The Lean Leadership Roadmap

1. The Lean Leadership
2. Roadmap
Presentation Agenda

• Intro to the LLA
• Current Situation in Lean
• LLA Mission and Approach
  – Implementation
  – Leadership Development
• Sample Results
• Q&A
The Lean Leadership Academy® is the premier Lean Transformation approach to Developing Highly Engaged Organizational Leaders, at all levels, and the most effective way to properly and completely implement the Toyota Production System.

Develop Your Leaders; Transform Your Organization to Excellence

Build an Engaged Organization Geared for Profitable Global Growth

- Teach Others
- TWI Job Instruction
- Knowledge of Lean Leadership Responsibilities
- Share Deep Job Knowledge
- Proactive Problem Solving
- Lead Others in Continuous Improvement
- Develop and Present A3 Plans
- Balance Work & Plan Resources
- Building a Cohesive Team
Who Are We?

Sam MacPherson is a former Chief of Training for the Elite United States Army Special Forces (The Green Berets) and Manufacturing Executive Vice-President of Operations. Sam has dedicated over 25 years to developing organizational leadership and lean transformation leaders.

Russ Scaffede is a retired vice president of manufacturing for Toyota Motor Manufacturing and Toyoda Boshoku U.S.A. Previous to holding these positions Russ also spent 19 years in various leadership positions at General Motors. During his tenure at Toyota Motors Russ worked directly with Fujio Cho the former President and Chairman of Toyota worldwide.

Art Smalley has over two decades experience with the Toyota Production System and leadership development. Art was one of the few Americans to ever work for Toyota Motor Corporation in Japan. Art learned TPS principles first hand at Kamigo Engine Plant which was founded under Taiichi Ohno and to this day remains the preeminent model for many aspects of the Toyota Production System.

Jittra Tussey has over 14 years of Lean Manufacturing experience and over 10 years experience with the Toyota Production System (TPS) including firsthand experience as a Chief Engineer and Statistical Quality Control (SQC) master trainer at Toyota. While at Toyota, Jittra led product evaluation teams in Quality and Product Development Departments.

The Lean Leadership Academy is dedicated to helping organizations achieve world class results while simultaneously developing outstanding lean leaders.
The LLA Mission & Concept

- Proven Toyota Production System Concepts
- Special Forces Leadership Development Concepts

Superior model for sustained excellence!

• Improve the success rate of lean transformation efforts
• Improve the internal leadership generation capability of an organization
• Create a true model for operational success that goes beyond buzzwords, wall paper, and short term results...
• But why is this even necessary?
According to Shingo Prize Institute data only about 15% of organizations attempting Lean continue to improve after a couple of years and produce measurable results. In other words 85% of organizations attempting lean either flat line in terms of performance or slowly regress back towards their original state. Of course many cases and both timing and extent vary.
This “white elephant” in the room is a real problem and requires us all to engage in further reflection, analysis and new countermeasures...

OR

Repeat the same basic process over and over and just “hope” for better results.

- Albert Einstein on the definition of insanity
Question: Why do 85% of cases surveyed exhibit this problem and fail to sustain?

1) Path A “Lean Zealot” Route
   - Love of tools, methods, ways, etc.
   - Excessive buzzwords
   - No deep understanding of why, how, etc.
   - Limited problem solving ability
   - Stuck on trivial details
   - Endless training, workshops, or reflection
   - However limited results are produced
   - Eventual program decay

2) Path B “Charismatic Leader” Route
   - Top leadership driven by few key people
   - Low hanging fruit obtained easily
   - Problems solved by experts / outsiders
   - Limited team development
   - No comprehensive tool, method, system or principle based approach
   - Results make everyone look and feel good
   - The great leader retires, transfers, leaves
   - Eventual results and program decay
What do the 15% of companies (like Toyota) succeeding in Lean actually do?

