Bon-Tech

Practical Questions to Consider in a Performance Improvement Initiative:

1. **Where do you need your resources?**
   Logistics can get expensive. This is one of the reasons why Bon-Tech, while headquartered and primarily staffed in northern Virginia, includes full and part-time faculty and staff from across the United States. Among other things, this allows greater nation-wide customer responsiveness while mitigating travel expenses. Many performance improvement tasks can be performed virtually, including not just administrative and project management work, but also coaching, mentoring, and even some teaching. With this said, there can be no replacement for physical, face-to-face interactions. Hands-on, experiential learning is very difficult to duplicate anywhere except in a physical, brick-and-mortar classroom. This is certainly the most expensive form of training, but it is also by far the most effective.

2. **Bottom Line Up Front: What makes Bon-Tech different?**
   It's honesty time. At Bon-Tech, our training is great, and our trainers are world-class. We charge reasonable rates, and we always receive high marks for providing practical skills that our students can use immediately. But unlike traditional training companies, a happy student is not our primary mission. Our goal is not to get your business; it's to transform it. We change people, and we change organizations. That's our reason for being. While we do offer stand-alone training, and it will make your employees, managers, and leaders more powerful thinkers and problem-solvers; but there are others who can provide this kind of service. Unlike those others, we encourage our clients to reach for more.

   Every farmer knows that it's hard to get the most from a seed if you drop it on untilled soil. At Bon-Tech, we believe the same to be true of training. Before attending training, we require our students to arrive with projects already identified, signed off and approved by their senior leaders. Ideally, these should be strategically significant projects, ready to be executed. We also understand that project selection can be challenging. For this reason, we have experienced facilitators who specialize in Executive workshops known as Strategic Execution sessions. These one- to two-day working sessions facilitate organizational leaders through the process of understanding the outcomes their core customers want; mapping out their core products, services, and processes; and identifying the precise places in their process where constraints occur that inhibit end-to-end enterprise performance. Once the right project locations are identified, the projects are scoped, staffed, and prioritized. With the right projects, the right project Leaders, the right metrics, and the right Executive support, the ground has been fertilized and tilled, and hands-on, application-based training can be delivered that will immediately translate into action. This is the Bon-Tech secret sauce, the way our customers get something that no one else delivers; end-to-end performance transformation in months, not years.

3. **Sounds great… but we're not quite ready for all that**
   Of course, not every organization is ready for this level of transformation. Change is hard, and sometimes it is easiest and even best to start small. This is no admission of defeat; it's simple

pragmatism, and we respect the leadership it takes to step back, experiment, and figure out what works for you. With or without a Strategic Execution session, our one-week rapid-improvement Lean Belt training is powerful and effective. In fact, our learn-do approach is so unique that it is the current subject of a doctoral research study by doctoral candidate William Journigan of American Meridian University. The tools are highly practical and can be applied immediately by everyone from the production floor, to the back office, to the Executive Suites. Graduates leave the class ready to facilitate teams through basic problem-solving, understand different types of data and data collection methods, and (for better or worse) are no longer satisfied with treating symptoms. They aggressively pursue root causes, validate assumptions, and understand how to engage the people who DO the work in order to ensure full buy-in and change that lasts.

This is important. If you choose your best people, train them in how to apply the right tools in the right way, and empower them to go make a difference, your organization will transform for the better. But, if you take those same people, provide them the same training, and then fail to empower them; make them find their own projects rather than putting them in charge of things that matter; put them off or shoot down their ideas; you will lose them. Either they will find other jobs, or they will simply disengage, de-energize, and begin just going through the motions. The cultural impact will be catastrophic, and the next time you try to transform your organization, you will find it inoculated against your best attempts. This is the opposite of the Bon-Tech way, and we do NOT want to be a part of this sort of program. Seriously. Make your choice. If you don't have your boss' buy-in and your boss' boss' buy-in, please don't call us. You will do yourself and your best people a terrible disservice. Right skills at the wrong time equals wrong skills, and like trying to pound a nail with a wrench, you and your team will find themselves frustrated and only marginally effective. As we said, it's honesty time. No games; just results.

4. **What is the difference between *education* and *training*?**

By now you may have notices that we often refer to "training" and not "education." There's a reason for this. Not to get too geeky, but by definition, *training* is a specialized sub-set of education that involves the higher taxonomy level of *application*. Think of watching a video in the hopes of learning how to swim. You may learn all about proper floatation techniques, water conditions, and potential aquatic dangers. You may even pass a comprehensive exam with a perfect score. But ultimately, swimming *education* is inadequate even to the task of carrying the student across a shallow, climate-controlled swimming pool, let alone through raging surf. Only applied training can help the student translate academic understanding into the demands of the real world.

Misunderstanding of this subtle difference between education and training may lead to dramatic organizational challenges, allowing individuals with only lower taxonomy *education* (memorization of terms, awareness of concepts, familiarity with tools) to confuse themselves with truly experienced practitioners. This is a recurring leadership conundrum, where executives presume to tell subject matter experts HOW they should do their work, rather than clearly outlining the goals that need to be accomplished. Just like clarifying the purpose of the

objective (training for project execution versus educating for awareness) is critical to success, so de-coupling the role of the leader from the role of the do-er is important to consider in the language. Nearly all Bon-Tech faculty have at least one Master's degree, and many either hold or are working on their doctorates. We are huge fans of education, and mean it no disservice; but our Lean Six Sigma training is much more than head knowledge. It's purpose is more than knowing; it's *doing*.

5. **What is the value of certification, and are there any risks in pursuing a certification program?**
To extend the swimming metaphor, even after solid classroom education, application-based training through in-the-water swimming lessons is vital in order to ultimately validate the knowledge transfer. A *knowledge-based* exam (questions regarding diving safety, the buddy system, the importance of telling someone where you are going and when you will be back if you go swimming, etc.) must be followed by a demonstration of skills through an *application-based* exam (swim two laps of the pool without touching the bottom, tread water for five minutes, etc.). This is the difference between a *Certificate* of Completion (eg. I showed up for class and passed a test, so I get a piece of paper. Yay me!), versus professional *certification* (eg. I took what I learned and made a difference in the real world, which was in fact the real objective of my organization investing time and money in my attending class. Yay everyone!).

   There was a time when professional certifications were intended to establish clear and consistent minimum competency standards against which individuals could be measured. Like a college degree, they help to simplify the process for leaders who are looking for certain skills in their employees. While anyone may write on their resume, "I'm a really good writer" or "I love teaching", an applicant is much more likely to receive an interview if their resume reads, "Master's degree in English from Five Rivers National University" or "Post-graduate professional license in secondary education from the Commonwealth of Virginia." Everyone knows that you can't get an English degree without demonstrated competence in reading and writing, and that a teacher's certification requires one to actually teach. The proof, as they say, is in the pudding. Certification means – or should mean – that leaders don't have to wonder if you can do the job; you have already proven that you can.

