Getting Your House in Order
The Road to Improvement
By
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With the increase in the number of people working remotely during the Pandemic, many of us have been spending much more time at home. We are using our home systems more and stressing them in a way we have not done before. Things like leaking plumbing and the weird noise the air conditioner is making or the sub-performing freezer that we tolerated when we were at the office 40 hours a week are now critical issues because we are now home working and home schooling all hours of the day. Now that circumstances have changed and we are more impacted by the state of our household processes, we may well decide they should be looked at, repaired and improved (assuming we can find a plumber with the time!).

Our business processes have also been stressed by people working remotely. Before the Pandemic, process failures that could be reversed or mitigated by people and resources easily available 40 hours a week (or more) are now becoming more obvious, visible, and frankly, disruptive. Like our leaky plumbing at home, the defects and rework in production, accounting, sales, or marketing that we used to live with have moved from an annoyance to a critical issue. Without resources close at hand, more and more organizations have realized they must improve those current process inefficiencies, disruptions, and waste. Now is the time to take a step back and revisit improvement of processes, customer relationships, efficiencies, and profitability.

Just as you would not start your home repair by replacing all pipes, air conditioners or freezers, we are also not talking about wholesale changes such as elimination of processes, implementing IT solutions for everything or replacing less than efficient production equipment in your business. We are talking about:

1. Looking at what your organization is doing as a System as well as from a process perspective
2. Understanding the interrelationships between the different parts of the organization
3. Mapping the key macro (level 1) and where appropriate, micro processes (level 2 or level 3), and making those maps accessible for people learning or having questions about the processes
4. Analyzing the process for waste and other customer non-value-added activities
5. Identifying improvement opportunities and using basic Lean and Six Sigma tools to
   a. Eliminate waste that costs time, resources, and money
   b. Reduce variation that produces uneven and unpredictable results or customer defects
   c. Create greater flexibility in your process so you can be nimbler and more responsive
   d. Improve turnaround time so you can increase capacity, and generally
   e. Provide more of what your customer wants and needs at a lower cost and higher quality

The tools and methodology we are using to accomplish the above are simple and have been part of the Lean Six Sigma and continuous improvement tool kit for a long time. It is the unique combination of these tools with the Road to Improvement facilitation approach that has made our methodology successful and easy to accomplish virtually. The plumber is in the building!

Travel the Road to Improvement in ten steps.

1. **Create a Level 1 SIPOC Map** (Supplier-Input-Process-Output-Customer) of the high-level (level 1) organizational process.
2. **Develop a process inventory** to identify all key processes at the next level and documenting interrelationships between those processes.
3. **Identify the most critical work processes** using the process inventory - this will provide a strategy for digging deeper into the most important work.
4. **Create a Level 2 SIPOC** for each of the critical processes.
5. **Create the level 2 process flowchart draft** using the SIPOC process as a starting point.
6. **Convert the process flow map to a Visio Swimlane diagram** for more clarity and detail (the Visio mapping happens off-line and then is confirmed with the team).
7. **Do a Value Analysis** using the Visio diagram as the foundation. Distinguish which activities are Customer Value-Added (CVA), Business Value-Added (BVA) and Non-Value-Added (NVA). Identify any pain points that exist in each process step.
8. **Create a dynamically linked Visio System Map** linking all the critical processes and the relationships between those processes.
9. **Identify the best opportunities for improvement** from the Value Analysis.
10. **Form Improvement Teams** of varying complexity, depending on the desired improvement, and use data and the basic tools of improvement to put improvements in place.

The Roadmap to Improvement Facilitation will be:

Virtual! It is important to note that the steps of the Road to Improvement can be done in virtual team meetings using web based teleconferencing platforms and collaboration applications. Virtual meetings also mean no travel (and its costs) and a safe COVID-free working environment for your team and your facilitators.

Executed in digestible chunks. Prior to the Pandemic and the subsequent move to remote work, the Road to Improvement required a team workshop lasting approximately three full days onsite. It has been our experience that using more frequent meetings (twice a week up to daily) and shorter time frames (2 hours) is an optimal approach to progressing through the Roadmap to Improvement while still getting daily work done. Also, more than two hours and the intensity of the sessions tends to lead to intellectual fatigue and diminishing returns.

Iterative – the learnings build throughout. The two-hour blocks of work spread out over a few weeks allows the participants to think about, digest, internalize and review their work output often resulting in greater enthusiasm about the process and the opportunity to go back and observe the application of what they did in the actual workplace. This creates a greater insight for the

participant. We have found that when we start with a review of the previous work in the next session, there is often constructive revision because the participant went back and viewed their process in a different light.

