the airline kept me on the tarmac for three hours (e.g., the airline was responsible for my happiness). Perhaps I overate because a client took me to his favorite barbecue joint where the food was abundant, caloric, and irresistible (e.g., my client—or was it the restaurant?—was responsible for controlling my appetite).

Adding the words "did I do my best" injected the element of personal ownership of responsibility into my question and answer process. After a few weeks using this checklist, I noticed an unintended consequence. Active questions themselves didn't merely elicit an answer. They created a different level of engagement with my goals.

To see if I was trending positively—actually making progress—I had to measure on a relative scale, comparing the most recent day's effort with previous days. I chose to grade myself on a scale from one to 10, with 10 as the best score. If I scored low on "Did I do my best to be happy?" I had only myself to blame. We may not hit our goals every time, but there's no excuse for not trying. Anyone can try.

At the moment, I have 29 daily questions. There is no correct number. It's a personal choice, a function of how many issues on which you want to work. Some of my clients have only three or four questions. My list is 29 questions deep because I need a lot of help (obviously), but also because I've been doing this a long time, and I've had years to deal with some of the broad interpersonal issues that seem like obvious targets to newcomers to this process.

The first 13 of my questions ask whether I did my best to address a particular behavioral change or interpersonal challenge. For example, I ask if I did my best to avoid angry or destructive comments, and whether I did my best to find meaning in my work. The remaining 16 cover professional and personal self-discipline issues, things like how much sleep I got at night, how many minutes I devoted to writing, and whether I was up-to-date on my physical exam. I depart from Kelly's formula a bit here since it doesn't make much sense to ask whether I did my best on those things. Instead I score myself with a measurement of time spent, or a yes or no.

If you're not sure what to start with, I recommend the questions I use in my online survey. (By the way, if you'd like to participate, please feel free to drop me an email at marshall@marshallgoldsmith.com). These questions cover the basic tenets of employee engagement, but they work well in other areas of life as well:

- Did I do my best to set clear goals today?

- Did I do my best to make progress toward my goals today?

- Did I do my best to find meaning today?

- Did I do my best to be happy today?

- Did I do my best to build positive relationships today?

- Did I do my best to be engaged today?

If you take the online test, we follow up after 10 days and essentially ask, "How'd you do? Did you improve?" So far we have conducted 79 studies with more than 2,500 participants. The results have been incredibly positive, as follows:

- Improvement in all six areas was reported by 37 percent of participants.

- Improvement on at least four items was noted by 65 percent of participants.

- Of those participating, 89 percent showed improvement on at least one item.

- Just 11 percent of participants reported no positive change on any items.

- Only 0.4 percent of those studied scored worse on at least one item (go figure!)

Given people's demonstrable reluctance to change at all, this study shows that active self-questioning can trigger a new way of interacting with the world. Active questions reveal where we are trying and where we are giving up on trying. In doing so, these questions sharpen our sense of what we can actually change. We gain a sense of control and responsibility instead of victimhood.

I say this knowing that it's hard not to feel victimized sometimes. There is so much in life we can't control, and the challenges truly are formidable—even for the typically very successful people who seek out programs like the daily questions. Maybe you find your job draining or you're trapped in a toxic pattern of arguing with a spouse. Maybe you carry 50 extra pounds, and it's hurting your health. Maybe you're running out of money. Maybe you're lonely.

The daily work of behavioral change, which can do so much to reorient our lives for the better, might seem overwhelming. The people we know we can be, the people we once dreamed of becoming, can seem to recede ever farther as we try to stay afloat in our daily routines. We feel dissatisfied, and

dissatisfaction slides so easily into bitterness. Once the chance to make a change has passed, that bitterness solidifies into regret.

Think of the daily questions as a pragmatic antidote to those darker emotions. Put your goals on paper, an Excel spreadsheet, or a papyrus scroll—whatever works for you. Measure every day, "Did I do my best to …?" Your problems won't disappear, but you exist in a different relation to them. You are now the agent of change.

You will fail many times—I have. But you will have your shoulder against the wheel, and believe me, if you keep at it, that wheel will move. Your disciplined effort and concentration on a set of problems of your choosing will affect your life for the better. When you look back on your life from the vantage point of old age, you'll be able to say, if nothing else, you tried as hard as you could at the things that mattered most to you. You did your best. No regrets.

Marshall Goldsmith

Marshall Goldsmith is an executive educator, coach, and author. He has been recognized at the Thinkers 50 *ceremony in London as one of the Top Ten Most Influential Management Thinkers in the World—and the top-rated executive coach—for the past four years. His work has been recognized by almost every professional association and publication in his field. Goldsmith is one of a select few executive advisors who have been asked to work with more than 150 major CEOs and their management teams. His coaching process is used by thousands of internal and external coaches around the world. Two of his best-selling books, including* What Got You Here Won't Get You There *and* Mojo, *have sold more than 2 million copies, and his articles, blogs, or videos have been read or viewed tens of millions of times. Contact Goldsmith at* **Marshall@MarshallGoldsmith.com**.

This case study applies a development of the Adizes Methodology to nursing management as an approach to overcome obstacles that prevent achievement of intended results.

When Things Go Wrong in Spite of Good Intentions

Ana Shetach

The vast majority of nursing leaders within healthcare services have chosen their profession due to an innermost desire to assist and support others. They undoubtedly would refer to themselves as having good intentions and doing their best to achieve those intentions within the framework of their professional positions. Often enough, however, intentions and plans do not work out successfully. A person sets out to do one thing but confronts processes and results that differ from what was expected.

Curtin wrote "Most people tend to judge others by the results of their actions, and themselves by their own good intentions."[1] What eventually counts in management and in performance evaluation, though, is objective long-term outcomes rather than subjective individual points of view. The general objective of managerial processes, and managing healthcare assignments in particular, is successfully attaining clear strategic goals. The quality and efficiency of decision making and implementation processes are essential. The tendency to justify acts by declaring good intentions may well block

a clear vision of mishaps. It also may blur the need to improve the management of those processes on an everyday functional level of the healthcare organization or unit or on the management of long-term change processes.

This article addresses the following areas in order to support improvement efforts:

- Understanding the nature of the key managerial processes
- Identifying probable obstacles that might be encountered during the implementation of care and treatment processes
- Ensuring successful management of projects and assignments
- Making follow-up and control processes work
- Developing managerial skills by acquiring systematic tools for coping with obstacles that occur

Obstacles that stand in the way of successful implementation of decisions and managerial working models that can help managers overcome those obstacles are presented along with a set of concrete, uncomplicated, and practical tools. The framework for the discussion

is healthcare and nurses in leadership and managerial positions who work to minimize treatment and medication errors, promote the effectiveness of communications and instructions, and maximize the efficiency of follow-up and control processes.

Obstacles and Tools for Resolution

Mackenzie et al. referred to management of ongoing decision-making processes as "messy situations."[2] This contention also applies to nursing managerial situations within healthcare teams.

Projects, decisions, solutions to problems, assignments, and routine tasks often are not carried out as expected and may result in unsatisfactory results. Various reasons and/or excuses may be given by workers and managers when issues arise. Five broad categories can be used to describe the variety of issues that stand in the way of effective and efficient management, as follows:

- Quality of the decision itself
- Cooperation needed for effective implementation
- Support/backing by the person of authority
- Follow up and control of the implementation process
- Incontrollable events

The first four of these categories can be overcome by applying two managerial tools associated with the Adizes Methodology—coalesced authority, power, and influence (capi) and the revised decision-square model (RDSM).

Coalesced Authority, Power, and Influence (capi) Model

When managing team decisions and projects, it is important to make sure that they have quality and are suitable and workable. Application of the "capi" Model, shown in Figure 1, is useful for this purpose. This tool involves the three factors described below and uses a preliminary analysis of the decision situation, enabling the decision maker to maximize his/her abilities and ensure the best possible results are attained:

- *Authority*—The capi Model advises users to verify in advance whether the project manager has the full authority to act independently on decisions related to the project.
- *Power of cooperation*—To ensure maximum success in any decision, the capi Model recommends initiative to ensure full cooperation of all future power holders by ensuring that they

Figure 1: The capi Model
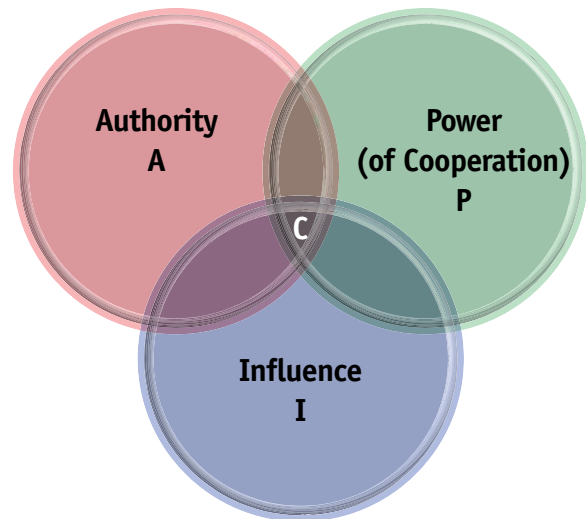
have the necessary know-how, capabilities, and/or resources, as well as willingness and interest, to cooperate.

- *Influence* (or information)—This is the factor that deals with the decision having high quality and being suitable and workable. This means the required know-how on which to base a successful and applicable decision is available.

It is the coalition of the three factors—authority, power of cooperation, and influence—being analyzed in advance of the decision that helps the team make and implement decisions successfully. The capi Model also is a reliable tool for determining whether establishing a working team is necessary or whether individual problem solving would suffice. For this purpose, the capi Model helps to identify whether the decision may evolve unexpectedly into a more complex dilemma as it is implemented. This added benefit of the model reflects its much broader scope of consideration.

Revised Decision-Square Model (RDSM)

The RDSM tool ensures efficient follow-up and a high level of control over project and decision implementation processes. It collapses all possible decision aspects into four categories that constitute the four sides of a square,[3] as listed below and shown in Figure 2:

- The what side of the square describes the content of the decision at various levels. This includes the goals the decision should enhance, which should be clear and accepted by all people associated with the decision, a detailed

Figure 2: The Revised Decision-Square Model—An Elaborated Example

What
– Project/Decision goals
– Manifested operative description
– Schedule for application: March 15
          April 2
          May 1

How
A detailed list of resources (including plans for obtaining them)
A clear and detailed list of assignments for each team member:
John:......
Sarah:.....
Ruth:......

Decision

Who
Sarah

When
March 11
10:00 a.m. – 11:00 a.m.
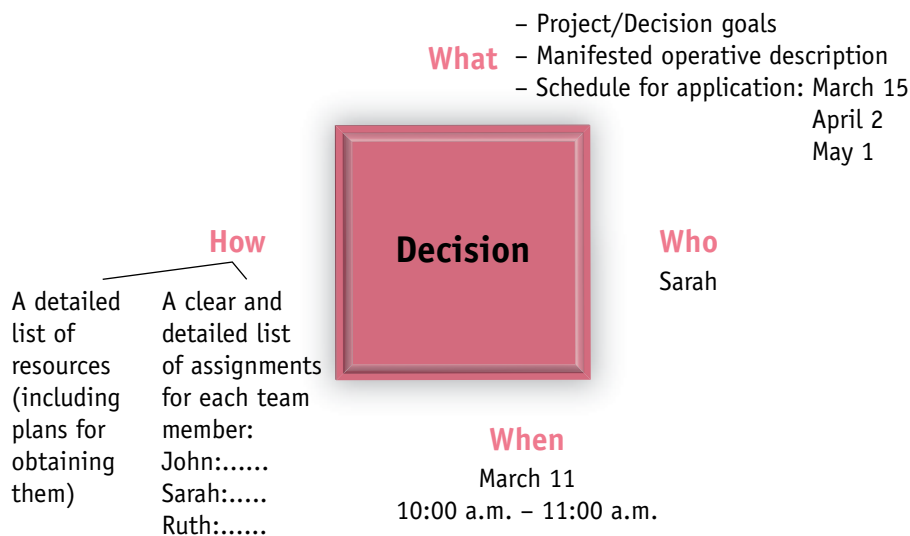
operational description of how the decision will be implemented, and a detailed timetable for the application of the decision.

- The how side specifies the means for achieving the what within the scheduled timetable. This side involves an elaborated list of resources needed to achieve the what (financial resources, manpower, labor hours, physical setup, equipment, aids, etc.), including detailed plans for its attainment, when appropriate (e.g., the process for obtaining the financial resources). The how also provides a detailed distribution of assignments among team members who are involved in the advancement and application of the decision.

- The when side points out one sole detail—the date and the time on which the team working on the decision or project is going to meet again for follow-up and implementation-control purposes.

- The who side names the decision or project coordinator. This is the team member assigned to ensure that the follow-up of the implementation process will continue as planned.

The RDSM assumes that "sealing" (e.g., specifying in detail) more thorough, clear, and unequivocal decision aspects increases the likelihood of efficient implementation. It recommends sealing all decision squares—one for each topic or aspect of the overall issue or project-aspect—before the end of every team meeting. This tool touches on the basic issues with managerial processes,

such as tying all loose ends, ensuring clear and unequivocal communication within teams, setting follow-up meetings and dates, etc. It emphasizes the obvious requirements for success, which are sometimes neglected or taken for granted, thus hindering or even totally jeopardizing efficient implementation. For example, use of this tool would encourage that enough follow-up meetings are scheduled to ensure quality results and that timetables are maintained.

Nursing Managers' Reactions to This Approach

Hundreds of nurses in various managerial positions have applied these tools in their everyday work successfully as part of training received from and tracked by the case study researcher. As demonstrated by their comments in this section, they were pleased and excited with the results.

