Chapter # 1

Engaging Employees in Continuous Improvement: 2-Second Lean Overview and Case Studies

Presenters

Scott Sink, Director, Integrated LeanSigma Certification Program, ISE, Ohio State University

Doug Shull, President, Transmet Inc.

Tim Gase, President, Peerless Saw

Developed and Offered through IISE by Chapter #1 and developed cooperatively with the Council on Industrial and Systems Engineering And the Integrated LeanSigma Certification Program at OSU in ISE
Agenda

▪ Scott will tee up Employee Engagement, Lean Deployments, 2-Second Lean

▪ Doug will describe the motivation for and evolution of the program at Transmet

▪ Tim will describe the motivation for and evolution of the program at Peerless

▪ Upcoming Events

▪ Q&A and post webinar dialogue small group calls
Scott Sink

Motto: One of them, from my Grandmother… “anything worth doing is worth doing to the best of your capabilities.”

What drives me:

• Serving, Learning, Integrity, Excellence

Change that was most impactful to my career: Leaving my first industry job (Kodak) to go back to Learning, so that I could better serve.

And the small print:

• Past President of IIE and on Faculty at Oklahoma State and Virginia Tech prior to a 10 year stint in industry as VP of Business Process Improvement for a Global Life Sciences Company
• Director of Integrated LeanSigma Certification in ISE at Ohio State
• Former VP Business Process Improvement MDS and ESI
• 44 years of blended experience in academia, industry, consulting
• BSISE, MSISE, and Ph.D., Ohio State University

Wife, Beatrice (44 years!) beats me at golf consistently and was and is a huge factor in my career and life evolution and successes. Love the work life balance between Columbus and OSU/ISE and Smith Mountain Lake, VA in Summer and at Christmas.
1. 196 Professional Members in Eastern Ohio but also from around the Country

2. Support, partner with the Youngstown State, Ohio University and Ohio State University Student Chapters.

3. Partner with our Dayton/Cincinnati Professional Chapter on our Annual IISE All Ohio Event and other things

4. 6+ Timely, Valuable Webinars each year; topics developed from Voice of Member

5. 12 Monthly Memo’s help Members get to know each other and keep members aware of upcoming opportunities AND also provide Self-Help Features on personal and professional mastery

6. quarterly GoToMeeting small group calls with members that focus on topics of interest from ‘affinity groups’/segments of our members.
Whether it’s a Career Ladder or Career Lattice—IISE supports you for your entire Career….BE AN ISE FOR LIFE!!

Career Ladder vs. Career Lattice

Defined Steps – Moving Up

Multidirectional – In & out of fields

Council on Industrial and Systems Engineering

Industry Advisory Board

You can get involved in Societies, Divisions and also ‘Affinity Groups’ like Young Professionals, Industry Advisory Board and the Council on Industrial and Systems Engineering
Example of a Roadmap for Lean... (create your own, tailor this)
People Management Objective

Close the Full Potential Performance Gap

The purpose of the Employee Value Exchange Optimization is to identify, specify, and document the processes, methods and tools required for employees to achieve their full potential level of performance.
Key Point: this is the high level strategy...

8 PROVEN STRATEGIES TO WORKPLACE EXCELLENCE

1. A Compelling Positive Vision and Clear Goals
2. Communicating the Right Information at the Right Time
3. Hiring the Right Employees and Managers
4. Making Accountability Count
5. Focusing on Cool Staff: Innovation and Continuous Improvement
6. Teamwork: We Are One Team
7. Celebration: Recognizing and Rewarding the Highest Achievers
8. The Loyalty Connection: Trust, Genuine Care, and Respect

Contribution Index

Engage + enable your employees and here's how you could benefit

- Increase employee performance by 40%
- Increase customer satisfaction rates by 18%
- Multiply your financial success by 4.5

Decrease employee turnover by 14%

Source: Based on linkage case studies using Hay Group's global normative database
What Motivates Employee Engagement

Employee Value Exchange Optimization:

- systematically identifying the unmet and unfulfilled needs of employees and responding to that.
- Managing the gives and the gets
- Being creative at finding ways to involve and engage employees
- understanding segments of employees and creating ‘offerings’ and culture and opportunities that address the key segments

Engagement is the state of emotional and intellectual commitment to an organization—the degree to which you have captured the hearts and minds of your employees

Say
- Consistently say positive things about the organization

Stay
- Intend to stay with the organization

Strive
- Strive to achieve above and beyond what is expected in their daily role

80% of employees are engaged at a typical Best Employer

CBSR and Hewitt Associates, “Engaging Employees Through CSR” webinar, Jan 2010
Understand what motivates people to give ideal behaviors

The Job Characteristics Model

I had an early ‘reduction to practice’ experience with this in one of my Summer Jobs in College, with Whirlpool.