   Truth time again. The availability of professional certifications often pushes high achievers even higher, as they strive to meet the requirements necessary for recognition among peers, or to qualify for promotional opportunities established by leadership. These are the clear and simple advantages to professional certifications; that the bearer has earned the right to be recognized as a competent professional in his or her craft, and is prepared to face additional challenges. But there can be a down-side to certification programs. Certification standards, if set too high or made too onerous can dissuade solid practitioners from bothering to pursue them. After all, if you excel at *doing* performance improvement, you probably have little interest in brushing up on the statistical nuances between a two-sample t-test and a paired t-test just so you can pass some exam. In such programs, the best *do-ers*, the ones most valuable to the organization and worthy of recognition, become the least likely to pursue certification. Meanwhile, the academics who love to make slides that demonstrate their knowledge and "prove" how skilled they are at applying their vast knowledge in running a project go racing off to receive their

certification, never even considering whether the project itself could have been done much faster and more effectively if all of those tools had NOT been used. In short, the very act of validating process improvement skills, if not managed carefully, may lead to the creation of a non-value-added, administratively burdensome process.

What are the right requirements for certification (both in terms of knowledge elements like "problem solving" and taxonomy levels like "demonstrate use of root cause analysis tools like cause-and-effect diagrams and XY matrices")? What are the right proofs of someone having met those requirements (is a signed affidavit from the project champion enough, or should the entire project be written up using a standard PowerPoint template to prove each skill?)? And what about the burden of upkeep? Do practitioners have to "maintain" their certifications, and if so, what are the requirements for proof and frequency? Annual re-certification exams? Completing at least one project every two years? Taking a set number of continuing education classes?

Certification programs can quickly become cumbersome and discouraging to real, action-oriented practitioners. Worse, they can become self-sustaining job shops for "Masters" who sit in judgment of the practitioners. Finally, without regular review and revision, certification requirements can become stale and outdated, forcing people to learn and apply skills that are no longer necessary (Many professional certifications still include language like "you must prove your understanding of hypothesis testing by hand calculating a 2-variances test, a chi-square, and an ANOVA" rather than perhaps more appropriate language like "you must demonstrate your ability to apply hypothesis testing by selecting and using the correct test and correctly interpreting the results using statistical software"). Hand calculations were once the mainstay of the Six Sigma profession. Now, software is faster, easier, far more powerful and accurate, and makes the CPI profession more accessible to those change agents who have excellent soft skills, but not such strong math skills. Potential access to a larger body of practitioners is a great boon to performance improvement as a profession – but it only benefits those programs that have bucked the status quo and removed outdated requirements from their practitioner bodies of knowledge.

It is no small irony that even in the world of performance improvement, professionals can become complacent, believing the way *they* learned is still the best way. Believe me, we know. The Founder and President of Bon-Tech has helped to develop the certification standards, bodies of knowledge, and certification exams for such organizations as the American Society for Quality, the United States Navy, and the Department of Defense; and there is a reason that Bon-Tech has created and manages its own certification standards and process. In short, if you want to lead, you can't keep doing what has already been done, and the nowhere is this more true than in the profession of continuous improvement.

There are advantages and disadvantages to standing up one's own certification program versus using someone else's. To use the Navy and DoD certification programs as examples, the government isn't generally in the business of creating and maintaining certifications. It could be argued that certifications fall outside of its core competencies. Thus, relying on an independent

third party certification like the American Society for Quality's *Certified Six Sigma Black Belt* or the Project Management Institute's *Project Management Professional* may make sense. Following an industry-standard lead has significant value and garners efficiencies. The counter-argument is that the goals of independent certification programs like ASQ or PMI – both highly esteemed and important organizations – are often different from the goals of the government. Holding one's own certification program allows direct control over the required certification standards, bodies of knowledge, exams, and even associated training materials. This tailored or *bespoke* approach ensures relevancy and value to the target demographic, and rapid response when gaps are identified and require immediate filling. But this value is only true so long as the program is properly built and maintained. In short, proper governance is key… and cumbersome… and costly.

Regretfully, there is no answer here. At Bon-Tech, we simply recognize the challenges, make our clients aware of them, and serve as trusted advisors in choosing the right option for you. Our suite of products runs end-to-end, from strategic planning, through training, coaching, mentoring, project execution, and, if so desired, certification. Any product can stand alone, or be used in combination with other internal or external options.

6. **What is the role of the Coach / Mentor?**

Often the launch of a Continuous Process Improvement / Continuous Performance Improvement (CPI) program focuses on training. This is understandable, since everyone is quick to grasp the value of having trained professionals available to execute projects and transform an organization. What many people fail to consider is the *other* reason why training is such a popular first step; because everyone knows how to measure "success". *Truth time*; the number of Green Belts or Black Belts trained is a wonderfully easy thing to define and measure! With departmental goals and accountability matrices, training plans and glide paths, these are the kinds of Objectives that both Managers and Contractors love!

But is the real goal of a transformation program training? Regrettably, in their pursuit of financial gain (or perhaps even out of sheer ignorance) many consulting or training companies fail to mention that in point of fact, the *goal* of the program should almost *never* be training. Instead, the goal is to execute organizational, even enterprise-level transformation. This is very different from simple butts-in-seats training metrics. This is not to say that training should not be performed or measured, but simply to point out that it should never be misconstrued as the Objective of the contract. Instead, training should serve as one means toward accomplishing the end Objective of transformation. Means may change and adjust over the course of time as both customer and vendor learn more about what works and what doesn't. The Objectives, on the other hand, should remain consistent and clear. Put differently, trainers may be an expected requirement to deliver the contract, but effective *do-ers* are just as necessary. If one of the long term Objectives is a sustainable, internally self-sufficient CPI workforce, trainers will only get you part way.

Moving back to the swimming analogy, taking the students out of the swimming pool and onto the beach, with waves crashing and opaque waters that may or may not include sharks and

nettles swimming just below the surface – that's the difference between going through the motions and really ensuring they can get the job done! Similarly, leaving the classroom is the transition point between saying you have a CPI program (because you have a few trained Belts) versus actually demonstrating true transformation. This is the realm of the Coach and Mentor. Where Green Belts and Black Belts run projects, Master Black Belts walk alongside the Belts, suggesting where to watch for rip tides, reminding that sharks tend to feed at dusk and dawn, and always standing ready to provide a strong arm of support – or a flotation device – when a 100 yard training swim turns out to be a quarter mile endurance event against the tide. Academics *prepare* the students for success. The Master Black Belt coach and mentor ensures that success. Bon-Tech Master Black Belts are more than just certified, they are ocean-tested life-guards with years of experience and hundreds of lives saved – successful projects that made a difference to real people in the real world.

A common related question is whether the trainer should also be the coach and mentor. The answer is, it depends. Some excellent coaches and mentors simply don't like delivering classroom training. They love being out in the surf, fighting the waves and striving for the far shore with their small group of mentees. Other excellent trainers aren't so good at mentoring projects. Some are great at both. *Truth time*; the best deployment models allow individuals to do what they are best at, without mandating a coupled structure where the curriculum developer is the teacher, and the teacher is the coach, and the coach is the project manager. Very few people are excellent at everything, and by asking one person to "do it all" you virtually ensure that some of the work will not be done well. Again, by de-coupling the goals and objectives from the methods required to achieve them, it allows flexibility among the Project Management team to best utilize resources and ensure program success.