- A nursing manager of a large healthcare clinic in an Israeli city, who had been promoted to the role about a year before this experience, reported, "The clinic prepares and is expected to present yearly working plans. This year, for the first time, this was my responsibility. I was determined to prepare a quality summary presentation of the clinic's activities and achievements in the past year, as well as presenting our targets for the following one. I felt, at first, quite lost with the plentiful quantities of data, dispersed among so many factors. Having been exposed to the RDSM and capi just prior to that assignment, I decided to give them a try. I began by defining my precise goals. I then met with each sector—nurses, doctors, and clinic manager (my 'a,' 'p,' and 'i') to obtain their cooperation and specify their responsibilities. All capi members then assembled to 'seal' the overall decision square, planning, in detail, the progressing stages of this project. Agreeing to reassemble after each sector collected their own data and produced their own part of the presentation, we set the

date for our next meeting. We also planned and set a date for our follow-up meeting to construct the final report in time for the final typing and presentation of the document. Progressing in light of those tools helped build my confidence, giving me the 'push' I needed to set out with this project. It motivated me to focus on what needed to be done, step by step, thus reassuring me I was heading for success on this mission. Eventually, we presented the final outcome two weeks ago. It was incredible! Our messages, at the bottom line, were eloquently presented, coming out focused, clear, and straightforward. We were highly praised by all that were present. My boss was particularly appreciative of me, for having managed it all so efficiently."

- A head nurse in a senior citizens' home, who is in charge of the nursing team as well as acting as the senior medical expert within the home's management team, explained that in the past, she and the home manager had not always been able to reach agreement, and in those situations she had been coerced into decisions that left her unhappy and, often, quite upset. After studying the capi and RDSM tools she shared, "I now feel more skilled and experienced, calmer, and considerably more reassured because capi has taught me that her approach and opinions are based on different resources and background than mine and that it is OK to express my views and professional opinions, even when they contradict hers. When she, nowadays, turns to me with a problem, I listen calmly and then ask her to give me some time to consider my response. I then consult with my deputy to arrive at the best and most applicable decision possible, returning to my manager with my recommendation, accompanied with simple and easily understandable explanations. Our relationship has turned much more cooperative and pleasant. Decisions are now more qualitative and better implemented. I have also learned to take certain decisions to a capi team that includes all nurses, the home manager, and the housemother. In this forum, for example, assignments and overall responsibilities among nurses are decided upon and allocated. These are tightly locked in a decision square, including proper follow-up and the confirmation that when a nurse leaves on holiday, she ensures that another will take over her responsibilities

as long as she is away. I feel I have become a far better manager with the aid of these tools. They make decision-making and implementation processes more organized and easier to handle on an everyday basis."

- A senior nurse working in the oncology department of a large Israeli hospital says, "On night shifts, when I am heading the team, I am often confronted with queries from women who have cancer and are phoning from their homes regarding issues that bother and worry them. I lately had an idea to form a pool of treatment protocols and professional answers to such common questions, which will be available on the computer for use to every nurse on the team, whether she has undergone specific oncology training or not, and to provide uniform professional answers. I am quite impulsive by nature, which often leads to uncooperative results. In order to really give this idea a chance, I decided to be more cautious in how I handled this issue. I decided to try and progress along capi Model recommendations. I first brought it up with the other nurses, who have oncology training, to obtain their potential cooperation on this project. I then met with the department head nurse to obtain her support and backing on this. She will eventually need to authorize the use of these protocols and to obtain the support of the department head. These steps minimized the potential obstacles I might later confront in the process of promoting this idea. The actual work could now actually begin. A date for an initial meeting with the four nurses on the project was now set. I presented my basic plan of the project. Together we locked the square (RDSM), exactly as I had learned, clarifying the goals and elaborating the details, setting the timetable, specifying the timetable resources, allocating assignments among us, and setting two additional dates for follow-up meetings—to go over the protocol itself in detail. It worked very well and the project is a major success."

Summary and Conclusions

This article describes a set of tools that can be applied to decisions, and in this case, led nursing managers on their unsteady road toward increasingly successful and efficient teamwork. Use of the capi Model lights up the road toward successful implementation of assignments or projects by

clearly pointing out in advance any possible obstacles that may arise on the way.

Although the concepts addressed by the tools presented in this article are not novel, they are straightforward to understand and apply. The comments from the nurses involved in their application indicated that they provided a set of useful guidelines that enabled success. The nurses used them to verify they had not overlooked, forgotten, or taken for granted anything on the way to attaining required achievements.

Dealing with obstacles is an everyday experience, and these tools help to prevent the avoidance of disappointment, frustration, and even disaster when decision-making processes do not proceed as intended. The capi Model focuses on the optimal course of action, clearly pointing out the risks to consider when evaluating different courses of action. The RDSM is designed to ensure efficient follow-up and management control over the actual implementation process.

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Ana Shetach

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Quality and Innovation

Tali Hadasa Blank and Eitan Naveh

The Journal for Quality and Participation is launching a new department in this issue. "Lessons From Academia" will feature a summarized version of an article that previously was published in the *Quality Management Journal (QMJ)*, an ASQ quarterly, peer-reviewed publication. It aims to link the efforts of academic researchers and quality management practitioners by publishing significant research relevant to quality management practice and provide a forum for discussion of such research by academics and practitioners.

This department kicks off with a summary of the article, "Do Quality and Innovation Compete Against or Complement Each Other? The Moderating Role of an Information Exchange Climate," by Tali Hadasa Blank and Eitan Naveh, which originally appeared in the April 2014 issue of *QMJ*. A link to the original article will be included at the end of each installment of this department so readers can dig into the details.

Premise

In today's fiercely competitive marketplace, companies not only need to provide high-quality products and services that are free of deficiencies, but they also must implement a radical innovation approach. Both are essential for an organization's survival, yet some studies suggest they compete for scarce resources and thus emphasize organizational activities that lead one of them to harm the other. Others provide empirical support for the simultaneous coexistence of these approaches.

The article focuses on reconciling this issue by identifying the conditions under which quality and innovation can coexist. The authors use climate and information exchange theories, which are good performance predictors, to present a new perspective on this debate. This reconciliation has important theoretical and practical applications on the field of quality and the quality manager's role. From a practical point, the balance between quality and innovation concerns many in the quality profession on a daily basis.

Research Area One: Applying a Climate Approach to Explain the Relationship Between Quality and Radical Innovation

Climate is defined as the shared perceptions of employees concerning the practices, procedures, and kinds of behavior that get rewarded, supported, and are expected in a workplace setting. In addition, various departments within the organization may have different levels of a specific climate as a result of characteristics of their work, interactions, work conditions, or managerial behaviors. The analyses, therefore, focused on the department level. Multiple climates often exist simultaneously, so the climates for both quality performance and radical innovative performance were investigated.

Research Area Two: The Influence of Innovation Climate on Quality Performance and of Quality Climate on Radical Innovative Performance

A quality climate emphasizes precision, accuracy, comprehensive fact-based problem solving, and focused-oriented processes. Quality climate involves adherence to routines and attention to detail through the adoption of standardized best practices; thus, it was hypothesized that quality climate would have a positive influence on quality performance. An innovation climate involves the employees' shared perception that they are expected to generate breakthrough new ideas designed to be useful and implement them into new products, processes, and procedures. An innovation climate is characterized by openness to different ways of thinking, autonomy, breaking existing paradigms, taking risks, experimenting, using trial and error, and tolerating mistakes; thus, an innovation climate would have a positive influence on radical innovative performance.

Some aspects of an innovation climate generally are believed to contradict the characteristics required to achieve high-quality performance, such as acting within organizational constraints or promoting an idea through accepted channels, testing, and integrating. The innovation climate generates variation, which is something the activities associated with quality, such as adherence to standards and routines, cannot accept. Moreover, an innovation climate encourages employees to explore their ideas even when these are not necessarily in line with existing quality guidelines.

Another traditional point of view contends there is tension between a quality climate and radical innovative performance. The quality climate promotes activities such as the use of existing technology and a focus on well-organized, well-planned, and systemic procedures and standardization. In other words, a quality climate that emphasizes stable routines and processes may interrupt the generation of creative ideas, thinking "outside the box," going beyond routines and common assumptions, and taking risks, which are the basis for radical innovative performance.

Research Area Three: Information Exchange as Moderator in the Tension Between Quality and Innovation

This tension may stem from the fact that quality and innovation both require resources, and organizational resources are valuable and limited. Information exchange is accepted as an important factor in achieving both quality and innovation and provides a means for enriching existing resources. An information exchange climate encourages behaviors that involve both giving and taking information that can be used as raw material for the generation of better and also new responses through synthesis or recombination. Employees may have different information, knowledge, and perspectives regarding work issues. Through the exchange of information with others, employees accumulate informational resources, improve their knowledge bases, refine and test ideas for resolving problems or for tapping into opportunities, and go beyond their "regular work" to develop new ideas. An information exchange environment, therefore, may reduce the negative influence of an innovative climate on quality performance and of a quality climate on radical innovative performance.

When the information exchange climate is high, the innovation climate can be expected to be synergetic with quality performance, leading to a situation in which the innovation climate supports quality performance. This is because information exchanged with other employees may identify problems that provide opportunities for quality outcomes. Information synergy may broaden the innovation climate to include not only the search for new knowledge but also the elaboration and use of existing knowledge important for achieving quality performance. For example, employees who are focusing on innovation may apply acquired information to quality aspects for eliminating variations.

When the information exchange climate is low, the innovation climate may be less synergetic with quality performance, leading to a situation in which the innovation climate harms quality performance. In a low-information exchange climate, employees understand that the use of discipline-specific information is encouraged, and there is no support for fertilization by other aspects of data and knowledge. Employees refer to their working domain's information and resources and lack additional input. The shortage of information leads to a situation in which employees perceive that divergent approaches and disagreements based on different discipline perspectives are not supportive of their objectives and, therefore, are not acceptable.

In addition, the authors hypothesize that a high-information exchange climate converts the negative effect of the quality climate on radical innovative performance into a positive one. The information exchange climate allows the sharing of information and ideas, which is a viable source of divergent thinking and innovation. In other words, an information exchange climate expands the quality climate to emphasize not only the use of existing knowledge but also to involve activities such as the search for new knowledge and novel approaches to problem solving, which are relevant to radical innovation performance. An exchange information climate may provide the team with inspiration in regard to quality problems or opportunities that otherwise are not recognized. Employees are exposed to different ideas and ways of thinking that trigger the use of broader categories and the generation of more divergent solutions. When the information exchange climate is low, however, activities associated with the quality aspects of low risk taking and stable routines and

processes would eliminate, rather than be transferred to, the synergy that goes beyond routines and common assumptions.

Research Hypotheses and Methods

Thirty-five departments participated in the study. There were several respondents in each department so the sources of the dependent and independent measurements were different, which improved trust in the results. All the departments were from high-tech electronics companies involved in software programming research and development, which avoided potential confounding factors. Detailed information on the research hypotheses, sampling plan, measurement approach, and analytical process are included in the original article at http://rube.asq.org/quality-management/2014/04/do-quality-and-innovation-compete-against-or-complement-each-other-the-moderating-role-of-an-information-exchange-climate.pdf. Limitations on the research methodology also are included in the full article.

Key Top-Line Results

Three independent variables (quality climate, innovation climate, and information exchange climate) and the two dependent variables (quality performance and radical innovative performance) were considered to be group-level variables, reflecting events occurring in the department that are shared or experienced by all individuals in the specific department. The evaluation supported this assumption and demonstrated that a significant proportion of the variance in individual responses can be accounted for by department. Furthermore, the scales of the dependent variables indicated that their measurements were sufficiently reliable to model effects at the team level.

Another analysis clarified how much variance resided within and between organizations and also served as a foundation for subsequent analyses. Models were developed on both quality performance and radical innovation. The first model demonstrated a significant negative main effect for innovation climate on quality performance. The second model demonstrated that quality climate did not have a significant main effect on radical innovative performance.

Additionally, the results for the first model showed a significant interaction between innovation climate and information exchange climate on quality performance. A graphical analysis of this interaction indicated that higher levels of innovation climate were associated positively with higher quality performance when the information exchange climate was high rather than low. In other words, the innovation climate improved quality performance when the information exchange climate was high, but quality performance was significantly lower when the information exchange climate was low.

The interaction between quality climate and information exchange climate on radical innovative performance also was significant. Higher levels of quality climate were associated positively with higher radical innovative performance when the information exchange climate was high rather than low. A quality climate improved radical innovative performance when the information exchange climate was high.

Practical Implementation

This study's results have important practical implications because managers are interested in improving their organizations' radical innovativeness; nevertheless, the current literature on how to balance innovation and quality may confuse managers with its inconsistencies. Managers read that quality harms radical innovative performance and that innovation and quality activities should be separated in time and place. The approach used for this research offers an explanation for earlier contradictory results and shows practitioners that quality and innovation do not harm each other. Quality managers can bring top management better answers about how to develop the quality system.

The study supports Michael Dell's notion that "At Dell, innovation is about taking risks and learning from failure." Also, Toyota's quality difficulties that were manifested in recalls were explained by their top management as originating in the unsuccessful management of the quality-innovation tension. Toyota's CEO also explained the organization's difficulties concerning the flow of information—for example, it may take a few months for field problems and customer complaints to reach Toyota's headquarters in Japan.

This study provides empirical evidence about identifying such difficulties and suggests the important influence of the exchange of information. The study provides a clear and simple integrated message for managers—they should be less concerned with harming their organization's radical innovativeness rather than with damaging its quality performance. The authors found when the information exchange climate was low, the quality climate still had a

positive influence on radical innovative performance; however, this was not the case with the influence of the innovation climate on quality performance. Encouraging an information exchange climate is a key factor in enhancing radical innovative performance and maintaining quality performance.

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A comprehensive list of all sources referenced to support this research is included online.

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More Online

To learn more about this important research study, be sure to read the original article from the *Quality Management Journal* at **http://rube.asq.org/quality-management/2014/04/do-quality-and-innovation-compete-against-or-complement-each-other-the-moderating-role-of-an-information-exchange-climate.pdf**.

