

Building Supervisory Skills through TWI Methods

By: Lloyd Johnson

With the threat of world war in the late 1930s, it became apparent that the demand for soldiers and military equipment would be greater than anything we had ever experienced as a nation. A completely new approach to training new, unskilled manufacturing workers would be needed to meet this demand. In 1940, the US Government established the Training Within Industry Service to meet the challenge. TWI developed methods to build supervisory skills that caused productivity to skyrocket. Aircraft and shipbuilding output reached record levels. But by late 1944 with the end of war in sight, orders began to decline. And many of those returning from war already had supervision skills, so these TWI methods were quickly set aside in the US and remained "lost" for almost 60 years.

Today, manufacturing is playing a leading role in the nation's economic recovery by adding 504,000 jobs between February 2010 and October 2012. (Economic Policy Institute, article

#351, Feb 2013). Once again, manufacturers are turning to supervisory skills as a way to increase their productivity and competitive edge. Recent studies show that a few basic skills, practiced by first-line supervision, are essential to achieving these improvements. Those manufacturers who transition to a "lean enterprise" credit their success to skilled supervisors and team leaders. Best of all, these skills can be learned through applying the TWI methods.

TWI has three specific job training methods for manufacturing supervisors and team leaders -- job relations, job instruction, and job methods. Each method is learned during a ten-hour workshop that teaches practical supervision skills that can be put to use immediately.

Job Relations (JR) teaches supervision how to treat people as individuals and effectively deal with human-relation problems rather than ignoring them. This skill reduces workforce conflict and improves behavior and morale.

Job Instruction (JI) teaches supervision how to plan workforce training, how to break down specific jobs for instruction, and how to effectively train workers to do the job safely, correctly, and conscientiously. This skill reduces the need for retraining and improves workforce quality and output.

Job Methods (JM) teaches supervision how to break down jobs into a series of steps and how to make simple changes that improve manufacturing flow. They learn to question why a step is done and whether it could be eliminated, combined with something else, rearranged for better flow, or simplified to make it easier to do. This skill improves and often shortens processes.

Taken together, these three workshops help supervision develop the skills they need to handle workforce problems, provide effective job training, and make process improvements.

Several companies in the Southern Tier have already discovered

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TWI will improve your supervisory team



Alliance for Manufacturing & Technology

HOW WE HELP

- Business Assessments
- Strategic Planning
- Lean Enterprise
- Supervisory Training (TWI)
- Project Management
- ISO/AS Quality Systems
- Sales and Marketing
- New Opportunity Identification and Growth — Markets, Products, Services, Customers

AM&T is a not-for-profit economic development organization that receives significant financial support from the New York State Foundation for Science, Technology and Innovation (NYSTAR), and the National Institute of Standards and Technology (NIST) Manufacturing Extension Partnership (MEP). AM&T is a NYSTAR® designated Regional Technology Development Center for the Southern Tier and is one of nearly 50 MEPs located across the country. AM&T works directly with regional companies to increase their competitiveness and profitability.

This publication is funded in whole or in part by NYSTAR. Any opinions, findings, conclusions or recommendations expressed in this publication are those of the author(s) and do not necessarily reflect the views of NYSTAR.



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Empire State Development, Division of Science, Technology & Innovation

Building Supervisory Skills

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the benefits of applying TWI methods. Astrocom Electronics, Audiosears, Borg-Warner, C&D Assembly, CAFUSA, Cameron Fabricating, Custom Electronics, Hardinge, Kennedy Valve, Transonic Systems, Silicon Carbide Products, Standard Printed Circuits, VMR Electronics and others have used increased supervision skills to improve their workforce, increase productivity, and become more competi-

tive. They have “found” the lost TWI methods and rediscovered that they work!