1) Path C “Characteristics”
   - Tremendous focus on both process and results. However neither alone is sufficient in the long run.
   - Rigorous development of leadership in terms of communication skills, problem solving / kaizen, coaching, mentoring, etc.
   - Customer focused business strategy for growth, quality, service, profits, etc.
   - Company culture of “can do”, “employee engagement” with an overall spirit of “why” and “how”. Not about the “5 Who’s” can we blame for our mess
   - Tend to have actual true value added process technology and or product technology as well that is hard to copy
   - Other organizational alignment factors, geographies, assets, markets, etc. of course sometimes come into play.
High Level LLA Approach

Diagnostic Assessment

- LLA Introduction
- Site Assessments
- Business Case Development
- Steering Team Selection
- LLA Member Selection
- LLA Area Selection
- Communications Strategy
- Program Finalization
- LLA Management Plan

Y/N

Wave 1
LLA Lead

- Structured Lean Implementation
  - Work Kaizen
  - Process Kaizen
  - Flow Kaizen
  - System Kaizen
  - Outreach Kaizen

- Lean Leadership Emphasis
  - Cohort Training
  - Grade Participants
  - Learning by Doing
  - Measure Results
  - Problem Solve
  - Teach Multiple Basics

- Transformational Business Results
  - Profits / Cost
  - Safety
  - Quality
  - Productivity
  - Delivery
  - Etc.

Wave 2
Co-Lead

Repeat in a new area and across shifts with shift in leadership responsibility. LLA coaching and some assistance.

Wave 3
Client Lead

Repeat in a new area and across shifts with complete transfer to client leadership. LLA audits and feedback.

Organic Growth

- Institutionalize organic LLA. Deploy across organizational functions. Export to key suppliers. LLA on call only if needed.

2-3 Year Effort

Repeat in a new area and across shifts with shift in leadership responsibility. LLA coaching and some assistance.

Repeat in a new area and across shifts with complete transfer to client leadership. LLA audits and feedback.

Institutionalize organic LLA. Deploy across organizational functions. Export to key suppliers. LLA on call only if needed.
Basic Implementation Beliefs

1. Prioritize and leverage greatest business needs and be customer value driven as a platform for transformation
2. Systematic transformation approach with pragmatic fact based decisions
3. Emphasize the vital few versus chasing the trivial many
4. Structure learning by training (10%), learning by doing (90%), improving by teaching with structured feedback (next level of understanding)
5. Focus on structured daily problem solving and daily kaizen routines not “events” like value stream map exercises or kaizen workshops, tools, assessments, training, charts, etc.
6. Create a system of “respond now” in order to go and see and get the actual facts right away
7. Actual Toyota Way / TPS is not always the same as text book Lean
8. Building in quality at the source can not be compromised
9. Technical depth matters not just breadth
10. Disciplined execution in the five basic skills of a leader (role, responsibility, teaching, relations, improving, etc.)
11. Structured employee engagement & participation opportunities matter
12. Track, post, and communicate results at appropriate levels
Note: C/T = cycle time; C/O = change-over time; EPE = every part every ____
TPS Also Has Depth

15%


85%

Stuff we don’t talk about so much and Toyota does not explain as well but is excellent at: Tooling, Material Science, Process Technology, Engineering, Role of a Leader, Maintenance System, Structured Problem Solving, etc.
TPS Grinding Problem Example

A. Immediate abnormality signal

B. Go to actual machine and see status

C. Ascertain actual problem situation

D. Sample Investigation Sequence

1. Measure actual dimensional extent of problem
2. Look for obvious contamination or abnormalities
3. True and re-dress grinding wheel and observe status
4. Check actual grinding wheel (check “pores”)
5. Confirm actual (not theoretical) stock removal
6. Send part to QC Mat’l lab for hardness and HT depth check
7. Check actual cutting conditions
   - Wheel RPM
   - Feed Rate, Depth of Cut, etc.
   - SFPM
8. Confirm status of datum features and clamp mechanisms
9. Measure spindle run out
10. Coolant check
    - Flow rate / pressure
    - Nozzle condition and direction
    - Temperature
    - Concentration