Facilitated by experts. The facilitation of the Road to Improvement is critical to success. Objective interrogation of the process by external experts keeps the team from falling into the traps of thinking that "we have always done it that way" or a defensive posture because somebody may be "calling their baby ugly". Facilitators will also ensure your teams make the most out of every session and never drive into a ditch along the road or go down a rabbit hole. They will take as much of the work as possible off-line while your team spends their time on what matters most – using their expertise to build the substance of the maps that will document your system and identify fertile areas for improvement. This means your team need not become experts in Miro, flow charting or Visio swim lane process mapping – unless they want to!

Fun! Our clients warm up to these meetings quickly. The Facilitators find humor in the process, making it an enjoyable experience. The teams really enjoy talking about their passion – the work they do. They are excited to make an impact by improving things that keep them from doing their best work every day. Once the Facilitators build an environment of trust and respect with the team then change management is easier because the improvements come from people who DESIGN and WANT the change. We must convey the idea that we are not there to criticize, intimidate or judge their work efforts but to help them bring out the best in them and help make their processes and jobs the best they can be. And to top it off, the feedback has been that the team members learn a lot about their own processes and appreciate that the deliverables will help them to speak clearly and concisely to other departments about how to best collaborate to get top results.

On the surface, the process looks simple. And it is. The key is in the disciplined use of the tools and the structured interrogation of the process throughout the Road to Improvement. Experienced facilitators are critical to creating an environment where the process owners, process experts and the rest of the Team feel comfortable discussing the realities of what is really going on in the process.

Think about it and invite us to YOUR HOUSE to see what we can do to help you Get Your House in Order using the Road to Improvement.

For more information on how we can help you Get Your House in Order please call or email us at:

mmonda@mondaconsulting.net (203)554-5600 or DrKen@optecconsulting.com (954)552-3406

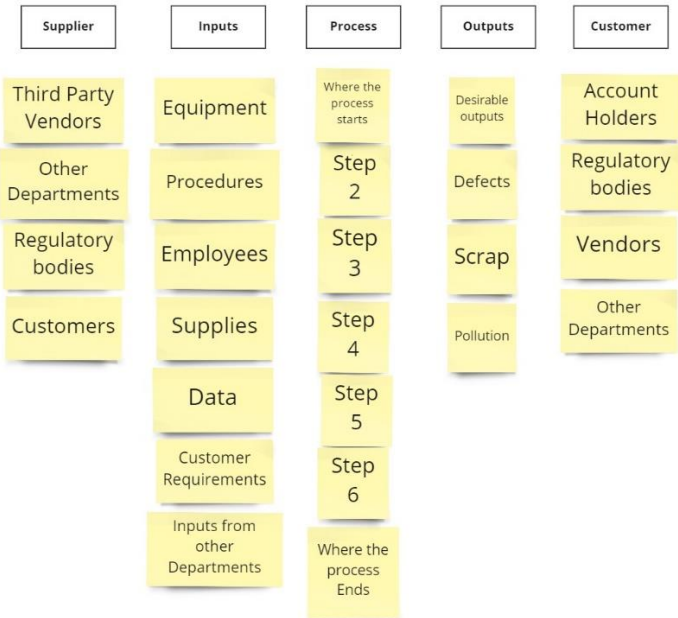## Appendix 1: The Roadmap to Improvement: Facilitated Focus and Deliverables

Roadmap to Improvement Step 1

Create a Level 1 SIPOC Map

Focus

- Agree on the level 1 process
- Think macro level end to end
- Understand outputs can be good and bad to the customer
- Think about who else, (e.g., suppliers, stakeholders, and customers) are involved in the process
- Identify key metrics

Create a Level 1 SIPOC Map – We have found the MIRO collaboration tool to be quite easy to use and sophisticated enough for the team to feel involved in the creation of the SIPOC. MIRO allows for the use of "post it notes" just as we would use for an in-person session.