AM&T stands ready to assist other companies in the Southern Tier with discovering this “lost” approach and reaping the benefits of TWI. For more information about AM&T’s TWI workshops or to schedule a meeting to discuss the potential benefits to your organization, contact Kim Cunningham at 607-725-1225

Lean Times Require Lean Measures

By: Chris Anderson

When is a good time to implement lean? If times are bad and you’re in a recession you need to get lean now in order to handle the increased work resulting from internal layoffs. But Lean as a strategy also means being more efficient when times are good in order to increase your competitive advantage. When can you stop becoming lean?

Lean helps an organization release unnecessary capacity, we call this waste. Just like a diet program is designed to reduce fat from your body. Fat is just extra calories or stored energy your body is not using. This is also wasted energy. In business this wasted energy has many forms: inventory, rework, defects, inspection, overproduction, unnecessary motion, delays, over-processing, and unnecessary transportation. Lean thinking is like a diet pro-

gram designed to eliminate this waste.

In bad times you may be forced to do less and as a result you can use lean to adjust to the recession. But it’s the good times that are more likely to cause your business to gain weight. When times are good it is just too easy to add people, begin unnecessary work, build inventory, and absorb unnecessary transportation. It is exactly the good times that implementing lean production methods is needed even more.

So in bad times you need to implement lean to survive the recession, in good times you need a lean competitive advantage. When can you stop becoming lean? I believe your business can always use lean. Just like a diet program requires you to change your eating habits, forever, you can never stop being lean either.

Five Things You Need To Do To Drive Successful Continuous Improvement

By: Bernard Borowski

Change is inevitable. New business paradigms require new tools to embrace the ever changing environment. Implementing a continuous improvement program is one of the critical initiatives that enable a company to adapt to change and create a competitive advantage. As many companies embark on launching continuous improvement programs or reviving past programs that stalled, they must take into account the following five elements leading to successful and sustainable continuous improvement.

1. **Align continuous improvement with the strategic objectives of the organization**

Continuous improvement should not be considered as a standalone initiative or a goal in itself. The continuous improvement program and its resources should be totally aligned to deliver the strategic objectives of the organization. When launching a continuous improvement program you need to make an impact quickly to build credibility. Therefore you may need to pick your battles and not try to tackle all of the objectives at once – but the focus should be on a strategic objective.

2. **Don't try to go all the way on process excellence: Balance product leadership and customer intimacy.**

Your organization needs to

position itself at a level of operational excellence that meets the strategic objectives and does not compromise product leadership and customer intimacy. Treacy and Wiersema, highlighted clearly that balance in *The Discipline of Market Leaders*. Therefore, conduct a continuous Improvement assessment to determine where your organization is and where it should be in terms of process excellence.

3. **Make continuous improvement part of creating a high performance culture**

To create a high performance culture you need a strategy. Create a vision, a mission and values and set objectives throughout the organization accordingly; providing routine feedback on how to improve. Next, develop the organization's winning behaviors and critical skills; rewarding those who made improvements. Then, set up the continuous improvement program that delivers process excellence.

4. **Blend the best practices from the different methodologies**

Focusing on one methodology for continuous improvement can hold back the possibilities. The old model that focuses only on one unique methodology limits the ability of the organization to realize its full continuous improvement potential. We find that utilizing a blend of

best practices from Six Sigma, Lean, Goldratt's TOC and GE's CAP (Change Acceleration Process) provide the optimal result when you have a plan and execute it.

5. **Focus on data, not emotions**

We are often told that continuous improvement is a mindset, a culture. This is true. Nevertheless, it does not exonerate us from going through the process discipline and the rigor of data driven decisions. Such a mindset is actually achieved by a set of actions that are measurable and specific, as part of a continuous improvement program. Continuous improvement must be measurable.

Continuous improvement goes hand in hand with creating a high performance culture. Attaining and sustaining such an achievement requires the implementation of a rigorous program, with measurable targets and milestones. As any corporate initiative, it should rally the organization around its strategic objectives and offer a flexible set of methodologies to execute. To commence or jump start a continuous improvement program it is highly recommended that an organization knows where it stands in terms of strategy, tactics and capability. It is highly recommended that the company perform a Continuous Improvement Assessment for that purpose. The ROI for this type of process is very compelling.