Cpk 1.15
Cpk 2.0
A 31% Shortage of Hi-Po Leaders is Threatening U.S. Industry

- Deloitte, LLC study on the future of U.S. Manufacturing Competitiveness that identified 31% gap in the identified need for high potential industry leaders (not managers) vs. availability (Executives Fear Leadership Shortage, Jonathan Katz, Industry Week, 3-11, 2012)

- Deloitte, LLC Executive Survey respondents anticipate greater shortages in the executive leadership pipeline, for the next several years, identifying the following “Top 5” as their most pressing talent concern. (January 2012 edition of “Talent Edge 2020”):
  1. Developing Leadership and Succession Planning
  2. Struggling to Keep Leadership Teams Intact
  3. Predicting Globally Deployable Leadership Needs and Shortages
  4. Focusing on the Leadership Pipeline
  5. Closing the Gap between Priority and Performance

- According to a recent Accenture survey of US Manufacturing and Industry Senior Executives, 48% ranked developing or acquiring high quality supervisors as a challenge in the years ahead

- **Bottom-Line:** While most of the executive surveyed agree developing high potential, globally deployable organizational leaders is critical to US competitiveness, many lack the confidence in their current capability to deliver the leadership talent and skills they need.
2nd White Elephant in the Room
We Wait to Late to Develop Leaders

Current State of the Industry ?????

1. Rarely requires defined selection criteria based on core values and attributes; primarily based on business need
2. Experiential, self-development or post-promotion Late develop of leaders
3. No particular Timeline
4. Rarely a designed pathway
5. Rarely an integrated mentorship methodology
6. Canned Programs
7. Classroom based PowerPoint – Primarily Safety and HR Based

The Toyota Way 5 – 20 years

1. No particular Timeline
2. Defined Core Values and Leader Attributes
3. Structured Pathway
4. Defined Core Competencies for Process Leaders; People Leaders; and Executive Leaders
5. Progressive Leadership Responsibilities and Role Based Competency
6. Integrated Mentorship 1 – 2 levels up
The TOYOTA WAY

- Organizational Leaders are the Main Focus of training efforts in Toyota since they directly and dramatically affect safety, quality, cost, productivity, and the morale of the team environment.

The GREEN BERET WAY

- The US Army Special Forces Qualification Course is the gateway to producing one of the world's most prepared globally deployable leaders.
- Acting as the front line of US Strategic Power and Diplomacy, a Green Beret is capable of sitting down and negotiating with, influencing and winning the hearts and minds of battle hardened Warlords and American politicians, alike.

Why Combine The Toyota Way with the Green Beret Way?
Training to perform role at each level: “Role of the Team Leader”, “Role of the Group Leader”, “The Role of a Plant Manager”, etc

NEW EMPLOYEE ORIENTATION

Basic Problem Solving
TJS - Job Safety

*Flexible Workforce Skills Training
Basic TPS, Safety, and Quality Training

TJI - Job Instruction

TEAM LEADER POST-PROMOTION

TJR - Job Relations: Toyota Communication Skills

GROUP LEADER POST-PROMOTION

A3 Writing Course

Lectures and Study Groups “Jishuken”

KAIZEN LEADER POST-PROMOTION

Toyota Training Path
From Assimilation to Culture

Three types: Required
*Assigned
**Optional

**Foreign Languages
**Programming

MANAGER POST-PROMOTION

ASST. MANAGER POST-PROMOTION

*MANAGER PRE-PROMOTION
Special Forces Leadership
Initial Career Training

Phase I: Orientation History
- ITC

Phase II: Language and Culture Training

Phase III: SF Core Skills and Small Unit Tactics

Phase IV: SF MOS Profession Training

Phase V: Unconventional Warfare Team-Exercise

Phase VI: Graduation Specialized Training

Prior Service Training & Leadership
Airborne School
Ranger School

SF Assessment and Selection

SF Officer
SF Weapons Sgt
SF Engineer Sgt
SF Medical Sgt
SF Communications Sgt

Cross Training
SERE Survival Training
**The White Elephant in the Room**

We Wait to Late to Develop Leaders

## Current State of the Industry

1. Rarely requires defined selection criteria based on core values and attributes; primarily based on business need
2. Experiential, self-development or post-promotion Late to develop leaders
3. No particular Timeline
4. Rarely a designed pathway
5. Rarely an integrated mentorship methodology