7. ***(This question is for Government Agencies only; for-profit businesses may skip forward):***
   Is there any value in investigating a public/private partnership?
   This question may seem a bit off-the-wall at first; which is precisely why we feel the need to invest time in discussing it. For clarity, the term "public/private partnership" has different meaning and different emotional baggage in different environments. In this case, we are simply referring to a blended approach to resourcing that allows the strengths of different organizational structures to be used to best effect. An example of a public/private partnership might be a collaborative think-tank that includes members from government, private sector, and academia. They are posed a challenge that faces all of their respective communities, and encouraged to come up with possible solutions. The resulting product (whether training materials or streamlined process maps or clarified requirements and taxonomies to improve communications, etc.) is agreed to belong to everyone equally. In the end, when the team is disbanded, the resulting solution was delivered in far less time, cost far less money, and is far more effective than any one group could have developed alone.

   It sounds great, even simple. How hard can it be for, hypothetically, the Office of Personnel Management (OPM), the Federal Improvement Team (FIT, a not-for-profit), Bon-Tech (a for-profit Veteran-owned small business), and American Meridian University (AMU), to work together to create collaborative CPI solutions that belong to everyone? Regretfully, the best

way to communicate the nuances of a real-world public/private partnership is through a true story that I will modify just slightly to move from example to metaphor. In the early days of the Federal Improvement Team (FIT), I developed a Cooperative Research and Development Agreement (CRADA) with a not-for-profit organization that we will refer to as the Rapid Innovation and Prototyping Experiment (RIPE). Understand, I did not invent the CRADA tool. To my knowledge, CRADA's were first developed and utilized by the US Air Force more than 30 years ago, and have fallen in and out of favor ever since. The Chair of the RIPE Partnership suggested it, and after some research, I agreed to the model. RIPE, it turned out, had many of the same objectives as the FIT, but was composed largely of industry partners, where the FIT was entirely composed of government employees (as added context, both RIPE and the FIT have since re-structured and the CRADA is no longer in effect between the two organizations. It was designed for a purpose, and then dissolved).

The CEO of RIPE was very patriotic, and had surrounded himself with like-minded business leaders, all of whom were eager to help the government to improve its performance (it turns out that nearly all business owners are also tax payers, and that a more efficient government is in everyone's best interest. Who knew?). Through the use of a CRADA contract, both the FIT and RIPE were able to structure a partnership that allowed them to develop materials together that belonged to both organizations equally. The CRADA ensured that government employees (in their private roles as FIT members, and therefore not directly representing their own government agencies, but with approval of their agency leadership) and RIPE members (in their private roles as RIPE members, and therefore not directly representing their own commercial companies, but with approval of their corporate leadership) were able to collaborate in creating CPI-related materials that would then become the shared property of both organizations. This initially focused on certification standards and bodies of knowledge for performance improvement that would allow both organizations' partners to better align their CPI standards and programs. Additionally, in the minds of our core Steering Committee, the hope was to allow joint curricula to be developed to prevent unscrupulous contractors from moving in and "ripping off" the government by charging millions of dollars to create "personalized" training materials for agency after agency, when in fact it was 95% the same, standard materials that other government agencies already owned.

If successful, this final product would not only make solid, standardized training materials available to the federal government, but would also simplify access to standard materials among government contractors, allowing them to focus their resources less on scrubbing their own "private" training and more on helping government agencies to successfully execute projects. After all, if everyone agrees on the definition of training and certification for CPI professionals, any academic institution can provide trainers to deliver the content, and any competent contracting company can provide resources to help create and execute the programs and projects. Competition would increase, costs would come down, and everyone would be able to finally focus on project execution rather than getting distracted by building a hundred different training programs at 100 different agencies. Simple, right?

While a novel and well-intentioned experiment, neither RIPE nor the FIT had matured enough as organizations to make this successful. In the end, while RIPE members and FIT members did collaborate in the creation of the DoD CPI/LSS certification standards and Bodies of Knowledge, it only worked because many of the government participants didn't really understand what was going on (not for lack of explaining; it simply turned out that most government employees and many of the private sector participants simply had no mental model for such a concept, so never really processed how the collaborative teams had been established). Once leaders on both sides caught wind of the effort, lawyers heard rumors, misinformation abounded, doors closed, resources were pulled, and everyone ran scared behind their old walls. When the dust settled and the CEO of RIPE and I worked through Lessons Learned, we reached one inescapable conclusion. The model could only work (at least in the current level of government agency maturity and legal oversight) if one government agency and one private sector company were willing to step up and take shared ownership of a tightly-focused CRADA with clear scope, boundaries, and duration. There would still be churn over who "got to participate", but because no money need be exchanged for a CRADA to be effective (the value proposition is in the shared ownership of the collaboratively developed product), the legal constraints are greatly simplified.

This is a simple case study in how hard it can be to make a true public/private partnership work effectively – but also a case study in what it takes to be successful. Run by third-party organizations like the FIT or RIPE (positions of influence but not authority), a CRADA can be difficult to manage. But, when signed by those with true authority (a single "lead" government agency and a single "lead" private company), the validity of the CRADA contract and its objectives are bolstered, and willing participants become much easier to find. Government agencies can explicitly say, "we are partnering with OPM on this project" and private industry organizations can claim, "we are partnering with Bon-Tech on this project".

In fact, Bon-Tech has used a similar model much more recently in developing and signing an articulation agreement with American Meridian University. This is, in effect, an academic version of a CRADA that allows collaboration between an academic lead and a private sector lead. Other companies can sub-contract under Bon-Tech and maintain access to AMU's credentials, even as other academic institutions may partner with AMU to use their contractual tools to access Bon-Tech. In the long-term, a single CRADA could conceivably be created with a clearly structured governing council that would allow true sharing of resources and jointly-produced products that align efforts and standards across the public, private, and academic worlds with a minimum of financial investment from each. As I said, this was in fact the original intent of the FIT, but it was a bridge too far at the time, and few members of the current FIT Board of Directors are actually aware of their 2008 roots (in fact, the first drafts of the CRADA still referred to the Federal Fusion Team; the original name I had given the organization before a Senior Executive within the DoD suggested that long-term success of any organization in Washington, D.C., requires a simple and memorable acronym… and thus, the FIT was born!).

So, I ask the question again; is there any value in investigating a public/private partnership? The short answer is, absolutely! But, it is not for the faint of heart. The potential challenges are every bit as great as the potential rewards. But, if you work for a government agency, have

access to the senior leaders at the political level, and are interested in pursuing one, please call me. I will do everything I can to help make you successful. It's the right answer for sustainable, low-cost, enterprise-wide transformation… if only we can find the right leadership to make it happen.