We Can Help You With Continuous Improvement

Art of Managing - You Can't Scale With Bad People

By: Art Petty

There's no formula, no strategy, no approach to building a great business that allows you to short circuit the need for great people.

You don't win in new markets, solve big problems, thump competitors and build offerings and services that delight customers with anything less than great people.

Yet, too often, we as managers tolerate poor performers, create "special rules" (aka double standards) for performance and fail to put the effort forth to find, engage and cultivate the absolute best people for today and for tomorrow.

Part of getting the success equation right is having the courage to make the tough calls on people for the right reasons.

Deal with those who don't have the skills or heart to help form the future fairly and honestly. Don't shirk your responsibility.

Invest relentlessly in those who can fit and have the heart to grow and develop. Your most loyal and productive people will come from the ranks of those you had the courage and grace to invest in and support.

People who don't fit the values... don't have the character and ethics your firm aspires to, never fit. Deal with them unwaveringly and expeditiously. No double standards allowed.

And if you're stuck in that camp where the people in your firm are costs on an income statement and that's all they are, you're the problem.

The Bottom-Line for Now:

You can only scale with great people.

Clear Expectations

By: Guy Harris

Poor performance, turnover, conflict and disengagement. This reads like a checklist of most leaders' worst fears. I know, because they get mentioned to me nearly every day when I talk with, coach, consult with and train leaders.

And while there is no single silver bullet answer to solve all of these problems, there is one major component common to all: unclear or mismatched expectations.

For optimum performance and strong relationships, make sure expectations are crystal clear in these four areas...

The work itself. People need to know exactly what is expected of them for the work itself. What levels of work quality are required? What defines successful completion of work? What are the boundaries on responsibilities? What are and what aren't the roles of the job? For optimum performance and strong working relationships, these must all be clearly understood and mutually agreed to.

The communication. How do we communicate? About what? When? How often? Communication is a critical component of organizational life and is far too important to leave to chance. If you

want to improve the communication in your organization, spend some time clarifying what is expected in your communication.

The time. What does "I need it Friday" mean? Does it mean it is on my desk at the start of my day or is the close of business fine? Does it matter when people work or how they work? Without clarity here, people could either be on their email device 24/7 striving for immediate response, or at the other extreme assuming a couple of days is fine for that request.

The culture. People don't work in a vacuum – the workplace itself is an important component of the work itself. When people are hired, they bring their past experience and habits with them. If those experiences and habits differ from "the way things are done around here", there will be mismatched expectations. Help people see that understanding and matching their behavior with cultural expectations, while more subtle than some other factors, is incredibly important to their success.

To create great performance, improve employee satisfaction and engagement and reduce the incidences of workplace conflict, spend more time on setting clear expectations.

"Success is getting what you want.
Happiness is wanting what you get."
~ Dale Carnegie

Driving to Zero Defects "8 Step Quality Defect Reduction Method"



HOST COMPANY
The Raymond Corporation



The Raymond Corporation, a Toyota Industries (TICO) member company is a global provider of materials handling equipment, technology, expertise, and support. Raymond manufactures electric lift truck products for the narrow aisle and very narrow aisle market segments in Class I, II, and III (Counterbalanced, Narrow Aisle, Pallet Truck).

The company was founded in 1922 and is based in Greene, NY. It has manufacturing sites in Greene, NY and Muscatine, IA, and a parts distribution facility located in Syracuse, NY.

WORKSHOP DESCRIPTION

Raymond will provide a tour of its manufacturing operations highlighting how it has applied the Toyota Production System (TPS) Principles and Tools.

In the afternoon, Raymond will review its 8-step method for reducing quality defects, including how each step is performed and its key points. A critical part of this method is Raymond's daily morning market or Asaichi meeting, which will also be highlighted during the workshop.

Asaichi morning meetings are used to communicate problems, share countermeasures, and speed overall resolution. Since every problem is an opportunity for improvement, this process helps leader's and associates understand that quality is everyone's responsibility.