## The Toyota Way 5 – 20 years

1. No particular Timeline
2. Defined Core Values and Leader Attributes
3. Structure Pathway
4. Defined Core Competencies for Process Leaders; People Leaders; and Executive Leaders
5. Progressive Leadership Responsibilities and Role Based Competency
6. Integrated Mentorship 1 – 2 levels up

## The Lean Leadership Way 6 – 36 month; Advanced 3 - 5 years +

1. Lean Transformation Based
2. Defined Core Values and Attributes
3. Defined Core Competencies
4. Progressive Leadership Roles and Role based Competencies
5. Integrated Mentorship Two Levels up and Two levels down

## The Green Beret Way 12 – 24 months

1. Prior Service Leadership
2. Military Leadership Schools Req.
3. Defined Core Values and Attributes
4. Defined Core Competency
5. Language and Cultural Req.
6. Progressive Leadership Roles and Role based Competency
7. Structured minimum time in rank 24 – 36 mos.
8. Alternating Leadership and staff roles
9. Integrated Mentorship Two Levels up
10. Pre-promotion Formal Schools in Advanced Military Education
11. You have to jump out of airplanes!
Creating Leaders

- Shared Core Values
- Leadership Skill Development
- Dynamic and Time Sensitive Operating Environment
- Operational Standards
- Core and Role Based Competency
- Team Based Matrix Organization Leadership Engagement and Support
- Detailed Job Knowledge Development
- Continuous Improvement
- Structured Problem Solving
- Scientific Method (Plan, Do, Check, Act/Adjust)
- Institutionalize Lessons Learned
- Skill in Teaching and Communication
- Institutionalize Lessons Learned
- Lead others in Problem Solving and Improvement Activities
- Creating Leaders

Role Competency

Core Competency
Why Combine the Green Beret Way with The Toyota Way?

• "Lean Manager Certifications" and Lean-Six Sigma “Belt” programs, or "Tools" workshops do not guarantee Leadership Development – Today, you can do much of this training on-line with having actually lead a team or achieve results!
• Toyota is one of the few organizations that compares with the military in educating and developing their leaders' career path, throughout their entire career.
• Our approach is based on the Special Forces Officer and Warrant Officer cohort format training that is part of the Special Forces Qualification Course, SF unit leader training, and Joint Operations.
• The Leadership Development platform is Special Forces, the Body of Knowledge is that of the internal leadership and management training model of Toyota's Operations Management Consulting and Training Division and Toyota's Leadership Skill and Operations Model used to teach and develop work team leaders to vice-presidents.
Before you begin your Lean Transformation, select leaders that can be Pioneers during the transformations phase. Train leaders for the specific roles required to transform your current operating model to a lean operating model.

Throughout Lean Leadership training, benchmark and coach leader values, thinking and behavior:

- Integrity
- Courage
- Perseverance
- Personal Responsibility
- Professionalism
- Adaptability
- Team Player
- Capability

The Lean Leadership Academy Way
A Blueprint to Developing Leaders: 20 Radical Steps

1. Start with Senior Leaders and “Area of Greatest Business Need” SQDC Functional Leaders
2. Ensure Operational Leaders develop Operational Leaders
3. Train Leaders for their roles as Lean Transformation leaders—not “Kaizen Men!”
4. Expect Excellence!
5. Design Lean Leader Training and Development to develop both Core Competencies and Role Based Competencies for responsibility two levels above their lean leadership role
6. Establish the Importance of Standards and Scientific and Process Thinking, and Sense of Urgency early
7. “War Story” Design Leadership Development to create identity and fraternity through a Challenging Discovery Experience
8. Use a Train-the-Trainer approach for developing Lean Leaders
9. Train as a Cohort to develop organizational cohesion: “Collaborate and Graduate”
10. Make Lean Leaders responsible for developing others and for the performance of others
11. Stress the importance of the effective and full utilization of resources – ALL resources are scarce
12. Teach Leaders to think like and Executive early: Always make the Business Case!