Quality Management Journal

Based on:

"Do Quality and Innovation Compete Against or Complement Each Other? The Moderating Role of an Information Exchange Climate"

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This information from the soon-to-be released book, *Coaching Green Belt Projects for Sustainable Success*, clarifies the obstacles related to developing a program that will serve the organization most effectively over the long term.

Coaching Green Belts

The Sustainability Challenge

Steve Pollock and Daro Mott

The Six Sigma methodology for quality improvement uses define, measure, analyze, improve, control (DMAIC), a well-accepted industry practice in Fortune 500 firms;[1] however, DMAIC sustainability remains challenging for many organizations. The American Productivity and Quality Center (APQC) notes that numerous barriers to DMAIC project completion arise from poor collaboration practices, and lack of access to a coach after training is a primary cause.[2]

Green Belt learning is not an accidental or informal process (see Figure 1). Green Belts need support in applying new skills, yet there is little research about how this works. ASQ has a technical handbook for preparing to take its Green Belt certification exam, but coaching is not widely discussed. A book by Owens[3] discusses tips for a Green Belt's second project. Most DMAIC research concentrates on Black Belt training, projects, or roles. For example, DeRuntz[4] and Hagen[5] discuss Black Belt training in their dissertation research. Some research by Gobeille[6] investigated Green Belt training using an apprenticeship model or a coaching approach.[7]

More than accessibility to a Black Belt (hereafter called coach) is required for success, however.[8] The quality of collaboration also is important to the outcomes of the project.[8] There may be many barriers to DMAIC sustainability, but the collaborative approach of the coach is a key opportunity as illustrated in Figure 1 of the online supplement.

Furthermore, success encourages the sustainability of DMAIC. The reputation of the change initiative encourages others to jump on board. Because people begin their DMAIC journey at the foundational level called Green Belt, and Green Belts seem to be faltering, it is of paramount importance to focus attention on their first project and then on subsequent projects as appropriate.

Guidance From the Experience of Others

Black Belts coach Green Belts, helping them learn how to apply DMAIC skills to solving real-world challenges in the context of a project. Coaches are helpful in lowering barriers to learning, and when

Figure 1: Green Belt Learning Curve

Being trained
- More coach
- Less Green Belt

Coach teaches Green Belt

First project
- More Green Belt
- Less coach

Green Belt applies skills

Additional projects
- Green Belt owns it
- Coach as needed

Green Belt and **coach** peers
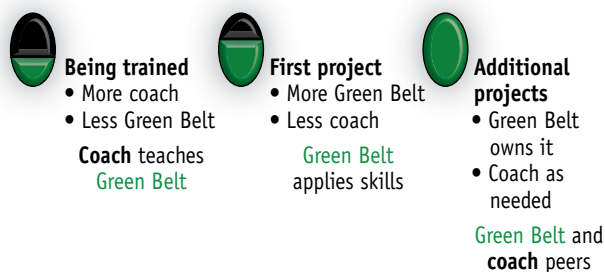
barriers are lowered, DMAIC adoption is raised.[8] Formal expectations promote the learning process as ideas are exchanged.[9] Collaboration during a Green Belt project builds a foundation for future improvements because participants learn skills, gain confidence, build relationships, and better understand how the organization works. Specific behaviors of coaches, which facilitate better Green Belt outcomes on the first project include adopting standards when working with Green Belts, meeting before the project starts to set expectations, and following up on expectations throughout the DMAIC project.

Bourg, Stoltzfus, McManus, and Fry[10] published a peer-reviewed study about coaches and Green Belts. The authors describe Agilent's response to the challenge facing Six Sigma adoption in its U.S. and U.K. operations. Agilent created a coaching infrastructure to help 300 trained Green Belts after the first projects stumbled. Agilent's previous practice was to emphasize classroom training and informal support on an as-needed basis. There were no formalized expectations or standards about the support process.

The Agilent case study cites standard practices for coaching as the key to facilitating higher levels of learning after training, resulting in more reliable project performance. After regrouping following the initial project setbacks, Agilent's coaching approach support became formalized based on a set of performance standards with feedback to coaches. Overall, the case study points to the need for managing the coaching process.

What Green Belts Want and Need to Know

Certain themes emerge about what Green Belts want to know and need to know. The themes arise from many years of direct, personal experience supporting Green Belts and from networking with other coaches. Typically, many questions arise about how to apply the ideas learned in class. Coaches are better able to do their work when they understand three key tips (see Figure 2 in the online supplement):

- *Understand what Green Belts want to know about each DMAIC phase.* This comes from asking questions and listening carefully.

- *Recognize what Green Belts need to know about each DMAIC phase.* This comes from knowing the Six Sigma Body of Knowledge and operating within the organization's goals for Six Sigma.

- *Balance Green Belt wants and needs during collaboration about project work.* This occurs in the context of the project work through the collaboration of the coach and Green Belts.

Coaches learn about Green Belts when coaches listen. The listening takes place across many channels of

Figure 2: DMAIC Report—Project Summary

Project name	Six Sigma Green Belt executive summary

Team	**Opportunity**
Department name	The problem
Sponsor name	The goal
Project leader	The benefits
Team members	
Project number	Elevator speech
Six Sigma coach name	
Project start date Project end date	
Project validation date	

Analysis and improvement		**Results**
Root causes	Solutions	Baseline performance (Defects per million opportunities I sigma level)
		Improved performance (Defects per million opportunities I sigma level)
		Tangible benefits
		Intangible benefits
		Number of associates certified

Coaching Green Belts for Sustainable Success
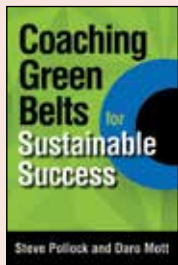
Authors: Steve Pollock and Daro Mott

Abstract: Six Sigma Green Belts need support in applying new skills after training, yet there is little research about how this works and even less advice about what support looks like in the field. This book is that missing link in providing coaching tips to support Green Belt projects. There is an abundant information on the technical, "hard skills" aspects of Six Sigma while considerably less about the interpersonal side of the define, measure, analyze, improve, control (DMAIC) methodology. Research has shown that desirable Green Belt project outcomes are influenced greatly by collaboration issues between the coach and the Green Belt team member; therefore, this text focuses on tips for effective collaboration practices. In addition to serving as a comprehensive discussion about how to coach Green Belts on their first projects, it also may be used to coach subsequent Green Belt projects. A case study of Louisville Metro demonstrates this book's ideas in the field and includes an example of one of its Six Sigma Green Belt projects.

communication—face-to-face conversations, phone calls, surveys, social media, and formal data-gathering sessions. Perhaps the most insightful communication occurs both at the moments of greatest frustration and greatest satisfaction with DMAIC.

Being present to share in these moments is invaluable. Do not rely exclusively on formal rules of engagement through scheduled meetings and reviews. Increase the chances for richer insight by building a relationship with the team members and encouraging feedback.

Coaching Example

Imagine yourself coaching a Green Belt team. Here are some thoughts on the coaching that can be provided as the project summary portion of the project report is prepared.

Report Development and Issues

The Six Sigma project is documented to record essential learning and to provide direction for follow-up work by the team. The project summary captures the key outcomes of the DMAIC phases as depicted in the sample in Figure 2.

The coach and Green Belts review this information at the start of the project. Typically, the sponsor will be engaged in this review to ensure alignment to the business need. The information for the team and opportunity sections is filled in by the Green Belts; the project validation date is the anticipated date for checking the results of the project.

The analysis and improvement section is completed after the analyze and improve DMAIC phases are finished. The results section is filled out after the measure DMAIC phase for the baseline of the project, and the rest of the results section is completed after the control phase of the project. As the project moves through the DMAIC phases, it is possible some of the project summary information may change; for example, the problem may need to be revised after the team learns more through research.

The 16 typical questions Green Belts ask about the project summary are listed in Figure 3 of the

Figure 3: Project Summary Themes

Training	
Teach project summary	Practice elevator speech

Projects	
Update all DMAIC phases	Share elevator speech

Standards (This is the basis for coaching feedback)	
Teach about purpose of and how to complete the summary	Keep summary current for all DMAIC phases and store in centralized location

Project summary is Twitter-like, answering four questions:			
Why are we working on the project?	What have we learned about the business process?	What are we doing to improve the business process?	Results so far?

online supplement. Although the classroom training usually addresses these issues with examples from previous projects, it is unlikely that trainees will remember details during their first project. If they do not ask these questions, the coach should bring these items up for discussion. Here are the two specific questions Green Belts most want to know when writing the summary (see Figure 4 in the online supplement):

- Why do we need to fill out a project summary?
- How often do we update it?

Bear in mind that any questions asked by Green Belts provide useful feedback about the training received. Questions suggest learning is occurring, and a trusting relationship is underway. Learning is essential to the knowledge transfer from coach to Green Belt.

Coaching Tips

The coach should focus on the value of the project summary as an "elevator speech," a brief, conversational description of the project that can be delivered to a person during the hypothetical time it takes to ride in an elevator from one floor to another. Think about the Pareto principle as this section is prepared; focus on the big bars or key information elements of the project. Sponsors and stakeholders are busy people. They do not have time to read a long discussion about the project. They value those who can summarize the key points quickly. There is a benefit for the Green Belt to learn how to summarize a complex project, telling their story succinctly.

Doing so builds a brand of personal influence. Being able to take a step back from the details—while connecting the audience with the project—is a desired leadership trait. So, the tip is to practice the elevator speech as depicted in Figure 5 of the online supplement

The DMAIC iterative process refines the message about the project. The message will improve throughout the project life cycle from insights about the project details, including how to communicate the speech. Practice the speech using the project summary information following completion of the DMAIC phases. Write this elevator speech, using a Twitter-like format of 140 characters, answering the four key questions below:

- Why are we working on the project?
- What have we learned about this organizational process?

- What are we doing to improve this organizational process?
- What are the expected results?

Here is an example of the language for an active project during the Improve phase, "Our Green Belt project is working on the sales reporting process because there are delays in preparing the reports. Some factors cause delays, including an informal process and 10 approval steps. We are creating a formal process for issuing a report that will reduce timing from five days to three hours by using two approval steps. We are testing our solution now and will estimate savings in two weeks."

The speech evolves as the DMAIC phases are completed, resulting in a final statement summarizing the project and its results. This information is part of a DMAIC knowledge management system.

Themes to Leverage to Improve Training, Projects, and Standards

The previous discussion about the project summary offers an opportunity to strengthen DMAIC training, internal coaching, and formalization of expectations for coaches who use the standards. Here are the key ideas (as summarized in Figure 3):

- *Training*—Teach about the project summary during training and practice doing an elevator speech.
- *Projects*—Review and update the project summary information throughout the project. Have the elevator speech ready for each sponsor review meeting.
- *Standards*—Throughout the project, the Six Sigma leader should discuss the standards with the coach in terms of how well the standards are being applied. The standards for the project summary information include providing instruction during the training about the purpose of and how to document the project summary and keeping the project summary current throughout all DMAIC phases; storing the summary and project documentation in an easily accessible and centralized location on the organization's intranet as part of the knowledge management system supports this standard. Furthermore, the standard should address the style of the elevator speech and the four content areas it should describe, as mentioned previously.

Summary

The first part of this new book provides detailed information on issues Green Belts experience as

they work on their first projects after training and how to coach a team through all five phases of the project report, using a similar approach as the example for the project summary in this article. The second part of the book also shares specific suggestions for collaboration approaches that lead to Green Belt success and sustainability of the Lean Six Sigma methodology.

A case study, based on work done through an alliance between Louisville Metro and Humana, demonstrates the book's ideas in the field and includes an example of an actual Six Sigma Green Belt project. These two organizations exemplify the best practice relationship possible between public and private organizations dedicated to serving the public.

Editor's Note: This article and its associated figures are based on the upcoming book, *Coaching Green Belts for Sustainable Success*, by Steve Pollock and Daro Mott, Quality Press 2015, and are used with the permission of the publisher.

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More Online

For additional figures associated with the content of this article, go to **asq.org/pub/jqp/.**

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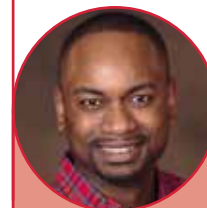
Daro Mott

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Supplemental Figures for Coaching Green Belt Projects

Steve Pollock and Daro Mott

The figures included in this supplement are described in the article "Coaching Green Belts: The Sustainability Challenge" and come from the new book, Coaching Green Belt Projects for Sustainable Success.

Figure 1: DMAIC is a Well-Accepted Industry Practice in Fortune 500 Firms, but Adoption Remains a Challenge Due to Key Barriers.

Access to coaching

Collaboration know-how

Coaching approach

Opportunity to support Green Belts

Figure 2: Key Coaching Tips

- ✔ **Understand what Green Belts** *want to know*
- ✔ **Recognize what Green Belts** *need to know*
- ✔ *Balance wants and needs*

Want to know

Coach asks questions
Coach listens carefully

Need to know

Coach grounded in body of knowledge
Coach understands organization's expectations

Balance wants and needs

Coach engages Green Belts in project work using high collaboration skills
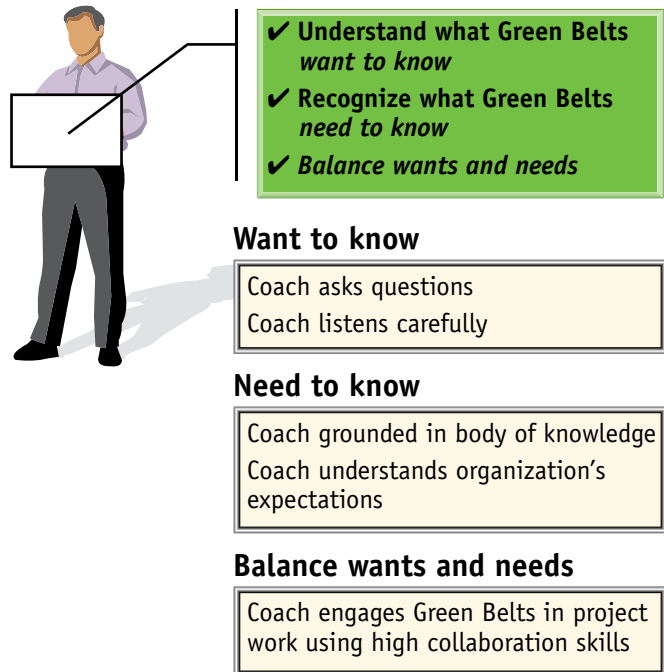
Figure 3: Typical Report Summary Questions

Who are the sponsor, leader, and team members?