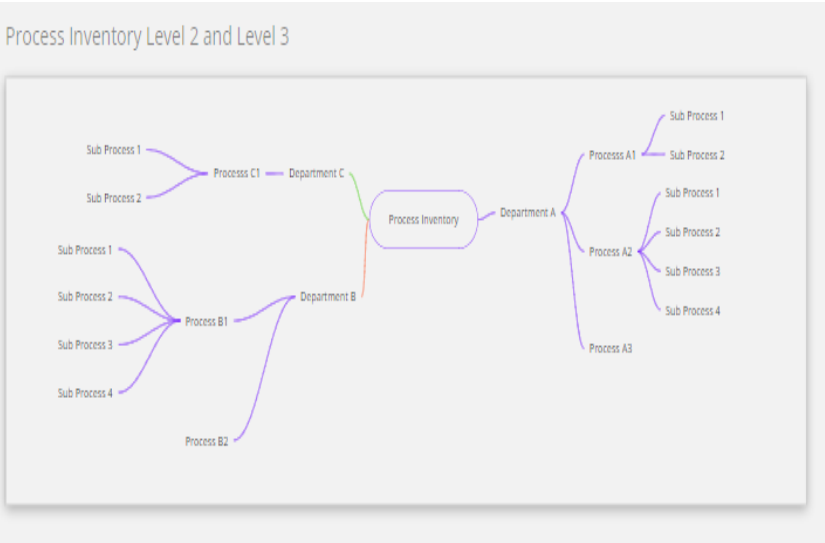| Supplier	Inputs	Process	Outputs	Customer
Third Party Vendors	Equipment	Where the process starts	Desirable outputs	Account Holders
Other Departments	Procedures	Step 2	Defects	Regulatory bodies
Regulatory bodies	Employees	Step 3	Scrap	Vendors
Customers	Supplies	Step 4	Pollution	Other Departments
	Data	Step 5		
	Customer Requirements	Step 6		
	Inputs from other Departments	Where the process Ends		

Develop a process inventory – The mind map feature in the MIRO application is a perfect tool for creating the process inventory. There is a lot of moving processes around as order and interrelationships are documented. Bonus: Avoids system suboptimization – when improving one process negatively impacts another.

Process Inventory Level 2 and Level 3

Roadmap to Improvement Step 2

Develop a process Inventory

Focus

- Data dump of all level 2 and level 3 processes
- Identify any natural process order or interrelationships
- Prevents suboptimization of the system

Identify the most critical work processes - Using the process inventory will provide a strategy for digging deeper into the most important and interrelated processes.

Roadmap to Improvement Step 3

Identify the most critical work processes

Focus

- Discuss relative importance of the processes in the system
- Choose processes to flowchart in the next step
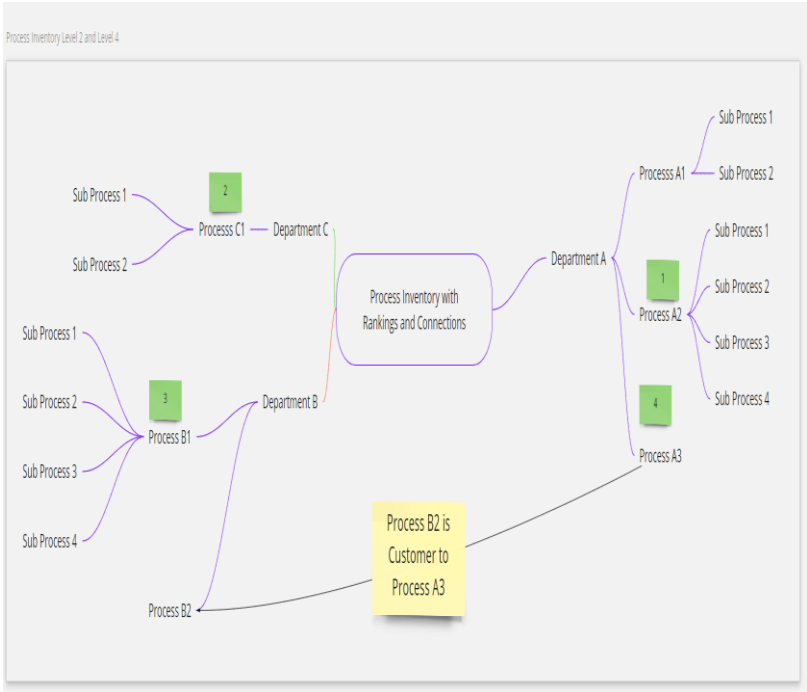
Create a Level 2 SIPOC - Drill down to the next few levels, as appropriate, and create the level 2 SIPOCs of the most critical level 2 processes.
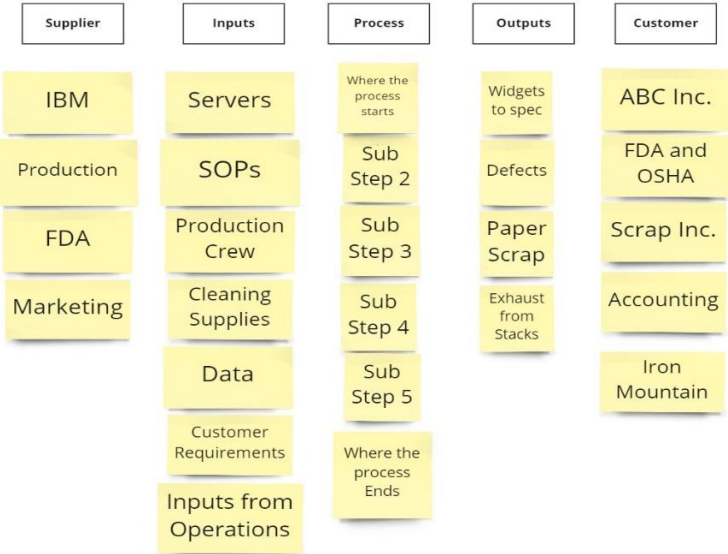
Roadmap to Improvement Step 4