13. Teach Leaders how to recognize and eliminate waste in the following order: Work methods, then Process, then Systems

14. Teach Lean Leaders how adults lean

15. Implement an annualized monthly “Jishuken”/ Self and Group Study plan

16. Develop coaching skills and ensure understanding in every activity through PDCA

17. “Stress the System” through Live Environment application to drive Transformation.

18. Lean Leaders must free up future Lean Leadership candidates through Lean Transformation Implementation.

19. Train Leaders for deployment outside they own operation

20. Maintain Lean Leadership Calibration through developing your own Lean Leadership development program and network mentors, taught by Lean Leadership graduates.
Your Lean Transformation as a Leadership Development Platform

A Blueprint to Developing Leaders: Where to Start

**Start Here!**

**PHASE ONE: WORK KAIZEN**
1. Establish Work Standards as the best method to work safely and efficiently to, produce quality
2. Basic Andon System: Introduce Breakdown & Daily Maintenance
3. 8 Step Problem Solving and Work CI

**PHASE TWO: PROCESS STABILITY KAIZEN**
1. Andon Management: autonomous problem identification system that non-standard conditions
2. Intermediate Problem Solving
3. Condition Based Preventive Maintenance

**PHASE THREE: FLOW KAIZEN**
1. Value Stream Management to Create Continuous Flow
2. Controlled Stock Logic in support of Level Pull
3. Shift Schedule Attainment to Customer Request
4. Supplier integration

**PHASE FOUR: SYSTEM KAIZEN**
1. Integration of Comprehensive and Integrated Operational Excellence System
2. Level 3-4 BAMA maturity levels in operating systems
3. Defined Operational Management Cadence and Leader Std Work
4. Help Suppliers w/TPS

**PHASE FIVE: OUTREACH KAIZEN**
1. BAMA level 4 clearly maturing
2. Deployment of Operational Excellence operating model in all functions & operations
3. Aligned/Cascading Strategy Deployment
4. Help Suppliers w/TPS

---

- **20% Start Here**<br>**< 5% Get Here**
- **80% Start Here**<br>**< 15% Get Here**
- **< 5% Get Here**
LLA Program Review

**Diagnostic Assessment**
- LLA Introduction
- Site Assessments
- Business Case Development
- Steering Team Selection
- LLA Member Selection
- LLA Area Selection
- Communications Strategy
- Program Finalization
- LLA Management Plan

**Y/N**

**Wave 1**
- LLA Lead

**Wave 2**
- Co-Lead

**Wave 3**
- Client Lead

**Organic Growth**

**Structured Lean Implementation**
- Work Kaizen
- Process Kaizen
- Flow Kaizen
- System Kaizen
- Outreach Kaizen

**Lean Leadership Emphasis**
- Cohort Training
- Grade Participants
- Learning by Doing
- Measure Results
- Problem Solve
- Teach Multiple Basics

**Transformational Business Results**
- Profits / Cost
- Safety
- Quality
- Productivity
- Delivery
- Etc.

**2-3 Year Effort**
- Repeat in a new area and across shifts with shift in leadership responsibility. LLA coaching and some assistance.
- Repeat in a new area and across shifts with complete transfer to client leadership. LLA audits and feedback.
- Institutionalize organic LLA. Deploy across organizational functions. Export to key suppliers. LLA on call only if needed.

**Institutionalize**
- Organic LLA.
- Deploy across organizational functions.
- Export to key suppliers.
- LLA on call only if needed.
**Sample LLA Results**

**Financial & Operational Results**

- Increased sales by 15%
- Improved PL profits
- Reduced working capital 40%
- Reduced customer defects 90+
- Reduced scrap & rework by >50%
- Improved OTD to 100%
- Shortened lead-time 25+
- Improved safety metrics 50+
- Improved uptime by 15-20%
- Improved process capability
- Improve morale
- Improved leadership
- Improved problem solving
- Other benefits as well...