Why do we need a project number?

What is the name of our project?

Does the initial information ever change? Why?

Who gets copied?

Do we need a coach?

Where should we save the document?

Who writes the report summary?

Do we list the stake-holders?

Report summary questions

Who approves updates?

When does the project end?

When do we update information about realized benefits for the project?

When does the project start?

What is the difference between a problem and goal statement?

How much detail is needed for the project background information?

When do we update information about root causes and solutions?

Figure 4: Project Summary—Top Two Questions

Questions suggest learning

Why do we need to fill out a project summary?

How often do we update it?

Learning essential to knowledge transfer from coach to Green Belt
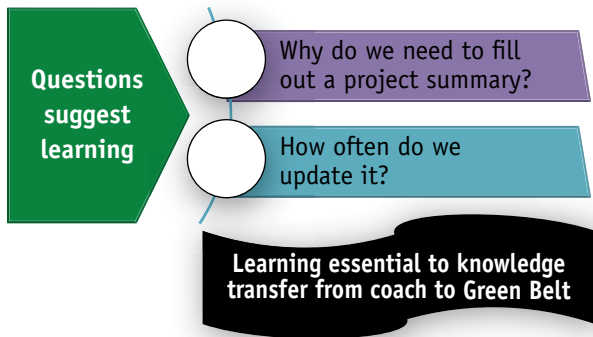
Figure 5: Key Coaching Tips—Project Summary

✔ Why this project?
✔ Insights about work process?
✔ Improvements planned?
✔ Project results?

Practice elevator speech

Example

Our Green Belt project is working on the sales reporting process because there are delays in preparing the report. Some factors cause delays, including an informal process and 10 approval steps. We are creating a formal process for issuing a report that will reduce timing from five days to three hours by using two approval steps. We are testing our solution now and will estimate savings in two weeks.

creating
A SHIFT

Ideas and tools for promoting change

A Simple Tool You Can Use This Afternoon

Rick Maurer

Have you ever sat in a meeting and wondered why you were there? Me, too. The more the speakers talked, the more you tuned out what was happening. This phenomenon occurs every day in every organization where I've ever worked. Obviously, this is not only a waste of people's time, but it's also a terrible waste of money and energy.

A few months ago, I was in a meeting with clients, and they were trying to use a change management tool to identify the reactions of various stakeholders in regard to a big project. As the discussion continued, the participants got tangled up in the jargon. They kept asking, "Did that category mean this or did it mean that?"

I stopped them and said, "Forget about the theory. Just think of energy. It's either working for you or against you." This simple comment changed the conversation completely. Suddenly it was easy for the participants to talk about the stakeholders' levels of support for the project.

Over the next couple of months, I explored the simple notion of energy either moving in support of or away from something. Although I'm a big fan of theories and practical models, I realized energy comes first. If I'm not curious about where your energy is in relation to mine or why we may not be at the same energy level, then none of the theories or tools will make any difference; they may simply cover up my lack of interest in you and what you're thinking. Before you apply some grand theory, you should look at the energy.

Applying the Energy Bar

When you need to influence someone else, you can begin by asking, "Where's their energy today and where do you want it to be?" For instance, suppose you've got a meeting next Monday with leaders from the IT department to talk about quality improvement. Prior to the meeting, you could use the Energy Bar to complete the steps described below:

Prior to the Meeting—Planning

Determine the participants' in-bound energy levels. As you create the agenda ask yourself, "Currently, where is the energy of the people coming to the meeting?" You may find some of the people are resistant, so their ratings would be on the left side of the bar—possibly "Indifferent" or "Grumble."

Establish a reasonable goal for the participants' out-bound energy levels. Ask yourself, "Where would you like the participants' energy to be at the end of that 90-minute meeting?" You might be hoping to inspire them to become champions of quality improvement. You imagine them getting excited, offering to help, wanting to give you money, and writing songs in praise of your fine work, etc. Wait a minute, though, you know that's not going to happen unless something changes. Be realistic about what you can expect from a 90-minute meeting. Maybe just getting their energy levels to shift to "Interested" in your idea by the end of the meeting would be a great success.

Develop an appropriate design and agenda to move the participants' energy levels in the desired direction. Design your meeting with a goal of moving the participants to the "Interested" level, preparing an agenda that supports your intentions.

As simple as this may sound at first, think about all those meetings and phone calls when you never clearly understood what the other people wanted from you. To succeed, you need to assess participants' energy levels and focus your discussion designs and agendas on shifting energy in the direction that engenders support. As you consider the way you previously planned meetings, you may find many of the agenda items didn't increase support for anything. For instance, think about all those obligatory departmental check-ins that were mind-numbing exercises; they did not get people interested in or committed to anything.

Following the Meeting—Assessing

Assess the discussion's results. By the end of the meeting, you need to be able to tell quickly and easily if you met your goal. The Energy Bar provides a straightforward tool to measure how successful you were.

Figure 1: The Energy Bar

Oppose   Grumble   Indifferent   Interested   Willing   Ally
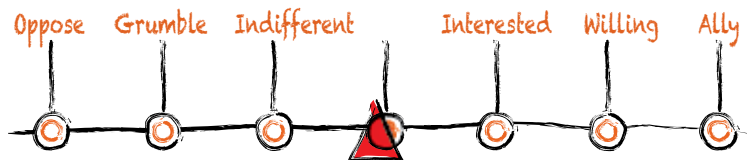
This is much like my personal process for weight management. I have a specific goal. Every morning I get on my bathroom scale to assess how I am doing at meeting this target. Within 9 seconds I know what I weigh—unless of course, I don't like what I see. Then I start kicking the scale around the room looking for the one sweet spot where I weigh exactly what I did for junior prom! You need something as simple as a bathroom scale to let you know if your discussion design and agenda were effective.

Ask yourself, "What needs to be done next?" Use the assessment results to determine what aspects of the discussion design and agenda were beneficial and which ones need improvement.

You might decide participants' energy levels didn't seem to move at all. This is important information, and it needs to be taken into account as you move forward with planning for future discussions. On the other hand, you may decide their energy levels did move in the intended direction, and they are now "Interested." That's great information, and you now can plan how to build on this momentum.

Wrap-Up

I believe if you use this simple Energy Bar at every tiny step in situations where you need to get the support of other people, you will begin to see what works and what doesn't work for you. You can begin

to expand your personal repertoire of approaches to drive change. That's a lot better than trying to apply some example from a book that doesn't fit your style or your corporate culture.

Using the Energy Bar doesn't have to take much time. People who have used this tool say they are able to apply it almost instantly, and it helps to shift the value of their meetings. The short animated video at www.rickmaurer.com/energybar provides a demonstration.

You may wonder where all the theories and models fit into this approach. Once you've estimated the initial energy levels of the participants and established a goal, these resources can help you create a design and agenda that will shift participants' perspectives and energy levels—step three of the process. Most of the books on managing change propose good strategies for this purpose—ones that align with models for change and can help you understand the underlying situation.

Rick Maurer

Rick Maurer is an adviser to people who lead change in large organizations. He recently released the new paperback edition of his classic book Beyond the Wall of Resistance: Why 70% of All Changes Still Fail—and What You Can Do About It. *You can access free tools on leading change from Maurer's website at* **www.rickmaurer.com.**

One of the most reliable ways to overcome obstacles is to communicate and get everyone on the same page. Here are some tips to make these conversations more effective.

Conversations That Unleash Employee Talent

Kim Janson

Examine high-performing organizations and you will find an important part of their success is fantastic communication. The communication is clear, transparent, iterative, conversational, and proactive. Unfortunately, organizations often have the opposite regarding communication. Trends show that people don't know how they tie into the bigger picture, they want more feedback and coaching from their managers, more input on their performance, they want discussions on their careers, and to know they are fairly compensated.

The effort and skill level needed for effective communication is minimal compared to the incredible benefits that are possible. It can seem overwhelming but it's really not when you break it down. Essentially, managers need to become proficient at these five conversations, and they must help employees understand what is needed of them, as follows:

- Discuss what the employee needs to do.

- Discuss how employees are doing along the way to help them succeed.
- Discuss how the employee did.
- Discuss what the employee will get if he or she achieves the results.
- Discuss and help employees continue to develop.

Managers are well positioned for success if they develop competence in engaging employees in these five conversations. When done well, these conversations help unleash an employee's potential. Let's dive into each of these conversations.

Conversation One— What You Need to Do

You wouldn't get into a car with someone without telling where he or she needed to go and important considerations along the way. Employees working without clear performance expectations/ goals is the equivalent to just that. It's simply foolish. Too many issues stem from this not being done or not being done well.

Manager's Role

At the end of the day, the manager is ultimately accountable for the employee's performance. It is prudent, therefore, to make sure employees are engaged and clear on what is needed from them. Managers are wise to ensure measures are in place to indicate whether employees are on track so they know when to reinforce or course correct.

Employee's Role

Employees are ultimately responsible for their performance. An employee who is highly engaged and clear on what great performance looks like is more likely to succeed. When an employee has influence and ownership, he or she has more passion around the work. All employees should go after getting this information and clarity with gusto. What's the down side? The potential downside of not achieving the results is so much worse and much more likely. Employees should come with a point of view based on informed company insights and data. Employees should pursue clarity until their deliverables are fully understood. Firmly commit and then over-deliver.

Pitfalls

- If this work is done too late in the performance cycle, it is demotivating and limits the likelihood of success.

- When performance expectations contain desired results that are just purely unachievable, employees tend to throw in the towel at the start.

- When the measures are irrelevant or complicated, they can work counterproductively.

- When changes that occur throughout the year are not taken into consideration and deliverables aren't modified, you will have an issue at the end.

- When either party feels like it is the other person's responsibility rather than fully acknowledging the shared responsibility, and, in turn, the huge upside, you are in trouble before you even start.

Best Practice Ideas

- This is a positive and proactive opportunity for engagement and should be treated as such. The focus is not on stress and pressure, but opportunity for success.

- When performance expectations are set from team brainstorming based on current-year priorities, powerful ideas can surface.

- When performance expectations are linked to the strategic direction of the company, employees feel more engaged.

- When managers share their goals, the employee can gain clarity much quicker.

- When the process has an automated component to make it easier to share information, it is easier, faster, and can be linked to the other elements of talent management.

- Agreements should be in writing. Miscommunication happens all the time even with the most well-intentioned individuals.

Conversation Two—How You Are Doing

Almost every professional athlete has a coach. Athletes are looking constantly for input and compare what they are doing against what they should and could do to be the best. They have a deep interest in achieving success. Can you imagine the power of an organization if employees and managers brought this maniacal focus to employee performance and development?

Manager's Role

Coaching and feedback are two skills that can be developed to a very high degree. Coaching cannot be seen as another thing to do, however. It needs to be a persona similar to being a mother, a volunteer, or an executive—in other words, who he or she is as a person. With that mindset, all else follows. Effective coaching requires assessing the situation, engaging the person well, providing feedback, offering suggestions, or connecting people with resources to help them. The greatest coaches care and organize their time and efforts to help people succeed. For some reason, it is acceptable for managers to perform poorly in this area. It's actually non-negotiable to be anything but great in this area because it is so essential and when done well, transformational.

Employee's Role

Employees need to seek input actively regardless of how their manager approaches coaching and feedback. The employee is responsible for his or her

behavior and performance. An employee is foolish to leave this in the hands of anyone else. Seeking input from multiple sources and soliciting ideas for improvement can sometimes take courage, but in the long run are well worth the effort. Employees need to be open-minded about what is offered to them because it may not be what they want to hear. A great question for employees to ask is "If you were in my shoes and were to do this again, what would you do more or less of to be even more successful?" That question is non-threatening in so many ways and generally nets great insights.

Pitfalls

- If employees don't feel safe in the relationship, they will shy away from coaching and feedback.

- If employees only hear negative feedback, they may not be receptive to soliciting input.

- If the manager approaches the input for his/ her own benefit, employees can sense this and become leery of it.

- When feedback and coaching is given at the wrong time or place, it can be undermined.

Best Practice Ideas

- Informal and formal checkpoints work best for being able to provide feedback on how someone is doing.

- The use of multiple sources for input gives a well-rounded picture.

- When in doubt—ask. What's the worst that can happen?

- When managers consider a person's style and how he or she communicates, and, in turn, package things so the employee can hear them, then the time to adopt the input is much quicker.

- Focus on specifics such as the absence or presence of the behavior being addressed or performance result. Give context and use examples. The more fact based, the better.

Conversation Three—How You Did

There has been so much drama and trauma in organizations in relation to the performance review process. Previously, all the emphasis was on the review and very little attention to the first two conversations. The reality is if you do a good job in the first two conversations then this third conversation is almost irrelevant. It becomes the period at the end of the sentence that was written all year long.

Manager's Role

First and foremost, managers need to ensure these conversations happen for several reasons: to bring closure to one performance cycle, to know how to compensate someone in upcoming merit increases and bonuses if applicable, to confirm insights that can be used in the next performance cycle and development plan, to document results to protect the company, and provide clear and final messages to the employee about the impact of missing results or delivering outstanding results. Surprises have no place in the performance review. Managers who blindside employees in performance reviews should be fired

because that means the manager has not been doing his or her job. These discussions should merely serve as uneventful summaries.