8. **What is the role of Project and Program Management in CPI, and how do Program Metrics fit in?**

Listing the required parts of a successful CPI/LSS program is not difficult. Getting the parts to coordinate in the real world can be *extremely* difficult. Even with a common Program Management structure (like, as an example, Malcolm Baldrige), getting people to do the right thing when resources are tight and other priorities encroach can be daunting. Effective alignment requires commonly agreed-to measures, metrics, and means of data collection, as well as consistent accountability to leading and lagging indicators of success. The role of the Project Manager is to drive to the organization's Operational-to-Tactical metrics, while the Program Managers consistently evaluate these against the "leading" and "Lagging" Operational-to-Strategic metrics. For example, "dollars saved" is a dangerous tactical metric, since it can drive short-sighted and self-serving decisions at the project level. "% defects reduced" (eg. "% decrease in new-hires who quit within 6 months") or "% reduction in process cycle time" (eg. "number of days from job-posting until candidate's first day at work") are much better project metrics. These process-centric project metrics become leading indicators for operational goals (like reduced attrition rates due to job satisfaction, or ability to meet new demands without increasing budget). Finally, these operational goals must roll up into strategic objectives which focus on where the organization is going, what programs are being initiated, and perhaps most importantly, what the enterprise has traditionally done that it should no longer invest time and resources in doing. After all, CPI is not about doing more with less; it is about doing less (If this seems odd, I would recommend we have a simple 1-2 hour training session on LSS and Strategic Execution).

Again, there is no simple equation for right or wrong leading or lagging metrics at various organizational levels. It becomes the job of the Program Office to manage and align senior leadership down through daily do-ers to ensure they are working on and measuring the right things in the right ways so that everyone can view their own metrics in a consistent and aligned way. But this is far more than just picking out metrics (after all, how hard can it be to select the right measures when everything comes back to quality, cost, and time… oh, and risk… and opportunities… and communications… and… hmmmm, maybe it really is hard after all!). At the heart of enterprise change management, every metric must align to the strategy, developed by the decision-makers, and clearly defined, collected, displayed, and reviewed in a way that makes sense to everyone. In Lean, this is referred to as "Hoshin", and there are as many different ways to facilitate it as there are Lean Sensei (and yes, there are a LOT of certificate-waving Sensei around these days!). Bon-Tech has developed its own model called Strategic Execution, which involves several simple, visual, collaborative tools to formulate a list of high-impact projects that all the leaders agree to (because they made the list without even realizing they were doing it). These become the core focus of the Executive Steering Committee, as they review not only progress on enterprise leading and lagging metrics, but also progress on the high impact, core

projects that have been prioritized and staffed in order to ensure that the organization meets its enterprise goals.

Conveniently, the Strategic Execution model is "fractal" in design, in that it may be replicated at any level of the organization to ensure that a more granular version of the enterprise strategic plan can be quickly and easily developed by each directorate or department as they deem it necessary in order to help them successfully execute their portion of the overall plan. Again, common metrics and data collection methods make alignment easy and ensure clear communications between organizational levels. In the end, it's really not that hard – it just requires a clear, intuitive plan where everyone understands their role and why they stand to benefit from its success.

9. **What is the role of senior leadership in a CPI program?**

While strongly alluded to in several of the questions and answers above, the role of executive leadership in any CPI program cannot be overstated. One of humanity's greatest strengths is also its greatest liability; its ability to adapt to any given environment. Ultimately, people will always behave as they are incentivized. When you see people behaving badly, the root cause is very rarely a truly "bad" person, but simply a person who has found an easier way to get to where they want to go (the "don't hate the player; hate the game" mentality). The most important function of senior leadership must therefore be NOT to "hate the players" (to punish those who don't behave properly), but to make it easier for people to do what is right than to do what is wrong (to rewrite the game).

Truth time; NO ONE is smart enough to do this on their own. Every organization is complicated and filled with connections and interactions that can be nearly impossible to see until it's too late. The law of unintended consequences is very, very real, and is one of the greatest inhibitors to enterprise transformation. Thus, it is almost always safest to either do nothing or to simply do what everyone else is doing. As one Executive Vice President of a Fortune 50 company once told me as he was considering a very innovative business proposal from a very small company, "No one ever got fired for hiring IBM". His meaning was clear; there is far less risk to the incumbent leadership if they contract with "the big boys" and do things the expected ways rather than to take risks and try something new. In the case of this particular Executive VP, he made the statement so that our team would clearly understand the risks he was taking as he announced that he would be using us for his project. Quite honestly, we were stunned. The risk he was taking was enormous, which told us two things. First, he really did want to make a difference, and second, that we really, really needed to be sure he succeeded! Is there any better allegory for the importance of executive leadership in the role of true transformation? His very choice proved that he was ready to make the tough decisions, and inspired everyone on the team not to let him down.

More truth; Big risk means active risk mitigation. After all, leaders aren't just responsible for taking risks to get the job done, they are responsible for ensuring that those risks do not compromise the organization. Big change means big risk, and big risk is, well…, risky. How does a true leader balance both? In the case of this particular Executive VP, part of the risk mitigation

plan was to ensure regular progress checks were performed, not just by him, but by a collaborative Executive Steering Committee consisting of other EVPs from the Global Headquarters (including operational, strategic, and IT leaders), EVPs from each global Region where the project was being executed (again, Operational and technology leaders), EVPs from the regions where the project would be leveraged next (a great way to ensure long-term buy-in!), and the C-level leadership of my own company at the time (in the interest of full disclosure, while I was part of the executive team at the time, this was not a Bon-Tech project). With this Steering Committee model, everyone stays involved, everyone has ownership, everyone maintains buy-in, and long-term odds of success go way up. I'm proud to say that 18 months later, this particular EVP had been promoted, and his projects had been (and are continuing to be) leveraged across every corporate region around the globe.

This exemplifies the job of the executive leadership; doing what's right (even if it involves risk) and then working to mitigate risks through communication and collaboration. Executive Steering Committees are excellent for this, and are the perfect follow-up to a Strategic Execution event, allowing mutual accountability and visibility, as well as mutual support. Even if (and when) things go south, finger-pointing and blame are reduced when everyone shared input on the process that created the failure, and everyone shares ownership in developing the solution (as a friend once commented, the goal is to fix the problem, *not* to fix the blame!). As an aside, I would point out that ideally, projects are *not* presented to the Executive Steering Committee by the Belts who lead them. Instead, they are presented by the Executive Sponsors themselves. This ensures that they stay actively engaged in the projects as they are executed, and have clear ownership over their success. After all, no one wants to stand up among their peers and explain that they really don't know the status of their own project… or why their own project is failing. Again, executive ownership makes all the difference!

10. **What are the biggest risks in standing up an effective, sustainable CPI program?**
    Ask any random 20 CPI/LSS Black Belts or Master Black Belts to name the single most important factor for success or failure of a CPI program or project, and 19 of 20 will give you the same answer; leadership engagement. Projects are hard. They require resources. They compete with other priorities. They encounter unexpected challenges and constraints. Newton's Laws of Motion apply, and historical momentum can be very, very difficult to break. Organizations at rest are very hard to get moving. Organizations moving in one direction are very hard to force to a different course. It requires unrelenting focus and positive support. It must, by design, be the single most important program in any organization or it will not – it *cannot* – fully succeed. Of course, there can be "tolerable" success. "Good enough" projects. Islands of genius that shine amidst a morass of mediocrity. But a program that focuses on these exceptions as if they were the rule quickly will be called out as a charade by the rank and file of the organization. They know smoke and mirrors when they see it, and they have no time for lip service. If leadership isn't "all in" they can smell it, and the enthusiasm of real change reduces to the simmer of apathy for yet another program on the smorgasbord of busy-work.