DATE: November 14, 2013
TIME: 8:00 am to 4:00 pm
LOCATION: The Raymond Corporation
22 South Canal Street
Greene, New York 13778
607-656-2311
COST: AME Member: \$395
Non-Member: \$495
REGISTRATION: www.ame.org

WHO SHOULD ATTEND

Any level of the organization from front line Team Leader to CEO.

Individuals and teams encompassing a cross section of your company.

PARTICIPANT BENEFITS

- Gain an understanding of how to effectively reduce quality defects.
- How Asaichi meetings work.
- The benefits of Asaichi morning meetings.
- How to engage all team members and departments and be part of the solution.

COURSE AGENDA

- 8:00 to 8:30 am: Registration and welcome
- 8:30 to 9:30 am: Overview of The Raymond Corporation
- 9:30 to 11:00 am: Tour of The Raymond Corporation
- 11:00 to 11:30 am: Q&A
- 11:30 to 12:00 pm: Lunch (provided)
- 12:00 to 3:30 pm: Driving to Zero Defects
- 3:30 to 4:00 pm: Wrap-up

Workshop Objectives:

- Review 8-step method for reducing quality defects
- Review Asaichi meeting roles, format and process

The workshop will be facilitated by Scott Campbell, TPS Manager at The Raymond Corporation and Carol Miller, Principal Consultant at AM&T.



Alliance for Manufacturing & Technology

Benefits of Becoming an AM&T Associate

- Four free hours of consulting services
- Your company's profile will be featured in the "Associates' Corner" of our monthly newsletter, which is distributed throughout eight counties: Broome, Chemung, Chenango, Delaware, Schuyler, Steuben, Tompkins, and Tioga. Also, the newsletter is featured on our website giving your company worldwide exposure
- Discounted fees at AM&T sponsored seminars & workshops
- A free Performance Benchmark and Transformation Planner (\$2,500 value)
- A link to your company's website from ours
- Assistance with Technology Transfer, Funding Sources, Venture Capital Investment, Networking, Research & Development Programs, etc

Call Jim Cunningham at 607-725-1225 to ask about becoming an associate.

More information at www.amt-mep.org

Associates' Corner

CORNING

Corning Incorporated, a world leader in specialty glass and ceramics, has its world headquarters in Corning and employs approximately 29,000 people worldwide. The company has \$8 billion in annual sales, a figure that would be nearly doubled if its share of joint ventures such as Dow Corning, Samsung Corning Precision Materials, and others were included.

Corning produces a range of consumer and industrial products that include glass substrates for LCD televisions, computer monitors and laptops; ceramic substrates and filters for mobile emission control systems; optical fiber, cable, hardware & equipment for telecommunications networks; optical biosensors for drug discovery; and other advanced optics and specialty glass solutions for a number of industries including semiconductor, aerospace, defense, astronomy, and metrology.

The company is driven by a sustained investment in R&D, more than 160 years of materials science and process engineering knowledge, and a collaborative culture. Corning's long history of innovation began in 1879 with the development of a bulb-shaped glass encasement for Thomas Edison's new incandescent lamp.

Subsequent inventions in-

clude glass globes for railroad lanterns, Pyrex cookware, high-speed glass production processes, silicones, cathode ray tubes, centrifuge casting for TV tubes, pyroceram (Corning-Ware), LCD substrate, fiber optics, and newer technologies such as the durable Gorilla Glass, which is now used on more than 1 billion handheld devices.

At a time when many companies have cut back on their business innovation expenses to pump up their bottom line, Corning spends nearly 10 percent of revenue on what it calls RD&E: research, development, and engineering. In 2013, it will spend more than US\$700 million on RD&E.

These days, teams at Corning are embedding inorganic, bacteria-killing ions into glass; making bendable glass so thin it can be rolled up in great spools; and designing a new type of fiber-optic cable that can carry cellphone signals and pick up Wi-Fi. "The scale of glass, what you can do with it today — it's wonderfully different," says David Morse, Corning's chief technology officer.