Employee's Role

As with everything else, the more the employee plays a role in this, the better off he or she is in the long run. Regardless of what the manager does, be sure to do a self-review and solicit input from key stakeholders. Document and, if for some reason your manager doesn't conduct a review, email your

Demystifying Talent Management: Unleash People's Potential to Deliver Superior Results
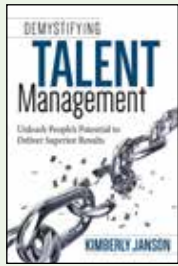
Author: Kim Janson

Abstract: The idea of unleashing people's potential by giving them good input and stretching them to new levels can be very heady stuff. When you experience the collective impact of everyone in an organization performing at the highest level and truly working together, you are amazed at what can happen when the constraints that organizations put on their people are removed. The results are extraordinary. This book offers practical advice for all managers, HR professionals, senior leaders, and other employees on how to work together to build a talented and motivated workforce. It addresses performance, development, coaching, feedback, compensation, and other elements of people management. By taking a 360-degree point of view, the book reveals how each stakeholder views the elements of people management, what they need from each element, and what confusion and conflicts arise among the stakeholders, limiting people's potential. This book will guide you to a deeper understanding of the mechanics of talent management and development success so that all the stakeholders can come together in a win-win scenario.

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manager this self-review with a request to meet. Documentation can work in your favor if you have an issue down the line. Come to the review with an open mind and look for ways to learn from this year's performance cycle and how things were done to be even more successful next year.

Pitfalls

- The feedback doesn't reflect the full year.
- Data isn't used to substantiate final assessments.
- The employee is not involved in the process.
- Not enough time is spent on creating the document or meeting.
- It is not actually documented or it is written poorly.

Best Practice Ideas

- Encourage an employee to keep an "I love me" file to use and share with the manager as examples of good results.
- The manager and the employee should use a quick process of five to 10 minutes each month to determine what can I do more of? Less of? Stop/start/continue? What is at risk? What different resources are needed? It's easy, fast, and can be insightful.
- Have a dashboard of red/yellow/green to indicate how you are tracking and capture that monthly. This can make the final summation process quite easy.
- In terms of the meeting, take an employee out to eat for the review. It diffuses a tough conversation or celebrates a happy one, but either way, it sends a message that the employee is important and valued.

Conversation Four—Money

People have a reasonable expectation to be compensated fairly for the work done and results accomplished. Companies that have a tight link to rewards and performance get more of the desired behaviors and results. Pay-for-performance is a wonderful model to motivate people to accomplish great things.

Manager's Role

Managers need to have the courage to align pay with results. That may mean that not everyone gets a raise or a bonus. While those are tough

conversations to have, the exponential contributions of top performers over everyone else should drive managers to find the courage to have these conversations. Managers should ensure employees fully understand how they are being paid. If the pay can be modified, managers need to ensure employees understand the circumstances in which they would be paid more or less.

Employee's Role

If there are any areas that an employee is unclear on regarding how he or she is compensated, the employee needs to ask.

Pitfalls

- Not fulfilling commitments for arbitrary reasons is the quickest way to have employees disengage.
- Leaders at the top make changes in the final compensation decisions and managers don't have good explanations to give to employees about why this happened.
- Managers sometimes take the money they have been allotted and spread it evenly across all employees without differentiating based on performance. This is a really bad strategy. Top performers catch on to this quickly and either leave or drop their performance while mediocre or poor performers continue what they are doing.

Best Practice Ideas

- Have this conversation up front as part of the performance expectation process.
- Check in along the year about how people are tracking and if all continues, what this looks like at the end of the year.
- If company financial performance is a factor in compensation decisions, provide updates at least quarterly about how the company is doing against its financial goals.
- All parties need to be open, transparent, and very honest through this process to ensure good results.

Conversation Five—"How You Need to Grow"

For companies, it is simply smart business sense to continue to invest, evolve, and stretch the biggest asset it has—employees. For employees, it is just good sense to add to your skill set and experience to remain employable and marketable. As obvious as these two things are—both companies and employees routinely ignore or fall down in the area of short-term and long-term employee development.

Manager's Role

Managers should be constantly looking at what capabilities are needed for the organization and how employees are lining up against those needs. By focusing on development, managers look to execute the performance commitments in the short term and help the company fulfill the strategic business goals in the long term, Additionally, employees who are developed consistently within a company tend to have higher retention rates for many reasons. This is an essential business practice and strategic imperative, not a nice-to-do as it has been treated as such in the past.

Employee's Role

It should be obvious what the employee's role should be, which is to develop every day. An employee should relentlessly pursue being better every day. While managers can play a big and powerful role in helping them, it doesn't mean employees will have a manager who understands this and adds value in this area. At the end of the day, it is fully the employee's responsibility to continue to evolve what he or she brings to the table. At the end of the day, employees have careers, organizations don't.

Pitfalls

- The obvious pitfall is to not spend time on development or to spend time on only immediate needs.
- A focus on the development plan (next 12 months) only and not the career plan (three to five years).
- Use of a single approach to develop rather than a multi-point approach to ensure knowledge or skill acquisition.
- Managers feeling they need to have all the answers. They don't. They need to be good at helping find the answer.
- Investment in people is often the first thing to be cut from a budget but the long-term implications of that can be detrimental to an organization and to the employees.

Best Practice Ideas

- Consider doing small amounts of development work over longer amounts of time. It is a great strategy. Think about it as if you were exercising. Doing something 30 minutes a day, six days a week nets better results than only three hours on Saturday.

- Create a plan. Work the plan. That's a good plan.

- Solicit input from a variety of stakeholders to determine a coordinated view of strengths and areas for improvement.

- Commit to lifelong learning.

- Commitment to helping employees achieve success and creating a learning culture where development is expected and supported will make organizations successful.

Conclusion

None of this work is difficult. It's actually pretty obvious and intuitive if you think about it. Approaching it with full commitment with a focus on keeping it simple will make these important conversations easy and productive. The path ahead is so full of opportunity, and these five conversations can help accelerate your success on this path.

Kim Janson

Kim Janson is the CEO of Janson Associates, a firm dedicated to unleashing people's potential. She has more than 20 years' experience working in 40 different countries in senior roles such as chief talent management officer at the H.J. Heinz Company; senior vice president leadership development at Bank of America; and a senior leader at Hasbro, BancBoston Mortgage, and Bank of Boston. Janson also coaches for the Harvard Business School. She is the author of Demystifying Talent Management: Unleash People's Potential to Deliver Superior Results. *For more information, contact Janson at* **Kim@jansonassociates.com**.

When the measurement system becomes the focus instead of the process it is being used to monitor, it can create a serious obstacle to improvement efforts.

When Measurement Becomes the Mission, Don't Trust the Measurement!

Kim Melton and Suzanne Anthony

Have you ever heard any of these questions? "Will that be on the test? "Would you please pull forward?" or "Your call is important to us; will you please stay on the line?" These seemingly different situations have a common thread—the desire to obtain a measurement. What thoughts come to your mind when you hear the terms "Enron," "mortgage crisis," or "adequate yearly progress?" Each of these probably leaves a negative image in your brain, and there are many additional examples where the quest for measurements takes on a life of its own.

We live in a society where managers talk about data-driven decision making. The concept sounds reasonable; design the work processes to produce desired outputs, develop ways to measure characteristics of the process or the output to assess quality, identify gaps between what is observed and the desired outcomes, and then make decisions about required actions to bring about alignment or improvement. How do we know when getting the "right" measurement has become the primary objective, however, superseding all other considerations? As Duke Okes points out, metrics become problematic when people play games with the metrics.[1]

All organizations struggle with developing data-collection processes that will produce measurements for use as a yardstick to reflect the quality or quantity of output clearly and accurately without the resulting measurement becoming a mission unto itself. For organizations to maintain trustworthy data, leaders must recognize behaviors and activities that signal an excessive focus on measurements. Often these behaviors and actions are unintended consequences of organizational policies and practices.

If data collection could occur in a vacuum, then collection and analysis of data would provide an objective basis for

evaluation and decision making. Unfortunately, there is no such thing as objective data. There is a human interface in all data collection. Even when data are collected electronically in processes, someone makes a decision about what data to collect, when to collect it, how to analyze it, and how to communicate the results of the analysis. In other cases, people may be collecting data related to their own processes and have a vested interest in the results.

In any case, data collection is part of a larger system. The data generated depends on the definitions used, the method of measurement, the point when the data are collected, and many other considerations. In addition, the reason that data on one characteristic varies from one time to another may be related to something that happened in a different place or at some other time. For example, politicians are quick to associate the actions or decisions of their predecessors with economic data.

There are statistical methods for assessing variation in the process studied, addressing lag effects, and comparing measurements obtained using different devices, but all of these assume that the correct measurements are obtained and that these measurements can be trusted. When too much emphasis is placed on the measurements, either explicitly or implicitly, the measurements become less trustworthy.

How can an organization or an individual reduce the likelihood that measurements will become problematic? First, recognize some of the signals. Then, identify organizational policies and/ or practices that influence behavior and modify or eliminate the practices that encourage a meeting-the-numbers mentality.

Signals That Measurements Have Become the Mission

The ability to trust measurements can be evaluated on a continuum. At one end of the continuum, measurement serves as a yardstick that provides a precise and accurate indicator of how the process is working. At the other end of the continuum, obtaining the desired measurement is the mission—and this mission is expected to be achieved by whatever approach is necessary. As we move from one end of this continuum to the other, the reported measurements become more susceptible to gamesmanship and often less reliable.

Fortunately, there are some signals that an organization or individuals in the organization are moving away from the appropriate end of the continuum. Here are some of the emotions, beliefs, and actions that can signal that providing the appropriate measurement is becoming the goal.

- Lack of trust
- Mixed messages
- Opposition to change
- A need to place blame
- Layering of inspections
- Not asking important questions
- A "what's in it for me?" attitude
- Changing definitions to match the situation
- Taking a one-dimensional view of situations
- Not asking questions when the measurements match the desired values

Organizational Policies and Practices That Encourage Focusing on the Measurements

No policy or practice is inherently good or bad, but some are more susceptible to "gaming the numbers." At the same time, policies and practices that are more susceptible to abuse tend to fall into two categories—those that lead employees to see the organization as composed of independent parts that can be managed separately rather than as components of a larger interconnected system and those that rely on extrinsic motivation. The common thread running through both of these is the tendency to reduce communication between individuals or departments by providing targets, incentives, and deadlines.

Policies and Practices That Evaluate Individuals or Departments Separately

Policies and practices that separate organizations into independently managed components fail to recognize that organizations are complex systems with interactions among their components. Ackoff described a system as a collection of interconnected parts where each part's effect on the system is dependent on some other part(s). As a result, none of the parts viewed separately have the defining property of the whole.[2] Coens and Jenkins pointed out that substantial organizational improvement only can be achieved by improving the *whole* organization as a complex system.[3]

When an organization is viewed as a system, some of the components include people, organizational units and their functions, policies, and practices; additionally, these can be expanded to

include suppliers and customers. Some of the most prevalent practices that attempt to manage the parts include traditional job descriptions, management by results, management by objectives, traditional performance appraisals, and personnel and organizational policies that address every possible issue separately. At the extremes, these approaches can lead to "that's not my job" or "protect my turf" mentalities. Other shortcomings of this approach include failure to share results across position or department lines, inappropriate levels of risk taking, stress between employees and supervisors, and an unwillingness to address new opportunities.

In the article, "Goals Gone Wild: The Systematic Side Effects of Overprescribing Goal Setting," the authors addressed problems related to goal setting in performance appraisals. They wrote, "We identify specific side effects associated with goal setting, including a narrow focus that neglects non-goal areas, distorted risk preferences, a rise in unethical behavior, inhibited learning, corrosion of organizational culture, and reduced intrinsic motivation."[4]

Policies and Practices That Rely on Extrinsic Motivators

Some of the most widespread policies and practices that rely on extrinsic motivators include numerical goals and quotas, rewards, rankings of people, pay for performance/merit pay, competition between employees or organizational units, and fiscal-year budgets. These approaches can lead to excessive focus on activities within the organization, reduced focus on addressing changes in customer needs, increased costs, reduced creativity, reduced teamwork and cooperation, and a focus on short-term results that can be quantified.

Deming noted, "Anybody can achieve almost any goal by: redefinition of terms, distortion and faking, running up costs."[5] According to Pink, "Carrots and sticks extinguish intrinsic motivation; diminish performance; crush creativity; crowd out good behavior; encourage cheating, shortcuts, and unethical behavior; become addictive, and foster short-term thinking."[6] Kohn made similar comments saying, "Rewards focus on what can be quantified rather than the quality of the work, undermine long-term interest in the work itself, destroy creativity, demoralize those not receiving the reward, serve as a controlling mechanism, and send a message that people must be bribed to complete the task attached to the reward."[7] *The*

Knowledge/Doing Gap identified internal competition and the impact of creating so many losers as a key practice that undermined the overall ability of companies to turn knowledge into action.[8]

Modifying Practices to Shift the Focus

When organizational practices interfere with the ability to rely on data to help organizations learn and take action, a shift in focus is needed. Shron suggested, "Working with data is about producing knowledge. Whether the knowledge is consumed by a person or acted on by a machine, our goal as professionals working with data is to use observations to learn about how the world works." For true data-driven decisions, data needs to help answer questions related to the "big whys." Why are we collecting the data? What is our purpose? How does the data relate to meeting the needs and desires of external customers? He emphasized that good answers to these questions inform action rather than simply informing. Informed action allows decision makers to look forward, creating what could be, rather than focusing almost exclusively on the past and reacting to what was.[9]

Collecting the right data depends on the purpose of the data collection. Consider how collecting the right data would differ for two healthcare organizations based on questions related to their stated purposes. One asks, "How can we better care for the sick and injured?" The other asks, "How can we improve the quality of life in our community?" The first focuses on reacting to current situations while the latter expands to include preventive and wellness-related actions.