    Conveniently, the biggest risk is also the biggest force multiplier. Truly engaged leadership can (and arguably must) be truly transformational. Thus, the success of the program can be

managed quite effectively from the safety of the Executive Steering Committee. Leaders who don't care are unlikely to volunteer to sponsor critical projects. Out of respect (both for the individuals and for the success of the program), individuals who aren't willing to volunteer for the heavy lifting are not forced to do so. Those who do care are very likely to volunteer. To these eager Change Agents, we assign the resources that will ensure their success. Let success breed success, and risk-aversion be its own reward. Ultimately, the apathetic middle will be forced to opt in for success or become increasingly marginalized. And the nay-sayers? Remarkably, history shows that many of these become the strongest advocates for the program… once someone else has politely demonstrated that it actually works. Remember, anti-change Agents aren't necessarily the bad guys. They're simply doing what they believe to be the best for those people and resources under their care. Our job is to demonstrate a better way, and make them comfortable with the options we have to offer. This is the point where the true leadership abilities of the very top leader(s) become critical; the servant leaders who are willing to take the role of coaching and mentoring their own executive team. Again conveniently, this final level of full-on performance by the entire senior team is not mandatory for program success – it's simply an amazing fringe benefit on those rare occasions when it comes.

11. **What about the technology component of CPI?**

Traditional Process Improvement focuses on… surprise… the process. In order to inform the Belts and obtain buy-in for change, cross-functional teams are a must. Thus, people are the foundation of success, with their subject-matter expertise informing the process changes. Process change requires people change. Every time. All the time. But what about enforcing the new and improved process? How do we really make it easier for people to "do it right" rather than "do it wrong"? In some cases, especially for transactional processes that require consistent standards across large geographic areas, or where data sources that inform the process are disparate and scattered across multiple servers or personal computers, or even old books and print-outs, there are very real limits to what can be done without applying an enabling technology. Is it really possible to standardize and sustain 21st Century improvements in a paper-based, or even email-based work environment? How do we establish visibility of process work when things are being done in in-boxes? How do we provide real-time measurement of process effectiveness?

The answer is through the use of Business Process Management (BPM) software. While there are currently no Lean Six Sigma training programs (that I am aware of) that fully integrate people, process, and technology aspects of CPI into a comprehensive end-to-end solution, there are a select few BPM companies which are educated in LSS methods and provide Agile project management approaches that allow the development of personalized process automation in a matter of months (that is, that can be created simultaneous with the execution of the LSS project, resulting in a final project solution that is not just paper-based, but fully automated, with electronic dashboards and automatic data collection that allow managers to see work status, view system constraints, and move to the next level of data-based leadership). It would be inappropriate for me to advocate on behalf of any one specific BPM company in this forum. However, it is important to consider how your own CPI program will manage the reality of 21st

Century CPI. At some point, there will be no choice but to engage the corporate IT and technology teams in their own version of CPI/LSS training that focuses on creating LSS-trained BPM developers who can support the Black Belts and Master Black Belts in executing a fully automated lean structure. One company in particular, BizFlow Corporation, located in Falls Church, Virginia, has partnered with Bon-Tech Black Belts and Master Black Belts, and is itself led by an experienced Master Black Belt. It is a minority-owned small business (for those who care about such things) with a GSA schedule (again, for those government organizations that take advantage of such things), and it uses a CPI/LSS-based model to improve the as-is simultaneous with developing system solutions to automate the to-be. Where appropriate, their training, skills, and software can be highly complementary for a specialized subset of technology-based LSS practitioners, and Bon-Tech is one of the very few (perhaps even the only) companies capable of tailoring its LSS training to allow graduates to create process designs in a way that facilitate the next step of process automation with BPM software companies.

To be clear, the Bon-Tech partnership with BizFlow is specifically because the Bon-Tech President, Scott Bonney, views the BPM skill set as integral in carrying traditional CPI/LSS models into the new century. However, a fully integrated People/Process/Technology-based CPI/LSS Body of Knowledge does not yet exist anywhere. To engage a BPM company would be very cutting edge, and could be a bridge too far for where many companies are able or willing to go at this point. We neither advocate for nor against BPM integration into Corporate CPI Objectives, but mention it in the interest of full awareness. It is coming. It's not a question of if, but when your own organization chooses to embRIPE it.

12. Why do I keep referring to this as CPI/LSS?

As Clark Kent once told Lois Lane, "Clark Kent is who I am. Superman is what I can do." So it is with CPI/LSS. Continuous Process Improvement (CPI) is what we do. Lean Six Sigma is the core tool set we use to do it. The day will come when "Process Improvement" isn't cool to talk about. When that happens, we shift our language to Continuous Performance Improvement. The day will also come when Lean Six Sigma is no longer cool, and people move on to older terms (like Business Process Re-engineering) or new ones (Like Business Process Management). But no matter what may happen to the "LSS" that follows "CPI", it will NEVER be cool to say, "We don't do continuous improvement." Thus, CPI (that is, what we do) always goes first, followed by LSS (that is, how we do it). It may seem petty, but this approach has paid significant dividends in the Department of Defense, where multiple phases of "cool" and "un-cool" have come and gone, but minor tweaks of language (like focusing on CPI, dropping the LSS, or changing the wording slightly on CPI) have allowed the core programs to continue relatively unscathed. It's certainly not mandatory terminology, but it's worth considering.

13. In simple language, what do these CPI terms like Lean and Six Sigma actually mean?

I probably should have started with this.

- *Lean:* First, "Lean" is not an acronym. It was coined by Dr. James Womack and his team at MIT in the 1980s in an effort to simply describe their approach to performance improvement. Their focus was to eliminate waste, allowing organizations to focus specifically on the important parts of the organization (the "muscle") and get rid of the

unimportant parts (the fat). It's that simple. "Lean" is the body of knowledge that focuses on how best to stop doing what you shouldn't be doing. Identify and eliminate waste. Its tools tend to be simple, quick, and highly collaborative. A typical "Lean" project is usually done using a "kaizen" or "Rapid Improvement" approach that executes a complete project in a month or less. The core process followed in Lean is PDCA (the Shewhart Cycle of Plan-Do-Check-Act).

- *Six Sigma:* Popularized by Dr. Mikel Harry in the 1980s, Six Sigma refers to the statistical measure for standard deviation (sigma) in order to emphasize its goal of reducing variation in processes. The focus of Six Sigma is to make processes so consistent (in those areas that matter) that the critical customer requirements easily fit within the customer specification limits. For the true geeks, in a standard normal distribution, if there are six standard deviations (six "sigmas") between the average process performance and the nearest customer specification, the odds of the customer receiving a product that fails to meet specifications is 3.4 per million. From the non-geeky perspective, where Lean tends to focus more on eliminating waste, Six Sigma tends to focus on improving quality. While originally designed for high-volume manufacturing processes, the core tenets and tools of Six Sigma are universally applicable, whether in transactional office work, operations, or services. Determine root causes for variation, change the process to reduce the variation, and produce products that are consistent; these are the definition of quality, and the intent of any good Six Sigma program. While very powerful, Six Sigma tools do tend to be more mathematically/statistically intensive and usually take longer to use than pure Lean tools. The core process followed in Six Sigma is DMAIC (Define, Measure, Analyze, Improve, and Control).