Create a Level 2 SIPOC

Focus

- Understand that processes flow down into deeper details
- Identify a starting point for the more detailed process mapping
- Document process inputs that could be critical to process improvement

Roadmap to Improvement Step 5

**Create the Level 2 Process flowchart draft**

Focus

- Continue to practice system thinking and map processes flowing downward into greater detail
- Identify process actions completed by other departments
- Think through the logic of how the as-is process works

Create the level 2 process flowchart draft – Starting with the process steps in the level 2 SIPOC, capture the process flow and steps. This results in a draft version of a Value Stream Map. This informal approach of following the process flow is appreciated by team members who may never have flowcharted a process before.
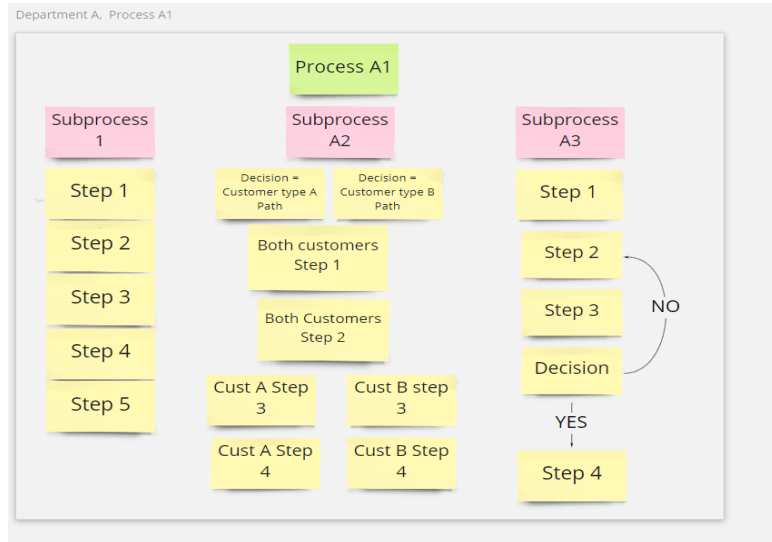
Convert the process flow map to a Visio Swimlane diagram. This provides for more clarity and detail (this happens off-line and then is confirmed with the team).
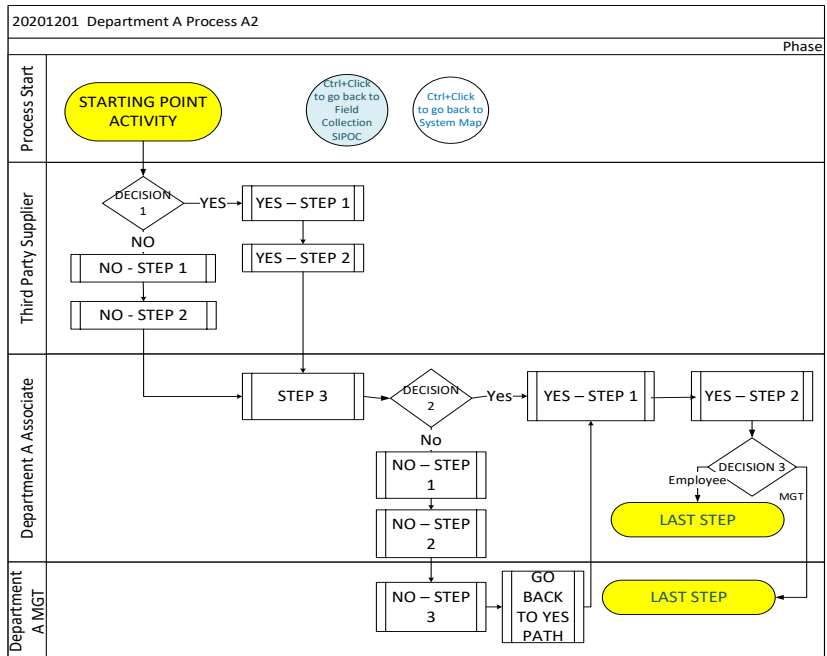
Roadmap to Improvement Step 6