Even when we attempt to collect the right data, the way people perceive the data will be used may influence the collection of the data and our ability to trust that the data represents the characteristic of interest. When we shift our view to seeing measurements as inputs into the decision-making process, then measurements become a midpoint in the data-driven chain. The output of the data-collection process becomes measurements that are used as inputs to the decision-making process. Recognizing that measurements are the output from a process implies that obtaining better measurements could benefit from the use of statistical thinking.[10] As such, measurements need to be seen as part of a system of interconnected processes where variation is expected and where understanding and reducing variation are keys to success.

Table 1: Ranking Versus Recognizing Differences

Ranking	Recognizing Difference
Aim: Decide if good/bad (determine value)	*Aim:* Optimize the system (add value)
Creates artificial scarcity	Creates flexibility
Seeks to exclude	Seeks to include
Creates winners/losers	Allows people to excel in their strong areas
Focuses on the measurement	Focuses on ability
Uses power to control	Empowers employees

Even processes that are operating as designed will produce variation. The presence of variation does not mean that adjusting based on the highest or lowest value is beneficial—in fact, such a reaction could increase variation. Many of the problems identified in the previous sections relate to ranking results and the games people play to come out on top in future rankings. This can be one source of increased variation in the measurement process. Instead, what if the variation in the data was used to recognize differences? Working to understand variation shifts the focus from assigning value to learning how to add value. Table 1 illustrates some of the differences between using data to rank versus using data to recognize and build on differences.

Characteristics associated with ranking are aligned closely with the extrinsic motivators that underlie the policies and practices that are problematic when it comes to obtaining trustworthy data. Multiple authors have argued that extrinsic motivators are not the best approach to organizational effectiveness. Using various terms, they acknowledge the need of individuals to have autonomy (some choice over their own actions), an understanding of the role that their work plays in the bigger picture (context, relatedness), and mastery (the ability/freedom to improve).[11, 12, 13] Using data to recognize differences is more consistent with these human needs identified by psychologists.

Conclusions

In 1997, de Gues reported that the average life expectancy of companies in the Northern Hemisphere was well below 20 years—yet a few had survived for more than 100 years. Consistently, the companies that managed to survive saw profit as a symptom of corporate health rather than as a predictor or determinant of corporate health. These companies were more tolerant of new ideas, more sensitive to the world around them, valued people, were less controlling, and were organized for learning.[14] The characteristics he identified almost two decades ago remain appropriate in a world experiencing rapid change, efforts to increase environmental sustainability, and high demand for knowledge workers.

Deming considered running a company on visible figures alone as one of his deadly diseases, saying "the most important figures are unknown and unknowable."[15] Johnson emphasized that organizations that attempt to quantify all aspects of decision making, or even worse, try to narrow the focus to one number (e.g., profit), ignore systemic thinking and feel compelled to short-circuit the need for learning.[16] Basing decisions on numbers alone can shift the focus away from an understanding of how the company organizes work and whether there is a market for them. Recognizing where data and measurements are appropriate and balancing this with a better understanding of human motivation and interactions will increase knowledge about how organizations function. This will feed a cycle where individuals will have more autonomy, see their work as it relates to a larger goal, continue to learn and develop, and seek out meaningful measurements to assist in decision making.

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More Online

To review examples and real-life summaries of issues with measurement systems that are problematic, take a moment to look over the supplemental information at **asq.org/pub/jqp**.

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Examples of Measurement Systems That Lost Their Focus

Kim Melton and Suzanne Anthony

The following two examples illustrate the signals showing that measurements have become the mission, rather than the indicators of process performance. "We Would Like Your Business" follows the evaluation of a new supplier for printing services for a nonprofit organization. "Will That Be on the Test?" focuses on the Atlanta Public Schools test results on the Criterion Referenced Competency Test.

Example 1: We Would Like Your Business

Situation: A nonprofit organization that served approximately 12,000 members published a monthly newsletter. The newsletter was written by the public relations (PR) director and taken to a printing company. Costs for printing were charged to the PR director's budget. Once printed, the newsletters were delivered to a mailing house for sorting and mailing using a bulk-mail permit. The costs for sorting and mailing were considered "postage" and were charged to regional coordinators' budgets based on the number of newsletters mailed to their regions.

A salesman for a new printing company called on the PR director seeking the printing contract. The salesman said, "I can't beat the printing price you are paying and the postage price is fixed by the Post Office, but we have our own in-house process for preparing bulk mail; so I can lower the total price that you would pay for each newsletter." The PR director's response, "Postage isn't in my budget."

Analysis: As with most situations where measurement has become the mission, this example illustrates a number of signals. These vary in terms of ease of recognition, impact on organizational performance, and unintended cost to the organization.

What Was Observed	Conceptual Signal
The PR director's initial response points to a metric that she believes is important in terms of her evaluation (budget) and indicates she sees the salesman's suggestion as not aligning with goals (stay within her budget).	A "what's in it for me?" mentality
Although not stated, the implication is that the PR director does not want to change printing companies. Even though people may grumble about current methods, they often grumble more about change.	Opposition to change
The PR director has focused on a single, narrow view of the situation—how this change would impact her individual budget. The salesman has taken a slightly broader view, focusing on the total amount the nonprofit organization would be billed for printing and distributing the newsletter.	One-dimensional view of the situation
Should the PR director have accepted the salesman's proposal and changed printers? If total costs billed for printing and distributing the newsletter were the sole factor in making the decision, the answer would be "yes," but the focus on costs may have diverted her attention away from other questions needing consideration. If so, the answer is not as clear. Some of these questions include: How much lead time does the printing company need to complete the work? Is the material to be delivered copy ready or in draft form? Can the material be submitted electronically? Who proofs the material prior to printing? Are addresses kept confidential and up-to-date? What is the quality of the printing?	Not asking important questions
Clearly, budget was viewed as important. At the same time, the supervisor believed the organization would function at its best when employees focused on meeting or exceeding their individual goals. If the PR director changed printers, she would overspend her budget, and the regional coordinators would each save money. She would be penalized, therefore, while another group of employees would be rewarded. Meeting her budget conflicted with working together as a team.	Mixed messages from the supervisor (budget versus teamwork)

Example 2: Will That Be on the Test?

Situation: Since October 2009, the Atlanta Public School (APS) system has been embroiled in a cheating scandal related to scores on the state-mandated Criterion-Referenced Competency Test (CRCT) used to evaluate student achievement to meet The No Child Left Behind Act's adequate yearly progress. The allegations began when *The Atlanta Journal-Constitution* identified 19 elementary schools statewide (including 12 in Atlanta) with extraordinary gains or drops in scores from 2008 to 2009.[1] The initial response from APS was "We expect outliers every year."

The Governor's Office of Student Achievement raised questions about test tampering in the form of the number of erasures related to changing answers from wrong to right. An APS internal review concluded that this offered the APS the opportunity to take the lead in establishing best-in-class test security practices.[2]

In 2011, the results of a state special investigation indicated that cheating occurred as early as 2001, and that there were warning signs as early as 2005. The cheating was caused by a number of factors, but primarily by pressure to meet targets in the data-driven

What Was Observed	Conceptual Signal
As long as the annual scores were increasing, individuals within the education system failed to question, at least publically, the year-to-year gains reported by APS. On the contrary, the gains were applauded when the school superintendent was recognized in early 2009 as the National Superintendent of the Year by the American Association of School Administrators. When questions were raised by the local newspaper, the response from the school system was to deny that the results could be wrong.	Failing to question results that are aligned with expectations
When the test provider and the Governor's Office of Student Achievement raised questions about the excessive number of erasures that resulted in wrong answers being changed to correct answers, the school system's internal review suggested adding more monitoring to ensure test security—rather than addressing the underlying causes for test tampering.	Layering of inspection
The governor's special investigative report found there was overwhelming evidence of widespread falsification of student answers and repeatedly pointed to a culture of fear, intimidation, and retaliation as the reason the cheating went unchecked for years. School principals recognized that the targets set for their schools were unreasonable, but did not speak up when meeting with the superintendent. In addition, they used fear and humiliation to encourage teachers to meet targets.	Fear
The use of monetary bonuses for meeting targets and the threats of poor evaluations and job elimination for failure to do so signaled the system did not trust the teachers would perform without the incentives.	Lack of trust
Interviews with teachers, principals, and others in the system could be summarized as "They made us do it." Interviewee after interviewee indicated "the inordinate stress that the district placed on meeting targets and the dire consequences for failure" forced them to cheat.[5] Since the targets increased each year and the gap between the students' actual achievement and the reported achievement increased, continuing to meet targets reinforced the cheating cycle.	A need to place blame
Clearly, the definition of academic progress shifted from consideration of the amount of student learning to increased test scores on the CRCT. The largest example of changing definitions related to what was viewed as ethical behavior. If test scores are expected to measure the academic achievement of students, then movement from teaching the curriculum to "teaching to the test" is a first step on the slippery slope. As the targets and intimidation increased, the tactics used to meet these targets increased to the point where the special investigative report concluded, "What has become clear through our investigation is that ultimately, the data, and meeting 'targets' by whatever means necessary, became more important than true academic progress."[6]	Changing definitions to fit the situation

environment and a culture of fear, intimidation, and retaliation existing in the APS.[3] In 2013, a Fulton County grand jury brought a 65-count indictment for racketeering against 35 employees claiming they conspired to make the school district appear it was more successful than it was.[4]

Analysis: Although the specifics presented here came from the APS system, they were not the first or the only school system that crossed this yardstick/mission line.

More Real-Life Examples

Here are some other situations from a variety of industries where the measurement system became the headline and the situation became a matter of public attention.

Banking

April 16, 1992, "Just trying to meet quotas, fired Crestar workers say." Bank workers were fired for "misguided" attempts to meet unreachable quotas for opening new accounts. They had used their own money to set up new accounts under fictitious names at their branch, located at 123 North Main St. in Suffolk. It was an attempt by staffers to reach what they felt were unreachable new account quotas.

Daily Press, Suffolk, VA

http://articles.dailypress.com/1992-04-16/business/9204160196_1_crestar-bank-fires-bank-records

Fast Food

December 22, 1993, "Domino's Drops 30-Minute Delivery Pledge: $79 Million Court Judgment Spurs Change"

For years consumer groups charged that the pledge led to reckless driving. Domino's lost multiple law suits and dropped the promise.

Chicago Tribune

http://articles.chicagotribune.com/1993-12-22/news/9312220035_1_thomas-monaghan-delivery-guarantee-delivery-people

Government/Finance

February 16, 2009, "A Government-Mandated Housing Bubble"

Fannie Mae and Freddie Mac increased financing for affordable housing and Community Reinvestment Act. New CRA regulations in 1995 required banks to demonstrate that they were making mortgage loans to underserved communities.

Forbes

http://www.forbes.com/2009/02/13/housing-bubble-subprime-opinions-contributors_0216_peter_wallison_edward_pinto.html

Healthcare

April 30, 2014, "A Fatal Wait: Veteran Veterans Languish and Die on a VA Hospital's Secret List"

"There's an 'official' list that's shared with officials in Washington that shows the VA has been providing timely appointments, which Foote calls a sham list. And then there's the real list that's hidden from outsiders, where wait times can last more than a year…. The VA requires its hospitals to provide care to patients in a timely manner, typically within 14 to 30 days," Foote said.

CNN

http://www.cnn.com/2014/04/23/health/veterans-dying-health-care-delays/

Legal

September 23, 2014, "Cherokee County Court Reporters Charged With Theft"

Three Woodstock, GA women were arrested for stealing tens of thousands of dollars from Cherokee County. The suspects are accused of intentionally mis-formatting court records (changing fonts and margins), then billing Cherokee County for non-existent pages. They are estimated to have over-billed approximately $175,000 since 2006.

WXIA TV – Atlanta

http://www.11alive.com/story/news/local/woodstock/2014/09/22/court-reporters-arrested/16052003/

Politics

Spring 2014 candidate for the U.S. Senate: The candidate's children say "He'll drive five miles on empty just to save two cents on a gallon of gas. … For Dad, it's about personal responsibility and respecting the value of a dollar. He'll be the same way in the Senate."

Note: The candidate is shown driving a 1990s station wagon that gets between 15 and 22 miles per gallon. Assuming the five miles is round trip extra mileage, then at the price of gas when the ad was filmed he will spend two to three times more going out of his way to the less expensive station than he

saves! And … this does not take into account the extra time or wear and tear on the vehicle.

Television ad in Georgia

http://www.youtube.com/watch?feature=player_embedded&v=zjVi4HJHsIk

Retail

June 12, 1992, "Accusation of Fraud at Sears"

Automotive repair shops were systematically defrauding customers by performing unnecessary service and repairs … after the centers changed from hourly wages to a commission structure.

New York Times

http://www.nytimes.com/1992/06/12/business/accusation-of-fraud-at-sears.html

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stewardship & SUSTAINABILITY

Acting responsibly with a focus on the future

New Standard for Occupational Health and Safety Management Systems Moves Closer to Release

Janet Jacobsen

A new international standard for occupational health and safety management systems is moving through the International Organization for Standardization's (ISO) development process and has reached the committee draft stage. ISO 45001, *Occupational Health and Safety Management Systems – Requirements*, is designed to provide government agencies, industry, and other stakeholders with effective, usable guidance for improving worker safety around the world.

In 2013, ISO announced that it would develop a new standard for global occupational health and safety (OH&S) following the tragic deaths of garment factory workers around the world, including more than 1,100 people in a factory collapse in Bangladesh. According to International Labour Organization (ILO statistics), nearly 2.3 million workers died as a result of work-related accidents or diseases (ill health) in 2013.