- *Lean Six Sigma:* Logically, the marriage of Lean and Six Sigma is a match made in heaven. Provide LSS practitioners with a hybrid skill set where Green Belts can focus on the simpler, more collaborative tools and Black Belts can receive extra, more powerful statistical tools. With a combined skill set, we can reduce variation in a process, and then remove the extra waste that shows up as a result (for example, higher quality product means less inspection, smaller buffer inventories, and often fewer people working a process because rework has been minimized). Lean Six Sigma uses the Six Sigma DMAIC approach to running projects, but often within the Lean structure of an accelerated Kaizen event in order to get projects done more quickly. Unlike traditional Six Sigma, improvement events can be done with a minimum of data (cycle time, defect rates, etc.), but unlike traditional Lean, where data are available, very powerful tools can be brought to bear to quickly understand process nuances that might not be visible to normal process Subject Matter Experts (SMEs).

- *Theory of Constraints:* While infrequently referred to in this country, ToC is a powerful focusing tool in the CPI arsenal. Popularized by Dr. Eli Goldrat in the 1980s, ToC views interconnected processes as an integrated whole and looks for the bottleneck that has the greatest impact in overall organizational performance. As an example, if your process is represented by water moving through a hose, and the goal of the CPI office is

to increase the volume of water moving through that hose, we really don't need projects at every one foot increment of the hose trying to improve water throughput. Instead, we simply need to find the kink in the hose and un-kink it. Doubling the output at the kink in the hose will likely double the output of the entire hose. Strategically, ToC tools help practitioners to identify the best places to focus their projects within an organization to maximize end-to-end impact. Tactically, Green Belts and Black Belts have limited time and resources. By focusing their teams on the internal project constraints, they can maximize the impact of a project in a relatively short time span. While the vast majority of LSS programs do not address ToC, it is a fully integrated part of the Bon-Tech curriculum even at the Green Belt level. We have been actively incorporating it into CPI Bodies of Knowledge and Certification programs for more than ten years in the hopes of increasing its visibility and impact, and yet even now very few of the more widely recognized certification programs give it anything more than lip service.

- *Strategic Execution:* This is a Bon-Tech term that was coined by our founder in 2008. It refers specifically to a strategic planning model that integrates Lean, Six Sigma, and Theory of Constraints methods at the executive level of organizations. The goal is a collaborative rapid strategic planning session that identifies the core products and services of an organization, produces a high level map for each of the most critical core processes, and identifies the constraining step or steps in each process. The result is a short list of strategically significant projects that Senior Leadership agrees to champion as part of its CPI/LSS initiative. While these are certainly not the only projects being executed within the organization, these are the ones that require Executive-level sponsorship. They become the focus of discussions for the new Executive Steering Committee, and provide a jointly-created, jointly-owned core around which leaders can engage in discussions of metrics, resources, training requirements, and ultimate impact of the CPI program. The Strategic Execution model cannot be found in any books (Mr. Bonney hasn't gotten around to publishing just yet), but has been implemented effectively at Army and Navy commands around the world, as well as in private sector companies ranging from insurance, to healthcare, and government support… as well as a certain, nameless Fortune 50 company. It's simple, intuitive, quick, and effective. While not required, it is strongly recommended and very, very useful!

  Many executives have commented that it was the most valuable two-day workshop they have ever attended. One Army command built its entire strategic plan around the approach, resulting in a tripling of strategic projects and over $180 million in savings within 12 months; and one set of three Army and Air Force bases used the approach in order to combine their resources in compliance with the Base Realignment and Closure (BRAC) requirements. The exercise was so successful that they invited us back to run the event the following year in order to improve their collaborative efforts. Even now, five years later, they are actively negotiating to bring in our same facilitator for an event that would for the first time integrate their CPI/LSS model with BizFlow BPM software to automate the joint base decision-making processes.

14. Belts: What is up with this whole Green Belt/Black Belt/Master Black Belt thing?

Back in the 1980s when Mikel Harry was beginning to evangelize American industry with the tools and methods that were so effectively serving Motorola, he made a few decisions to try to jazz up the whole Six Sigma thing. Remember, the original Six Sigma model was very statistically intensive, and while it appealed to Engineers, it was not exactly what you would call "Executive friendly". Executives were always asking questions about money, and while they liked the potential savings associated with Six Sigma, it could be challenging explaining what they stood to gain by sending someone through four weeks of training (a traditional "Black Belt" program) as opposed to just two weeks (a traditional "Green Belt" program).

Mikel happened to be into the martial arts, and latched onto the idea "Belts" as a cool way to convey the advantages of different levels of training. While a "Green Belt" had enough training to defend himself and his immediate turf (that is, his own work space), a "Black Belt" could be used as a proactive tool, sent out into hostile territory (multiple work areas that required larger scale, more strategic work) to kick butt and take names. And who would teach these Green Belts and Black Belts? Why, Master Black Belts, of course!

While structures and definitions have changed and merged over the years, one of the lasting legacies of Six Sigma has been its "Belt" structure. Easier to remember than ranks like "Level I, II, and III", the idea of a growth structure appeals to many people, encouraging them to move onward and upward to the next rank. But, as a practical matter of managing training and growth within the CPI/LSS industry, this can also be a danger. *Truth time*; many people want higher certifications not based on knowledge and ability, but as "proof" of their own superiority. This attitude leads to a market that caters to quick and easy certifications (I have seen impressive-looking certifications from impressive-sounding organizations that would train and certify a Master Black Belt in three days… for the appropriate amount of money). These diploma mills are part of the reason why establishing and enforcing clear bodies of knowledge, taxonomy levels, and certification standards is so important for long-term professional recognition; because where there are self-serving short-cuts, they will invariably be pursued. Ironically, as a rule, the best change agents are the most humble; eager to watch and learn and ask questions, with little desire for certification-collecting.

As an aside, the Lean community refused for many years to even label their skill set, let alone offer standardized exams or certifications. If you wanted to know a Lean practitioner's skills, you could simply ask how many improvement events s/he had run. In Lean, knowledge comes through doing, not through passing tests. Thus, they defer to the term "Sensei" or teacher, and now, somewhat grudgingly, "Master Sensei" for those who have done hundreds of improvement events and are widely recognized by their peers for their skills.

With all of this said, and recognizing that standards, definitions, and expectations do differ between organizations, there are certain general truths that help to define the roles of Green Belt, Black Belt, and Master Black Belt. Based on these, here are some general guidelines for consideration.

- *Green Belt:* Traditional Six Sigma Green Belt training was composed of two weeks of classroom training (generally one week per month over two months). Over the last ten years, GB training has shifted to become more Lean-centric (Lean Six Sigma vs. pure Six Sigma). Since the Lean tools tend to be more intuitive and quickly learned while the statistics of Six Sigma can be more challenging, the shift to LSS GBs has allowed most programs to move to a single week of GB training. Some programs treat GBs as "Junior Black Belts", leading their own projects and teams in much the same way as BBs, but with tighter scope or less complexity. This model allows GBs to slowly grow with experience and eventually mature to a point where they are ready to pursue the additional Black Belt training. Other models have Green Belts working more in the role of "Junior Project Managers", in that their GB projects are sub-sets of larger BB projects, with BBs running perhaps a cross-departmental project with GBs within each of the departments responsible for executing the portions of the BB project that fall within their own, tighter scope. Both models – and hybrids of both – work well.