**Client Testimonial Comments**

The Lean Leadership Academy approach has created “Critical Mass” in our Operations and is the clear difference between other Lean/Six Sigma approaches we have tried!

- Mike Hill, Director, Industrial Bearing Division,
  - The Timken Company
• Thank you kindly for your time and attention
• We are interested in trading ideas on this topic of structured lean implementation and structured leadership development
• We are actively looking for future host sites for LLA
• We plan to update interested parties on our progress as time goes on.
• We don’t have “secrets” we are out to hide. We’d love to create an LLA model that everyone can learn from and adapt
• Good luck on your lean journey!
• Visit or contact us at www.leanleadershipacademy.com
Appendix Slides

1. The Lean
2. Leadership
3. Roadmap
The Lean Leadership Academy Way

• **Train-the-trainer:** Make Lean Leaders a resource to each other by providing resources and standards to allow them to teach and check knowledge for the following subjects:
  - Eight Wastes
  - Toyota’s 8 Step Problem Solving
  - The 7 Quality Tools
  - The 7 Management Planning Tools
  - A3 Structure, Form, and Purpose
  - 5-S and Workplace Organization
  - Situational Leadership

• **Use Group Study, Classroom, and OJT through Lunch and Learn, Buddy Study, and Group Projects to maintain team cohesion between classes.**

• **Teach coaching skills by ensuring every activity completes the PDCA cycle**
  - Recommendations for Improvement
  - Best Practices and Lessons Learned

• **Standards, Problem Solving, and Kaizen Skills at the Work Level**
DEVELOP YOUR LEADERS, TRANSFORM YOUR ORGANIZATION

The Lean Leadership Academy Way – Work and Process

Lean Transformation Orientation Training and Planning

Pre-deployment Organization Planning and Pacemaker Leadership Assignments

**Session One:** Introduction to Lean Transformation, TPS, TWI Job Methods, Deming Cycle (GTS-PDCA) and Work Standards, & TWI-Job Instructions

**Session Two:** Introduction to the Role and Responsibilities of a Lean Leader, Situational Leadership, Production Control and Analysis, Kami-Shibai/PDCA; Zone Control; A3 Thinking and * Step Problem Solving; Process, Recurrence Prevention, Basic Cadence Management Activities

**PDCA Week - Freshman Project:** Obeya “Operations Center” operations; “Leader Work Standards” TPM, SMBR/QR, Process Review, TPM-MS, Dispatcher Operations, etc.

Team Leader briefs Root Cause Analysis and Countermeasure Plan
Timken Tapered Bearings

Team Leader briefs his Team on Top Shift Priorities and Leads Continuous Improvement

PDCA Week (Sophomore Projects): Standardized Work, Kanban, Lean Material Handling

Session Four: Kaizen Skills Course: TWI Job Relations; Situational Leadership and Building High Performance Teams; Six Steps for Leading Kaizen: Kaizen Project Assignments

Kaizen Week (Junior Projects): “Where there’s a need; there’s activity.” “What is our Greatest Need?” Projects include SMED, Cellular Manufacturing, TPM, Lean Office, etc.
The Lean Leadership Academy approach has created “Critical Mass” in our Operations and is the clear difference between other approaches we have!”

- Mike Hill, Director, Industrial Bearing Division, The Timken Company


Session Six: Future State Development; Quality Functions Deployment; Lean Supply Chain operations; Introduction to Hoshin Kanri/Kojo Kanri/Gemba Kanri; Lean System Kaizen proposals

Senior Project: Lean Brown Belt Project: Deploy Jidoka and JIT, SME Bronze Cert. Exam

Session Seven: Advanced Lean Concepts Seminars: Shingo Approach to Operational Excellence; Lean Logistics Operations; Lean Administrative Advanced “Obeya” Operations; Principles of Lean Accounting; Lean Product Development and Design Engineering; Lean Expansion Operations; Lean Training Management; Lean Supplier Qualification and Consortium Development; Lean Recruiting and Reward Systems; Green-Lean; and Lean Best Practices

Session Eight: Lean Transformation “Black belt” Project week: Lead Value Stream Improvement Team Project for host operation; SME Silver Certification Exam