The new standard, which aims to create consensus solutions for improving working safety in global supply chains, is currently being developed by ISO Project Committee (PC) 283. More than 50 countries from Europe, North America, Africa, Asia, and South America, including the United States, are directly involved in creating this standard through PC 283. Experts from ILO also provided valuable insight into the elements of this standard.

"The goal underlying the development of ISO 45001 is to provide organizations with a management system framework they can use in order to provide safe and healthy workplaces for their workers. Like the other ISO management system standards, the focus is on prevention. For ISO 45001, this means proactively identifying occupational health and safety risks and implementing appropriate controls for these risks in order to keep individuals safe while at work," explains Thea Dunmire, president ENLAR Compliance Services and one of the three designated U.S. experts for ISO 45001.

ISO 45001 will be aligned with both ISO 9001 (for quality management systems) and ISO 14001 (for environmental management systems), both of which are currently under revision. Members of PC 283 have specifically focused on easy integration of ISO 45001 with ISO 14001 because many organizations, especially small businesses, have one person who is responsible for both safety and environmental concerns.

"As companies operate in an increasingly competitive global market, quality professionals are being asked to create value beyond our traditional roles. For many of us, the scope of our work has expanded to include topics related to the environment, health, and safety. ISO 45001 has the potential to provide quality professionals with a well-defined framework for managing these important issues," notes Holly Duckworth, vice president of continuous improvement for Kaiser Aluminum and the member leader for ASQ's TheSRO – The Socially Responsible Organization.

The new standard will replace OHSAS 18001, an internationally applied British standard for occupational health and safety management systems, which was used as the proof of concept for ISO 45001. Two of the primary differences between OHSAS 18001 and ISO 45001 are that the new standard provides greater focus on the context of an organization and a stronger role for top management and leadership. These changes are designed to prevent organizations from shifting risk to other entities. ISO 45001 also requires the organization's management and leadership to integrate responsibility for health and safety issues as part of the organization's overall plan rather than shift responsibility to, for example, a safety manager. ISO 45001 requires health and safety aspects to be part of an overall management system and no longer just an added extra.

Like other recent ISO standards, ISO 45001 will use the Annex SL process and structure, easing the use and integration of multiple ISO management system standards by a single organization. This high-level structure of ISO 45001 will align with that of other newly developed ISO

management system standards, including the following components:

- Scope
- Normative references
- Terms and definitions
- Context of the organization
- Leadership
- Planning
- Support
- Operation
- Performance evaluation
- Improvement

The next anticipated milestone is the release of a final draft international standard in mid-2015 followed by release as a completed ISO standard in the fourth quarter of 2016. To purchase a copy of the current draft of ISO 45001, visit the ISO website at www.iso.org.

Janet Jacobsen

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social
RESPONSIBILITY

Did You Know?

Has your organization embraced the core principles of ISO 26000? If so, your organization also may have an interest in B Corp certification. It has been said that B Corp certification is to sustainable business what LEED certification is to green building or Fair Trade certification is to coffee. B Corps are certified by the nonprofit B Lab, and they meet rigorous standards of social and environmental performance, accountability, and transparency. Today, there is a growing community of more than 1,000 certified B Corps from over 30 countries and 60 industries working together toward the unifying goal of redefining success in business. Certified B Corps are distinguishing themselves in the competitive marketplace by offering a positive vision of a better way to do business.

There are three steps to earning certification, as follows:

- *Complete the impact assessment and earn a reviewed minimum score of 80 out of 200 points.* This assessment is a free, confidential, and useful tool to benchmark the organization's impact and sustainability program, as well as to learn how to improve. More than 16,000 businesses already are using this assessment.

- *Meet the legal requirement by determining the appropriate path for corporate structure and state of incorporation.* Determine whether you will need to amend your governing documents or adopt benefit corporation status to meet the legal requirement for certification in your state of incorporation and corporate structure.

- *Sign the B Corp Declaration of Interdependence and Term Sheet.* After meeting the performance requirements for B Corp certification and also adhering to the legal requirements for your particular corporate structure and state of incorporation, your company officials may then sign the declaration and term sheet. In addition, approximately 10 percent of certified organizations also are randomly selected for an on-site review. Annual certification fees are based on the annual sales of your organization.

The list of reasons for seeking B Corp certification are as varied as the companies that have earned it and include benchmarking performance, attracting new investors, recruiting and retaining talented employees, saving money, gaining access to services, as well as partnering with peers.

To learn more, visit http://www.bcorporation.net/.

A novel research study substantiates
W. Edwards Deming's legacy, and highlights the
need to increase funding and time allocation
for research into Deming's philosophy.

The Prophet's Legacy

Michael Babula, Max Tookey, Fraser Nicolaides, and Al Infande

The New York Times reports that Ford Motor Company is to recall 1.4 million vehicles from 2013-14 while General Motors is recalling 9,000 sedans.[1] General Motors has raced back into bankruptcy court to gain insulation from lawsuits arising as a result of the company's allegedly defective products.[2]

It has been 34 years since the publication of W. Edwards Deming's book *Out of the Crisis*,[3] and the West appears no closer to sparking a quality revolution than it did in 1982. Deming's book was a monumental and ambitious undertaking and detailed a plan of action to tackle quality and leadership deficits among Western businesses. He helped post-World War II Japanese industries rebuild after the nuclear attacks on Hiroshima and Nagasaki. Perhaps because Deming's theories were slow to catch on in the United States, he was labeled by the Western media as a prophet not readily accepted in his homeland.[4] Deming's primary concerns were to promote cooperation among employees and to apply statistical control to reduce variation in the production process.

Deming's contemporaries, including Joseph Juran, Philip Crosby, Kaoru Ishikawa, Genichi Taguchi, Shigeo Shingo, Armand Feigenbaum, and John Oakland have experienced varying degrees of recognition and citation in quality journals over the past three decades. Table 1 provides a brief description and critique of each of the quality gurus' theories. To date, there has not been a formal comparison of whether any of these theorists are emerging as the dominant voice of quality management theory.

This article explores the quantity and quality of publications in relation to quality theorists. Searching for the names of quality gurus to observe trends and differences concerning the quantity and quality of literature written by or discussing them offers a unique approach to addressing this area. A reduction in the quantity of literature in relation to any of the theorists might indicate that funding and time allocation for research into

Table 1: Adaptation of Beckford's (1998) Description and Critique of Eight Quality Gurus

Quality Guru	Theory	Critique
W. Edwards Deming	Promoted cooperation among the workforce. Sought to reduce variation through statistical control to improve quality. Provided 14 points as a philosophical guide for quality improvement.	Over-reliant on statistical control, which is rarely understood by management and employees in Western businesses. Theory requires more investment in terms of funding and time allocation for Western managers to employ in practice optimally.
Joseph Juran	Held a mechanistic view of quality. Emphasized heavy preplanning and management responsibility.	Early work reflected the thinking of Frederick Taylor. Too much emphasis on the organization can demoralize employees.
Philip Crosby	Emphasis placed on workers. Heavy use of slogans and quotas to improve quality.	Labelled a charlatan by Juran. Approach in using slogans and quotas does not appear to follow the use of the scientific method.
Kaoru Ishikawa	Created quality circles and fishbone diagrams.	Theories are more systematic rather than systemic.
Genichi Taguchi	Concentrated on the use of design to improve quality.	Overlooks human variability in the workplace. Theory is more concentrated on quality in relation to products rather than services.
Shigeo Shingo	Desired to mechanize the workforce. Favored defect prevention.	Theories are aligned to Frederick Taylor. Fails to take into account human motivation.
Armand Feigenbaum	Held a systemic view toward quality, arguing that the human element was important to improve quality.	Sought to give managers discretionary power over when to use statistics. Theory thus progresses away from the use of the scientific method.
John Oakland	Provided 10 points as a guide for senior management to improve quality.	Fails to describe how to motivate leaders. Places too much emphasis on competition rather than cooperation.

their theories is declining. The research that follows indicates that the quantity of literature discussing Deming has declined since the 2008 economic crisis, while his impact over time (as measured by the volume of citations for articles written by or mentioning Deming) is far greater than that of his contemporaries. We would argue that this research justifies a call for greater funding allocated toward the study of Deming's philosophy.

Method

Eight quality gurus were selected for analysis—Deming, Juran, Crosby, Ishikawa, Taguchi, Shingo, Feigenbaum, and Oakland. Beckford's research helped in narrowing the list to these eight

individuals by arguing that they have become established in the "mainstream of theory and practice."[5] Wilkinson identifies the same quality gurus as Beckford with the exception of Shingo.[6] The overall consensus in the literature helped narrow the study to these eight theorists, and in keeping with Beckford's original analysis, a decision was made to include Shingo.

The Publish or Perish (PoP) software for Google Scholar was downloaded and a phrase search for W. Edwards Deming, Joseph Juran, Philip Crosby, Kaoru Ishikawa, Genichi Taguchi, Shigeo Shingo, Armand Feigenbaum, and John Oakland was conducted. We decided to perform the search in Google

Table 2: Google Scholar Search Showing Names in Title, Article, and/or References

Year	N	Deming	Juran	Crosby	Ishikawa	Taguchi	Shingo	Feigenbaum	Oakland
1980 – 1982	633	128 (20.22)	51 (8.06)	116 (18.33)	103 (16.27)	108 (17.06)	68 (10.74)	23 (3.63)	36 (5.69)
1990 – 1999	2,002	522 (26.07)	332 (16.58)	351 (17.53)	184 (9.19)	220 (10.99)	165 (8.24)	160 (7.99)	68 (3.40)
2000 – 2007	1,552	265 (17.07)	236 (15.21)	193 (12.44)	180 (11.60)	186 (11.98)	194 (12.50)	245 (15.79)	53 (3.41)
2008	265	21 (7.92)	41 (15.47)	25 (9.43)	30 (11.32)	39 (14.72)	49 (18.49)	45 (16.98)	15 (5.66)
2009	332	13 (3.92)	50 (15.06)	37 (11.14)	61 (18.37)	34 (10.24)	65 (19.58)	58 (17.47)	14 (4.22)
2010	288	17 (5.90)	44 (15.28)	39 (13.54)	52 (18.06)	34 (11.81)	43 (14.93)	53 (18.40)	6 (2.08)
2011	259	7 (2.70)	32 (12.35)	29 (11.20)	43 (16.60)	28 (10.81)	58 (22.39)	49 (18.92)	13 (5.02)
2012	329	22 (6.69)	44 (13.37)	29 (8.81)	55 (16.72)	22 (6.69)	74 (22.49)	67 (20.36)	16 (4.86)
2013	275	3 (1.09)	35 (12.73)	39 (14.18)	36 (13.09)	17 (6.18)	70 (25.45)	58 (21.09)	17 (6.18)
2014*	62	0 (0.00)	8 (12.90)	4 (6.45)	12 (19.35)	2 (3.23)	23 (37.10)	8 (12.90)	5 (8.06)

Notes: *2014 analysis only constitutes publications up until May 17, 2014. Calculations in brackets are percentages of row N. Results where the date was unknown were excluded.

Scholar using PoP because it is free and other researchers would be able easily to access it and replicate our analysis. We also wanted to capture the range of publications everywhere to obtain a comprehensive picture of the discussion involving major quality management theorists and then focus on some specific key phrases in relation to the authors. We decided not to use Scopus because that database is limited by only providing citations back to 1996. We wanted to go back to the original publication of Deming's *Out of the Crisis*, published in 1982, as a starting point to track trends in quality management over a longer period.

For all eight theorists, Google Scholar's PoP software generated a set of 6,931 items, of which 933 omitted the year of publication. These items were

excluded, reducing our sample to 5,998. The specific distribution of records per author is shown in the online supplement, but it ranged from Deming with 998 to Oakland with 243. The process for determining the confidence level for this sample and other information related to the analysis also are presented online.

Results

What was significant about the number of publications in relation to the eight theorists? We noticed some interesting frequencies over time. Table 2 shows that Deming is mentioned and/or cited frequently in the 1980s, 1990s, and prior to the 2008 economic disaster. The data shows that articles written by Deming or mentioning him constitute

22.22 percent, 26.07 percent, 17.07 percent of the literature for the 1980s, 1990s, and early 2000s, respectively. These figures show that the number of publications by or discussing Deming held a noticeable lead in those periods. Although Deming died in 1993, we observed that the number of citations remained high throughout the ensuing decade.

We saw a huge drop in citations for Deming at the onset of the 2008 crisis, however. Table 2 shows that alongside his contemporaries, Deming captured only single digits: 7.92 percent, 3.92 percent, 5.9 percent, 2.7 percent, 6.69 percent, and 1.09 percent of the literature produced annually from 2008 through 2013. As of May 2014, Deming did not appear in any of the results in the PoP software. These results were surprising. We had assumed there would be a renewed interest in Deming as one way to counter the culture of self-interest, which arguably contributed significantly to the recession.

Did we inherit a lasting legacy from Deming? The answer to this question is yes. The descriptive analysis was subjective and reliant upon an interpretation of the literature. For this reason, we focused on the Kruskal-Wallis and follow-up Mann-Whitney tests. These analyses demonstrated that not only were the number of citations for Deming significantly higher than all of his contemporaries, but also the size effects of the differences were moderately strong.

These citation results were surprising because the rankings associated with publications written by or mentioning Deming did not sizably differ from seven of the eight gurus. The data overall suggests that, based on citations, Deming's impact remains paramount and that the Google ranking mechanism is unreliable when measuring the impact of these theorists. It is of no consequence if theorists are published by or referred to in highly rated publications—if no one discusses and cites such articles. Given the impact of Deming's work as measured by citations, a very legitimate case can be made to suggest that more resources should be dedicated to the comparative study of Deming's theories on quality management. Such resources most readily might take the form of grants and research time allocation.