Convert the process flow map to a Visio Swimlane diagram

Focus

- Review and revise the process flow as needed.
- Agree on the final depiction of the level 2/3 process
- Keep track of any pain points that may arise during the process documentation

Do a Value Analysis - Using the Visio diagram as the foundation, distinguish which activities are Customer Value-Added (CVA), Business Value-Added (BVA) and Non-Value-Added (NVA). Identify any pain points that exist in each process step.
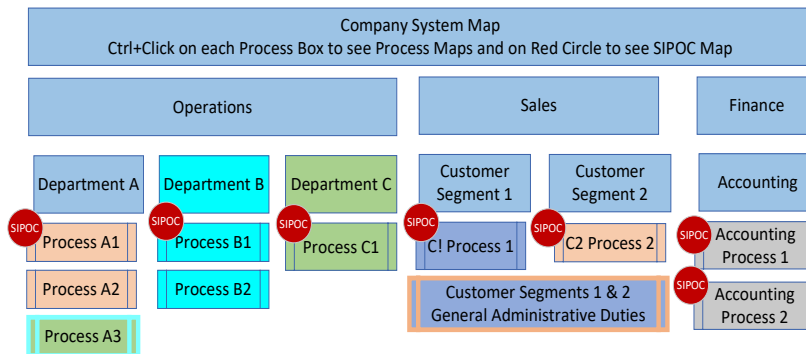
Do a Value Analysis

Focus

- Start thinking about the process from a customer's point of view
- Identify opportunities for improvement
- Better understand how customer centric the process is
- Ask questions about business-value-added activities or non-value - added activities
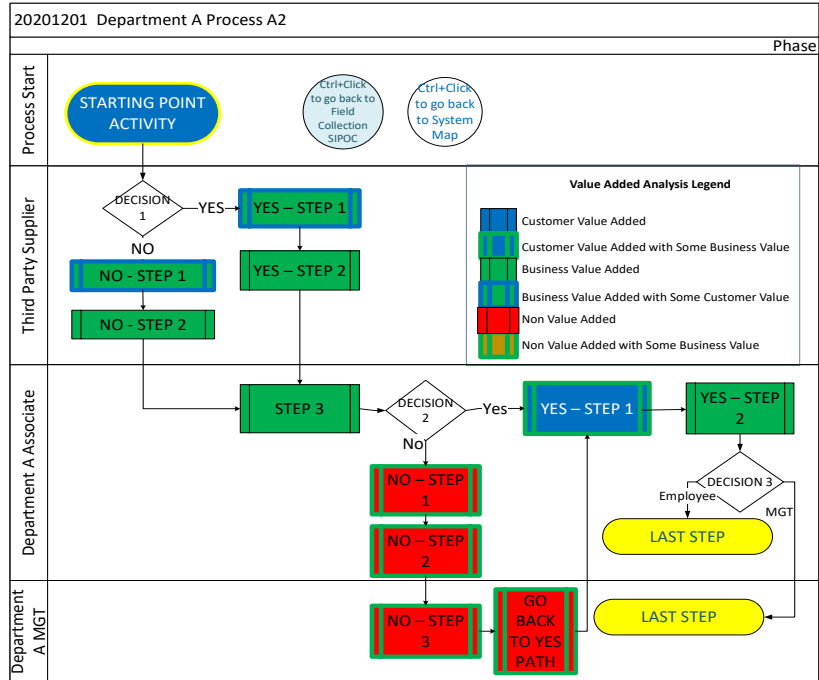
- **Create a dynamically linked Visio System Map -** Links all the critical processes and the relationships between those processes. This takes a complex system of process maps, organizes it within and between departments, and puts it all at the team's fingertips in an easy to navigate format. The system map may be seen as a living document of the system of processes that will need to be continually updated.