  Traditional Six Sigma Green Belts were also trained in the DMAIC-based project approach, with each phase of the project taking several weeks or even as long as a month. This means weeks to **Define** the project scope and boundaries, weeks more to collect baseline data and **Measure** how the process is currently working, weeks more to **Analyze** the data for patterns and root causes, longer to develop and implement **Improve**ments, and finally, even longer to put **Control**s in place to ensure the new process standards are clear and institutionalized. Thus, traditional Define-Measure-Analyze-Improve-Control (DMAIC) GB projects would typically take 4-6 months to execute.

  With the integration of Lean and Six Sigma, many GB programs now utilize the Lean Kaizen/Rapid Improvement Event model, training GBs in how to execute the traditional DMAIC model in a matter of weeks rather than months. This has many advantages (obviously), but also means that GBs will not have the time or skills to do deep-dive data analysis often required in solving more complex challenges. Thus, more skill is required in developing proper scoping and resourcing of GB projects in order to ensure success. It is the Bon-Tech view that these "Lean Belt" Green Belts tend to be more successful than the old-school pure Six Sigma Green Belts, primarily because they are forced to get things done quickly, which only works when the entire team is included in the process and can reach quick consensus on what needs to be done. The emphasis on action has a strong psychological impact on participants, helping them to feel like there is no time to waste and that their efforts are really making a difference. From a change management perspective, this is hugely important in beginning to shift a culture from apathy to motion.

  When it comes to GB certification, action is generally rewarded. Most programs require one week of training, successful completion of a comprehensive exam, and the completion of just one project for GB certification. In some cases, there is a requirement that GB candidates be selected from among those who have participated

as team members on previous GB or BB projects. This provides valuable context and ensures that they know what they are getting into before they volunteer for training. However, most programs waive this requirement for practical purposes when they first launch a CPI/LSS program and, frankly, never get around to re-instating the requirements after the program has matured. It's one of those "good ideas" that few people do – but it's worth mentioning as a worthy long-term best practice.

In terms of numbers, there is huge disparity in the percentage of an organization that can or should be trained as Green Belts. Some models recommend that a mature organization be composed of 10% Green Belts, 1% Black Belts, and 0.1% Master Black Belts. *Truth time*; In fact, most of these models are arbitrary, and when institutionalized as operational goals, these measures can even be dangerous, encouraging a focus on training rather than a focus on project execution. Where the metrics are changed to focus less on training and more on certification (a slightly better model, since certification requires individuals to actually execute projects), there is still the danger that unimportant or "just do it" projects will be performed in DMAIC format just to meet the certification metrics. Ideally, such measures as number of or percentage of certified Belts are tracked as a lagging indicator of enterprise change management maturity, but never supplemented with targets or operational goals. Having the right GBs assigned to do the right projects in the right places is the responsibility of leadership, and any metrics that might incentivize people or organizations to do the wrong projects with the wrong people just to meet an artificial quota can quickly drive a program – and an organization – in exactly the wrong direction.

- *Black Belt:* Traditional Six Sigma Black Belt training was composed of 4-5 weeks of training, usually consisting of one week per month over 4-5 months. It is no coincidence that this coincides with the traditional duration of a Black Belt project, or that it includes training on the five phases of the Six Sigma "DMAIC" process. The intent was to train BBs in the skills of a particular phase of their project (for "Define" phase, tools such as project charters, scope, boundaries, business cases, cost-benefit analysis, team selection and development, stakeholder analysis, voice of the customer, etc.), with the expectations that after the training, the BBs would go back to their respective organizations and *DO* what they had learned. When they return for the next phase of training, BBs would report out on their project progress to their classmates, allowing both a peer-pressure-incentivized "pull" signal to drive projects forward, and a chance for all of the Belts to learn vicariously from each other's experiences.

  Even with the integration of Lean and Six Sigma (that is, an increase in the overall tool set and knowledge required to effectively fill the role of Black Belt), most CPI/LSS programs have felt the squeeze to accelerate training. This has led most Black Belt programs to dial back the training to just three weeks (and in some cases, less). Most programs save the time by eliminating the need for Black Belt students to "teach back" to each other the projects that they are working on. Also, many have reduced or even eliminated the need for students to learn the "hand-jamming" approach to statistics,

relying instead on statistical software to do the work. These are usually business decisions made for practical reasons by the program office, and while some studies have been done to evaluate the impact of these differences on program effectiveness, the Bon-Tech team generally shares the view that the studies are consistently biased in their assumptions and data collection methods, depending on whether they are sponsored by the business or the training developers. In short, the jury is still out on what "right" looks like.

An additional difference between programs is whether Green Belt training or certification is required as a prerequisite for Black Belt training. Some programs focus on "ramping up" resources of different skills, allowing pre-selected individuals to move directly to Black Belt training. Others presume that Green Belt training and experience in executing projects is the best way to identify GBs who might be a good fit for the more extensive (and expensive) Black Belt training.

While data are mixed on project benefits, the slower approach of requiring GB certification prior to pursuing BB certification does significantly reduce the attraction to people who just want the paper but don't want to do the work, and as such, is the approach preferred by Bon-Tech. While our BB training can be delivered in three weeks over the course of three months, our preference is to train Green Belts for a week and let them go apply their skills immediately in a project. Then, if they like it, they're good at it, and their leadership is convinced of the value of the training, they can return for two more weeks of Black Belt training. It's not the best way to crank out Belts, but in our experience it is the best way to crank up results while keeping training costs down.

Traditional certification requirements for BBs include successful completion of at least 4 weeks of total training, passing a comprehensive exam, and successful completion of at least 2 BB-level projects (with "success" being defined by the project sponsor for whom the projects were executed). Some programs require additional certification steps, such as mentoring GBs through certification, financial goals, time in service, or teaching GB classes. Again traditionally, GB is a part-time position (what the military might refer to as an "Additional Skill Identifier" (ASI) that helps people to be more effective at their "day-jobs"). In contrast, BB was originally designed to be a full-time position.

Put differently, the role of Black Belt is the role of the full time Performance Improvement professional, traditionally lasting about two years before individuals rotate back into their next leadership position (nearly always a promotion above the position from which they were chosen when they entered the BB program). During their time in the *role* of Black Belt, the expectation is that BBs will demonstrate their skills and abilities and achieve BB *Certification*. After moving on from the role of BB, they may continue to maintain the professional title of Certified Black Belt. In some models, certified BBs are required to rotate back into the organization for at least two years prior to requesting to return to the CPI/LSS program office for a rotation in the

role of *Master Black Belt*. Again, the thinking is that the best performance improvement practitioners come from, and ultimately return to, the core functions of the company.

- *Master Black Belt:* Where GBs execute tightly-focused, within-department projects (ideally using a kaizen/rapid improvement event approach) and BBs execute more complex, cross-departmental projects (ideally, with the assistance of Green Belts), the role of the Master Black Belt is traditionally a balance between coaching/ mentoring/ teaching the GB and BB skills, helping to manage the complexities of standing up new CPI/LSS program offices, and leading end-to-end enterprise-level transformation projects. Program models are mixed regarding whether MBBs are actually responsible for meeting financial goals for the organization. Where finances were actively added to MBB responsibilities in the late 1990s and 2000s, more recent change management research indicates that this creates an adversarial relationship between CPI/LSS offices and the Operational department leadership.