The Need for Further Research

The major area for future research includes tackling the long-standing debate between measuring the influence of researchers' work using citations or rankings. This area raises the question as to how universities should view article quality itself. It is possible that by concentrating on peer-reviewed journal articles, the impact of citations and rankings might be better aligned, but the general consensus and evidence seems to suggest otherwise. It appears that it is preferable to measure impact via citations rather than rankings. Due to time and financial restrictions, self-citations were not removed from the records identified by our research. Given the large sample size, however, it is unlikely that self-citations unduly skewed the results. There is clearly room for further independent investigation outside major indexing services to explore this phenomenon and help educational and funding institutions render improved estimates for impact factors.

More Online

Detailed information on the research methodology, analyses, and results are included in the online supplement at **asq.org/pub/jqp/.**

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Supplemental Research Information

Methods, Analyses, and Detailed Findings

Michael Babula, Max Tookey, Fraser Nicolaides, and Al Infande

The Google Scholar's PoP software generated 5,998 items, broken out by guru as shown below:

- Deming (n = 998)
- Juran (n = 873)
- Crosby (n = 862)
- Ishikawa (n = 756)
- Taguchi (n = 691)
- Shingo (n = 809)
- Feigenbaum (n = 766)
- Oakland (n = 243)

We decided to calculate the confidence level for the resulting sample based on an assumption of an infinite population because there may have been multiple ways of citing each author, and, in some cases, publications may have referenced an author in such a way that the search engine failed to detect that person. For example, although Google estimates the total population of articles mentioning W. Edwards Deming in the title, article, or reference section to be 16,500, it might be that some publications have only referenced Edwards Deming or some variation thereof. Assuming an infinite population, the confidence level for this sample was as follows: $5,998 = (Z)2(.5)(.5)/.05^2$. Solving for the Z value, the equation becomes $Z^2 = [5,998(.05^2)]/(.5)(.5) = 7.74$. Any Z value over 3.4 results in a critical value (α) estimated to be less than .0001. The resulting confidence is estimated to be 99.9 percent. In other words, the researchers were 99.9 percent confident that the resulting sample represents the number of publications by or discussing the authors under examination with a +/− .05 margin of error.

In this study, four dependent variables were used, as follows:

- Nominal categorical variable grouping of the authors.
- Numerical variable for the number of publications per year for each author.
- Numerical variable for the number of citations per article.
- Google Scholar Rank per publication.

In the first instance, descriptive statistics provided insight as to the number of publications. A review of the descriptive statistics suggested that skew was present, and that the data did not appear to follow a normal distribution for the number of citations and rankings per author. Field indicates that nonparametric hypothesis testing such as the Kruskal-Wallis and Mann-Whitney tests are often used to explore the association between variables when skew is present.[1] Kruskal-Wallis tests were applied in this study to explore the presence of significant differences among the authors in relation to citations and rankings. We decided that Kruskal-Wallis was an appropriate test given the number of groups under observation. Although Kruskal-Wallis tests are helpful in identifying if a significant difference exists among three or more groups, they do not indicate which groups are significantly different.

Post-hoc analysis in the form of Mann-Whitney tests help to locate differences between paired authors and for this reason were used in this study. Size effect calculations were used to report the size of the difference between paired authors. This study used Field's size effect formula, which is demonstrated as follows: $r = Z/\sqrt{N}$. To avoid Type I errors, a Bonferroni correction was applied. Field states, "… pairwise comparisons control for familywise error by correcting the level of significance for each test such that the overall Type I error rate (α) across all comparisons remains at .05. There are several ways in which the familywise error rate can be controlled. The most popular (and easiest) way is to divide α by the number of comparisons, thus ensuring that the cumulative Type I error is below .05 … This method is known as the Bonferroni correction."[2] The Bonferroni correction (e.g., critical value) was calculated as follows for the groups under observation in this study: .05/8 = .006.

The number of citations produced were significantly affected by the eight theorists under investigation (H(7) = 1145.23, p < .001). Mann-Whitney tests were used as a post-hoc exploration of

the size of the differences between Deming and his contemporaries. To reiterate, a Bonferroni correction factor of .006 was applied. The number of citations associated with Deming (Mdn = 18) were significantly higher than Juran (Mdn = 2), (U = 195,648, r = −.48); Crosby (Mdn = 2), (U = 159,326, r = −.55); Ishikawa (Mdn = 1), (U = 132,110, r = −.56); Taguchi (Mdn = 4), (U = 196,874, r = −.37); Shingo (Mdn = 1), (U = 132,111, r = −.58); Feigenbaum (Mdn = 0), (U = 111.985, r = −.61); and Oakland (Mdn = 0), (U = 48,038, r = −.42).

The rankings for the publications involved also were affected significantly by the theorists under investigation (H(7) = 393.57, p < .001). After the Bonferroni correction factor was applied, however, Deming's rankings (Mdn = 501.50) were only significantly higher than Ishikawa (Mdn = 409), (U = 341,058, r = −.08); Taguchi (Mdn = 347.50), (U = 266,717, r = −.19); and Oakland (Mdn = 135), (U = 32,683, r = −.50). It is important to note that the size effects for the ranking differences between Deming and Ishikawa and Taguchi, respectively, are weak. The size effects suggest that Deming's rankings sizably differ from Oakland.

Limitations

PoP software does not permit the retrieval of more than 1,000 samples per search. This is somewhat limiting because the entire population of articles from Google Scholar could have been theoretically collected and analyzed for further accuracy. It is not easily discernable from the PoP software whether the samples selected were done so randomly, but a review of the publications' titles and content suggested strongly that the sample collected represents a reasonable, if somewhat, random sample of all the gurus' publications identifiable via Google Scholar.

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The Obstacles of Everyday Problem Solving

James J. Rooney

Despite the fact that team problem solving should be a critical component in any organization's continuous improvement tool kit, many issues prevent this approach from being systematically applied on a sustainable basis. Although the actual problem-solving methodology—in particular the use of statistically based analysis tools—can be daunting and present challenges, the most common barriers to implementation actually usually involve the people side of the process.

Here are some of the barriers that must be overcome.

- *Different focus*—Whereas most people are accustomed to spotting a problem and immediately seeking a way to take care of it, structured problem solving relies primarily on facts and data rather than instinct and experience. This does not mean that these latter two attributes add no value, but their contribution is not sufficient to make decisions that avoid the risk of negative side effects, including repetitive cycles of solving the same problem. An effective problem-solving team focuses on identifying and permanently eliminating root causes. Quick fixes generally are set aside in favor of an organized approach that requires patience and some perseverance, which are not the strongest traits in many people.

- *Team approach*—Most structured problem-solving methods rely on the collective wisdom of a team. Although working with colleagues can be more enjoyable than working individually, it doesn't fit everyone's personal style. Furthermore, some teams are fraught with dysfunctional behaviors that can lead to frustration for members.

- *Engagement in analysis*—Modern society has tended to divide its members into those who are comfortable with the use of data and analysis, and those who are viewed as being more proficient with other tasks. To prove suspected causes and select effective solutions generally requires significant analysis, which may cause some team members to drop out of the process. They may

say that they're bored, but they actually may not know how to contribute to the process in a meaningful way.

- *Competing priorities*—It's rare for any team member to be focused primarily on solving a particular problem. Instead, team members are busy juggling multiple work assignments and simultaneously trying to achieve some acceptable degree of work-life balance.

- *Insufficient and/or inappropriate recognition*—Structured problem solving takes a great amount of time and effort. It can involve learning new techniques and tools, requiring additional investment of time for team members. The total energy required to complete the process varies among the team members, yet the general practice is to recognize the team as a unit and not acknowledge individual contributions to the team's success.

Once these, and other human-side obstacles, are recognized, the task of finding reasonable ways to overcome them looms ahead. Because assignment to a problem-solving team isn't viewed as a desirable situation for all team members, it becomes important for the organization to have a structure in place that offsets some of the underlying issues. Every design feature of the organization's system that makes the process more stimulating and rewarding can help alleviate the stresses. Beginning with a mental framework that problem solving should be similar to gathering and analyzing the clues in a mystery or searching for hidden treasure can provide insight. For instance, the report, "How to Succeed at Treasure Hunting" provides the following tips:[1]

- *Believe in treasure*—or the need to attain the final outcome. "The path to success as a treasure hunter begins with the belief that there is indeed treasure to be found … If you don't believe the preceding statement, then this may not be the pursuit for you," states the report. Team members need to believe that solving the

problem will improve their lives, so make sure assignments involve projects with obviously important benefits.

- *Set a goal.* "To succeed as a treasure hunter, you must first define the level of success you wish to attain. Does success to you mean finding coins or bullion totaling a half-million dollars? Or, will you feel satisfied if each year you find enough to augment your regular income by 20 percent? Think about this carefully because the level of success you wish to achieve will ultimately determine the amount of time, energy, and money you invest in the venture." Similarly, it works best if the project's expected results are commensurate with the anticipated time and energy team members will need to invest.

- *Develop a treasure attitude.* "Having the right treasure attitude encompasses a whole host of traits that are crucial to your success." The report mentions two traits in particular—belief in yourself and that you will succeed, and being aware of the treasure possibilities around you. The first trait involves visualizing success, which involves being alert to leads, regardless of their source. Skillful leadership and facilitation can help team members get engaged in the search for root causes.

- *Specialize for success.* "Serious treasure hunters agree that specialization is important because it allows you time to do the type of focused, in-depth research most likely to uncover productive leads. Also, if your time is limited, specialization will allow the greatest return for time invested. Specialization allows you to concentrate on those types of sites that most interest you, usually resulting in greater recoveries because you will do a better job." Assign tasks to team members who have the greatest interest and skills to keep them engaged.

- *Follow through.* "Follow through is the logical culmination of your treasure hunting efforts. This is the stage of the hunt that adds legitimacy to the entire treasure-seeking process. It's what

separates treasure hunters from fiction writers. To research a lead and verify it, and then not follow through is a waste of your precious time and effort." Implementation of the selected solution and adoption of a clearly defined approach for sustaining that solution are paramount for leaving team members with the proof that their efforts have resulted in a win for them as individuals and as a team, as well as for the organization.

Ultimately, the key is to ensure that team members enjoy the trip. "With all the emphasis mentioned earlier on goal setting and putting treasure hunting on a business-like basis, it is easy to forget that treasure hunting is supposed to be fun." Energized problem-solving teams celebrate their work throughout the project. They don't have to hold the treasure in their hands to recognize that they are working hard and making an important contribution, and that makes the obstacles bearable for most team members.

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New Publications Related to the People Side of Quality

Insights to Performance Excellence 2015-2016: Understanding the Integrated Management System and the Baldrige Excellence Framework

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Abstract: This book helps leaders, organization-improvement practitioners, and performance excellence examiners to understand the 2015-2016 Baldrige Framework and Performance Excellence Criteria and the linkages and relationships among the Items. A CD-ROM included with the book delivers templates and related analyses that are current with the changes in the criteria. It provides a comprehensive application development template for education and healthcare organizations, as well as for business and nonprofit organizations and provides scoring calibration guides that combine the Baldrige Criteria and Scoring Guidelines for Education, Healthcare, and Business/Nonprofit organizations. This book will strengthen your understanding of the criteria and provide insights for analyzing your organization, improving performance, and applying for the award.

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Price: $92.00 List/$56.00 Member

Strategic Connections: The New Face of Networking in a Collaborative World

Authors: Anne Baber, Lynne Waymon, André Alphonso, and Jim Wylde

Abstract: Today's organizations are collaborative. With old command-and-control methods replaced by openness and transparency, networking has become an essential professional skill—expected of everyone, at every level. Unveiling eight indispensable competencies for the new network-oriented workforce, this book provides practical advice for building better, more productive business relationships. Readers will discover how to commit to a positive, proactive networking mindset; align networking activities with individual and organizational objectives; and leverage their contacts by organizing them into strategic groups. With technology, new contacts are only a click away, but the level of connection and collaboration required for real success demands advanced, face-to-face relationship-building skills. This book gives you the tools you need to meet goals, execute strategies, foster innovation, and make yourself invaluable to your organization.

Publisher: AMACOM

ISBN: 978-0-8144-3496-3

Format/Length: Hardcover/256 pages

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Act Like a Leader, Think Like a Leader

Author: Herminia Ibarra

Abstract: You aspire to lead with greater impact. The problem is you're busy executing on today's demands. You know you have to carve out time from your day job to build your leadership skills, but it's easy to let immediate problems and old mindsets get in the way. This book shows how managers and executives at all levels can step up to leadership by making small but crucial changes in their jobs, their networks, and themselves. You will learn how to make more strategic contributions; diversify your network so that you connect to, and learn from, a bigger range of stakeholders; and become more playful with your self-concept, allowing your familiar—and possibly outdated—leadership style to evolve. This book turns the usual "think first and then act" philosophy on its head by arguing that doing these three things will help you learn through action and will increase your outsight—the valuable external perspective you gain from direct experiences and experimentation. In contrast to insight, outsight will then help change the way you think as a leader.

Publisher: Harvard Business Review Press

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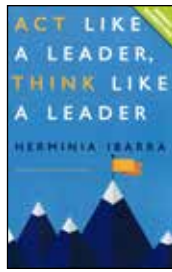
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Authors: Dr. David Perlmutter and Kristin Loberg


Abstract: This book blows the lid off a topic that's been buried in medical literature for far too long: Carbs are destroying your brain. It's not just unhealthy carbs, but even healthy ones like whole grains can cause dementia, ADHD, anxiety, chronic headaches, depression, and much more. The book explains what happens when the brain encounters common ingredients in your daily bread and fruit bowls, why your brain thrives on fat and cholesterol, and how you can spur the growth of new brain cells at any age. It offers an in-depth look at how we can take control of our "smart genes" through specific dietary choices and lifestyle habits, demonstrating how to remedy our most feared maladies without drugs.

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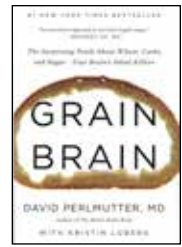
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