Create a dynamically linked Visio System Map

Focus

- Link the individual maps within each department and between departments
- Use the system map to enable training within the department and communication outside the department
- Create a central repository for process documentation

Identify the best opportunities for improvement from the Value Analysis. A simple Benefit/Effort Matrix is a useful tool for this activity. The sweet spot is high benefit and low effort projects. However, high benefit, high effort projects should not be ignored. They can be real game changers.

Roadmap to Improvement Step 9

Identify the best opportunities for improvement

Focus

- Use the value analysis to identify a list of potential improvement projects
- Rank these projects as to the benefit (high, med, low) and effort (high, med, low)
- Size of the bubble is the "size of the prize" of the financial impact
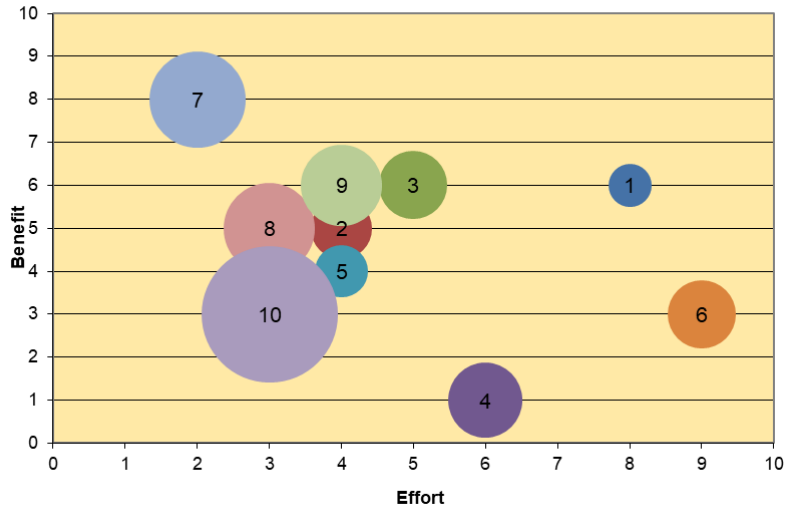
Form Improvement Teams of varying complexity, depending on the results of the analysis conducted in Step 9. Use data and the basic tools of improvement to carry out quick wins and just-do-It actions. Hold Kaizen events or kick-off full blown DMAIC or DMADVI/DMEDI projects to develop improvement recommendations and implement complex process improvement.

Roadmap to Improvement Step 10

Form Improvement Teams

Focus

- Leverage the momentum and goodwill that is a result of this work to quickly implement as many quick wins as possible
- The team identifies the changes they want in their own work processes. They will support and advocate the improvement changes.

Author Bios

Marilyn Monda MA, MBB

Marilyn Monda is a statistician, Master Black Belt (GE) and Change Management Level 2 (Conner). She has been a Quality Professional/ Process Expert for over 35 years. She has spent her career fostering quality improvements in the private and public sectors and in a variety of industries including, for example, Pharma (Merck, Pfizer), Finance (GE Capital, Synchrony), Government (NASA, NPRDC), retail (Walgreens and Nature's Bounty) and Manufacturing (Here Technology and ALCOA).

Marilyn's process analysis skills provide innovative solutions to thorny problems and has resulted in millions in savings and increased productivity for her clients.

Marilyn has been an independent consultant for the past 7 years. She holds a triple MA in statistics, psychology, and computer science. Early in her career she was mentored by W. Edwards Deming and assisted him with clients and at his famous 4-day seminar, Quality, Productivity and Competitive Advantage.

Ken Feldman, PhD, MBB

Dr. Ken Feldman is a Lean Six Sigma Master Black Belt. Prior to becoming an independent consultant, Ken was a Senior Director of the Rapid Continuous Improvement effort at Dr Pepper Snapple Group. He has more than 40 years of experience helping organizations improve quality and performance in a wide variety of industries.

Previously, Ken was a Principal with Accenture Consulting in their Pharmaceutical Practice, an SVP in the Quality and Productivity Group at Bank of America, the District Director of Performance Improvement at the North Broward Hospital District and worked at GE Capital doing global LSS training and coaching. Ken also teaches Statistics and Operations and Supply Chain Management in higher education.

Ken has a dual Ph.D. in Industrial Engineering and Psychology with the distinction of having Dr. W. Edwards Deming, the esteemed quality Guru on his Doctoral Committee. He also holds an MS in Industrial Engineering, an MBA and a Certificate in Occupational Safety and Health.