In a recent interview, Morse commented on emerging innovations at the company. "Take a big industry like automotive. Think of all the things that have been done to cars to reduce weight—moving

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Associates' Corner

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from steel to aluminum to carbon fiber, making tires lighter, and doing everything you can to the engine. But you're still hauling around the same thick window glass made by the same soda lime float process that was used in 1950. Lighter, stronger glass makes a great deal of sense and will take a great deal of weight out of the car. Consumers will see that in improved gas mileage, and we see it as an opportunity for our advanced glass technology."

"Think also about architecture. If architects design buildings with electrochromic windows (sometimes called smart glass), which can change colors to regulate the amount of sunlight that enters a building, for example, they need a technical glass like ours. You can achieve a lot of energy and light control with that."

"In consumer electronics, touch is becoming ubiquitous. If you're 15 years old, you live with your touchpad. You watch TV on it,

not on your parents' television. One sees babies playing with iPads these days, and those babies will grow up expecting to touch things to get them to respond. Ubiquitous touch is going to be everywhere—refrigerators, computers, everything in school. Companies will need thin and strong glass for all these applications.

For more information, visit www.corning.com

Entrepreneur's Day Conference (ASQ & IEEE)
 November 16, 2013 - 9:30 am to 4:00 pm
 American Civic Association
 131 Front St Binghamton, NY 13901
 Questions: 607-218-7066 | Registration: 607-348-6022

Around the Southern Tier

Oct 09	Business After Hours - Tompkins County Chamber 607-273-7080
Oct 10	SBC Network Luncheon - Greater Binghamton Chamber 607-772-8860
Oct 10	Tioga Business 2013 - Tioga County Chamber 607-687-2020
Oct 16	Networking At Noon - Chemung County Chamber 607-734-5137
Oct 17	Networking At Noon - Tompkins County Chamber 607-273-7080
Oct 22	Labor & Employment Law Update - Greater Binghamton Chamber 607-772-8860
Oct 23	Women Business Owners Roundtable - SBDC Binghamton 607-777-4024
Oct 24	Business After Business - Chemung County Chamber 607-734-5137
Oct 30	Speed Networking - Tompkins County Chamber 607-273-7080
Nov 07	Small Business Training Part 1 - SBDC Binghamton 607-777-4024
Nov 14	Driving to Zero Defects - See Page 5
Nov 16	Entrepreneur's Day Conference - See Insert Above

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HELPING MANUFACTURERS PLAN, PERFORM, PROFIT & GROW

We are a team of experienced, skilled consultants and trainers dedicated to helping manufacturers in the Southern Tier of NY plan, perform, profit & grow. Our goal is to have manufacturers remain, grow and prosper in the Southern Tier.

AM&T uses a comprehensive, overall business approach to create significant and long-lasting business improvements. Our experience is that individual improvement methodologies will provide some measurable benefits on their own, but it is the combination of them across the whole value chain that will lead to dramatic gains.

WE CAN HELP YOU:

- Assess your current state
- Articulate and define the desired future state
- Train your workforce in improvement methodologies
- Implement process improvements across the whole value chain
- Identify new opportunities
- Achieve and sustain growth and breakaway results

AM&T DELIVERS:

A third-party survey for 2008-2013 reported impacts of:

- 3,461 jobs created or retained
- \$622 million in increased or retained sales
- \$15.0 million in cost savings
- \$44 million in investments
- \$845 million total impact
- 4.6 out of 5.0 Customer Satisfaction

OUR SKILLS:

- Business Assessments
- Strategic Planning
- Lean Enterprise
- Supervisory Training (TWI)
- Project Management
- ISO/AS Quality Systems
- Sales and Marketing
- New Opportunity Identification and Growth — Markets, Products, Services, Customers

Our integrated, comprehensive approach, applied to the whole value chain, can make a difference. We are "hands-on", roll-up-your-sleeves people and we're passionate about manufacturing.

Call Jim Cunningham at 607-725-1225 to ask how we can help.