Special Lean Master’s Program: Special and Advanced Topic Knowledge Exchange Continuing Education Program: Lead – Using TSSC process, a civilian contractor to the military or government. Contractors the achieve OpEx, receive special preferred vendor designation; SME Gold Certification Exam
Who Have We Helped

Lean and World Class Performance Transformation

- Crown Cork and Seals World Class Performance Model
- Timken Lean Operating Model-Industrial, Automotive, Wind Energy, Aerospace
- Hanes Brands, Inc
- AP Aftermarket Exhaust Technologies Systems
- Toyota and BMW Supplier Support – United Southern Industries (Lexus, Toyota, Scion)
- Donnelly Corp. – Honda, Toyota, Ford, GM, and Chrysler

Lean Leadership and Staff Development

- Mercedes Benz Institute USA Manager and Supervisor Training Program
- Burt’s Bees Senior Leadership Team
- Timken University Lean Manager Certification Program Model
- NC State Industrial Extension Service Lean Delivery Specialist Training
- Moen New Bern Operations

Lean Supply Chain and Logistics

- BP – British Petroleum
- Overstock.Com
- American Greeting Danville Distribution Center
- A. M. Castle Metals Aerospace Sales, Distribution, and Logistics
- Truck Services Inc. Logistics and Transportation
- ITT Logistics and Fort Bragg, NC Directorate of Logistics– Soldier Services
- Goodyear Mexico
- Hill Air Force Base Transportation and Logistics Center

Lean Product Development, Design, and Engineering

- Vale’ Mining Canada – Quality Systems and Engineering
- American Greeting Design and Manufacturing Engineering
- Timken Aerospace Manufacturing Engineering
- Crown, Cork, and Seal Product Design and Engineering Group, Alsip, Il

Lean for Non-Manufacturing Operations

- HealthSouth Medical Group Practices
- Department of Veteran Affairs – VA Hospitals, Erie, PA
- 2002 Salt Lake Winter Olympics Turnaround
Awards and Recognitions

• Chairman of the Board of Governors – The Shingo Prize (Russ Scaffede)
• Three Shingo Prizes for Research
• Lean Enterprise Institute Academy
• Shingo Academy
• Recognized as Master Subject Matter Experts (or Master Sensei) by Toyota, our industry, our peers
• Industry Leader Instructors for:
  ➢ University of Michigan
  ➢ North Carolina State University College of Engineering
  ➢ MIT Sloan College of Business and Lean Advancement Initiative
  ➢ Department of Defense’s Joint Forces Staff College
  ➢ International Consortiums on Operational Excellence
• Thought Leaders and frequent Keynote and Workshop Speakers for:
  ➢ The Shingo Prize
  ➢ Industry Week Magazine’s Best Plants Conference (Art and Sam are frequent guest speakers)
  ➢ Industry Week Magazines Online Conference and Webinars
  ➢ Our Clients are featured in Industry Week Excellence in Action Plant Tours
  ➢ Reliable Plant Magazine Lean Manufacturing and Reliable Plant Conference
  ➢ Association of Manufacturing Excellence (AME) and Society of Manufacturing Engineers (SME)
  ➢ Wide variety of Case Studies, Publications, videos, blogs, etc.
• Led our organizations and client to win:
  ➢ The Shingo Prize
  ➢ Harbour Award for Productivity
  ➢ JD Power and Associates Award for Quality and Customer Satisfaction
  ➢ The Shingo Prize for Operational Excellence
  ➢ Industry Week Best Plant
  ➢ Alabama Governors Award for Productivity
  ➢ Internal Corporate Lean, Quality, Best Plant and Most Improved Plant Awards
  ➢ Numerous Customer Supplier Qualification Awards
• Utah State University Operational Excellence Medal
• NC State University’s State Shingo Gold, Silver and Bronze Medallions
• Coca-Cola’s 1st Statistically Certify Supplier: Evolution 3 Supplier Certification 2001
• Shingo Prize Board of Examiners 2004
• Panelist, McKinsey and Company, The Online Executive