  Best models have a single process and budget owner on the operational side who is ultimately accountable to the executive team for strategic deliverables, including operational, quality, and budget performance, while LSS resources are made available to support the leadership as an enabling tool to meet these goals. Ideally, Master Black Belts engage in the development and execution of the enterprise strategic plan, helping to ensure clean integration of cross-enterprise projects that are led by BBs and GBs, sponsored by management, and Championed by the Executive team as necessary.

  From a skill-set perspective, Master Black Belts need to be very diverse, with both training and experience in parametric and non-parametric statistical analysis and visual displays of data, as well as change management, strategic planning, and financial skills. Master Black Belt training varies widely in duration and content, depending on the intent of the program. Most MBB programs are two to three weeks in duration (following the typical one-week-per-month model). MBB Certification is usually a combination of time on the job (2-3 years minimum as a full-time CPI/LSS professional), training delivery (GB, BB, and Executive champion training), coaching/mentoring (usually they must coach at least 2 BBs through certification), examination (comprehensive certification exams may be delivered immediately following training, or after successful completion of all other requirements, depending on the program), and other skills (sometimes related to finances, strategic goals, or enterprise-level projects).

  From an organizational population perspective, MBB is a relatively scarce skill set, usually representing just 1 individual per 1000 employees in a mature organization. As an allegory, consider the apples in an orchard. Green Belts have the basket and skills necessary to quickly pick up the fruit on the ground or hanging from the lowest branches. Black Belts have ladders that allow them to climb up into the tree where the bulk of the fruit can be found. Master Black Belts have very tall ladders that allow them to get far up into the top-most branches where the most challenging, but also the sweetest fruit can be found. The fact is, most orchards can run just fine with baskets

and shorter ladders. There simply isn't as high a demand for Mastery… but it absolutely vital that every organization have at least one or two good, tall ladders handy!

- *Executive Champions, Sponsors, and Process Owners:* These terms are used synonymously in some programs, and very differently in others. While the titles themselves are not terribly important, understanding the different roles within the program is critical to success. Phrased more classically, the Roles, by any other name, doth smell as sweet, and represent responsibilities that are mandatory for the success of any program, any project, anywhere. The LSS community has simply borrowed these concepts from classic project management and, at least in some cases, provided new names.

  As a rule, a *Process Owner* is the lowest ranking person with decision-making authority over the portion of the process that falls within the scope of the project. In a widget manufacturing process, this might be the Supervisor who oversees the widget assembly line. In an HR office, this might be the individual responsible for maintaining accurate personnel records in the PeopleSoft database.

  In these situations, it is often the supervisor of the *Process Owner* who takes on the role of *Project Sponsor*. The Sponsor has a wider view of how process changes might interact with other aspects of the organization, and as a peer to the other managers, can keep them informed or request resources that can help the project to be successful. In the Widget shop, the Project Sponsor might be the Operations Manager. As a peer to the Materials Manager and Maintenance Manager, the Ops Manager can request SMEs from other departments who can help support the team's efforts. In the HR Office, the HR Manager would play a similar role. Again as a rule, the Process Owner is the one who would "Own" the project for the Department and keep senior leadership informed on progress. *Truth time*; In organizations that rely on the Belt to keep leadership informed, there is danger that they lack the authority necessary to implement the changes that the team suggests, and if the Project Sponsor has no accountability to ensure project success, apathy or lip-service-only support from the Sponsor can result in project failure despite the best efforts of the team. This is an untenable position for the Belt, and a recipe for frustration and failure. Only accountability at the appropriate level can help to systematically mitigate this risk, and clear roles like Process Owner and Project Sponsor are critical in this regard.

  Finally, the role of *Executive Champion* falls to an individual who has both vested interest in the strategic success of the project, and the authority to break down any barriers to success that might arise – whether internal or external. Executive Champions may never have to do anything other than acknowledge that a project is being done and that they support it, but this level of visibility and top-cover can go a long way when it comes time to ask for cross-departmental assistance for the team like help from the IT department in understanding how best to change access requirements or availability for certain software.

Again, since these leadership roles are ubiquitous to any successful project of any kind, most organizations already have a common title or term for at least some of them. The challenge in standing up a new CPI/LSS Office is in giving these roles standard names that everyone across the organization can use to mean the same things. Where no organizational standards exist, these LSS-friendly terms are recommended. Where terms exist that everyone understands, Bon-Tech recommends that you go with what people know.

- *White Belts and Yellow Belts:* For sake of completeness, we will include a brief explanation of the roles of White Belt and Yellow Belt. First, there is virtually zero agreement in the industry as to what these terms really mean. Second, there is vast disagreement as to whether they add value in managing change, or simply serve to line the pockets of consultants and training organizations and build the budget and prestige of the CPI/LSS Program Office. In general, *White Belts* are trained at a very low taxonomy level, with perhaps as little as an hour or as much as a day of CPI/LSS awareness training. The theory is that if everyone learns the basic language of the program, it accelerates the acceptance and ability of the GBs and BBs to do their projects.

  Yellow Belt training may range from half a day to two days in duration, and is often required for people who will serve as team members on new GB and BB project teams. Again, the theory is that if everyone is brought together and taught the basics of what a LSS project is, how the project is expected to progress (across the DMAIC phases), roles of different team members, project timing, how some of the basic tools work, etc., it will level-set the team and improve both the speed and probability of success of the project.

  The counter-argument to WB and YB training is simply this: by definition, training is non-transformational. The goal of CPI/LSS programs is not to teach people about change, but to train just what is needed, just when it is needed, in order to successfully *execute* change. From a Lean perspective, training 100% of people as White Belts is 100% non-value-added. Those who need to know will be involved in strategic planning or project selection, or as SMEs on projects, or as Belts and Sponsors and Process Owners. Those who don't need to know about it, well…, don't need to know about it. They can learn from conversations in the hall or posters on the wall, and if they want to learn more, they can ask. And as for the YB training for those who are selected to be on teams? The argument can be made that the job of the GB or BB is to provide just-in-time training on how a tool works and then have the team do it. That's it. No need for special training for people who may or may not be on a team that may or may not use all of the tools they learn about. In some programs, "credit" for being on a successful GB or BB team is given by granting team members Yellow Belt certification at the completion of the project. This is the "Lean" view, where certifications are considered of secondary value, and training should never distract from execution.

Again, arguments abound on both sides of these views for WB and YB training, even among experienced Bon-Tech professionals. Our policy is to refrain from taking a personal position on the matter. However, we will say that while Bon-Tech does possess training materials and certified instructors to deliver WB, YB, GB, BB, and MBB training, to date there are no Bon-Tech certified White Belts or Yellow Belts… and when questioned about this, our President simply commented, "I'm perfectly fine with that. At the end of the day, WBs and YBs are not responsible for leading projects. GBs, BBs, and MBBs *are* responsible for leading projects. From a professional certification perspective, where do *you* think the best value can be found?" Hmmm. Enough said.