I think we all have experiences of where this model of motivation has come into play?
Just want to skim through this more advanced presentation and reinforce a couple of key points for larger, more complex organizations.

Culture Modeling Tools to Measure an Organization’s Lean Transformation Effectiveness

Lessons Learned from the IBM Path Forward to Lean Transformation Methodology

Sreekanth Ramakrishnan, Ph.D.
Advisory Engineer, Scientist; Lean Master, Lean Six Sigma Black Belt
A Case Example

Most of the critical challenges to successful change involve people, process-technology and leadership

**Major Change Challenges**

- Changing mindsets and attitudes: 50%
- Corporate culture: 49%
- Complexity is underestimated: 35%
- Shortage of resources: 33%
- Lack of commitment of higher management: 32%
- Lack of change know how: 20%
- Lack of transparency: 18%
- Lack of motivation of involved employees: 16%
- Change of process: 15%
- Change of IT systems: 12%
- Technology barriers: 8%

Source: Making Change Work Study: Continuing The Enterprise of The Future Conversation from the IBM Global CEO Study, 2008 (n=1,332)
Strategies can be comprehensive and complex or much simpler.
At the heart of employee engagement is ‘thought, word, deed’ DNA in the Culture

Organizational Culture Inventory®, OCI
Circumplex with a Brief Description of the 12 Styles

Achievement
Members are expected to set challenging but realistic goals and solve problems effectively

Perfectionistic
Members are expected to avoid making mistakes, work long hours, and keep “on top” of everything

Competitive
Members are expected to operate in a “win-lose” framework and work against their peers to be noticed

Power
Members are expected to take charge and “control” others, and make decisions autocratically

Oppositional
Members are expected to gain status and influence by being critical and constantly challenging one another

Avoidance
Members are expected to shift responsibilities to others and avoid being blamed for mistakes

Self-Actualizing
Members are expected to gain enjoyment from their work and produce high-quality products/services

Humanistic-encouraging
Members are expected to be supportive, constructive, and open to influence in dealing with others

Affiliative
Members are expected to be friendly, open, and sensitive to the satisfaction of the work group

Approval
Members are expected to agree with, gain the approval of, and be liked by others

Conventional
Members are expected to conform, follow the rules, and make a good impression

Dependent
Members are expected to do what they are told and clear all decisions with supervisors

OCI® is a proprietary of the Human Synergistics International

Styles of Behaviors Required to “Fit-in”
Many tools for measuring and understanding culture
As leaders create context and conditions for living on the ‘right’, cultural shifts take place.
The Importance of Values

SERVING
- Ourselves
- Service to Others
- Creative
- Conventional
- Nurture Ideas
- Attack Ideas
- Team
- Individual

EXCELLENCE
- Courage
- Indecisive
- Decisive
- Being Popular
- Right Decision
- Focus on Activity
- Focus on Results
- Fearful

INTEGRITY
- Accountable
- Blaming
- Team
- Competition
- Collaboration
- Suspicion
- Avoidant
- Direct

LEARNING
- Learning
- Arguing
- Listening
- Hierarchical
- Empowering
- Territorial
- Sharing
- Defending

Under Performance

Full Potential Performance
When those shifts take effect, individual, team and organizational performance improves.

Culture has a significant impact on an organization’s long-term economic performance:

Results from an 11 year study, contrasting cultures of more than 200 companies, shows organizations with Adaptive cultures consistently produced superior business results.*

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<thead>
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<th>Unadaptive Culture</th>
<th>Adaptive Culture</th>
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<tbody>
<tr>
<td>Revenues</td>
<td>166%</td>
</tr>
<tr>
<td>Work Force</td>
<td>36%</td>
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<tr>
<td>Stock Price</td>
<td>74%</td>
</tr>
<tr>
<td>Net Income</td>
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</tbody>
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Doug Shull

Motto/Drive: I enjoy learning and particularly from others success and failures

Change that was most impactful to my career: 2008 great recession

A word to best describe my career: Blessed

Current Experience: People will fix issues, if I allow them too. My job is to set up systems that allow this to happen.

Past Experience: I am the best at improving things and need to incentivise people to do their jobs.
Background

- I became a partner in 1990 of a failing business.
- Buy 2006 it had grown into a comfortable growing business.
- Then there was the great recession and the death of a partner.
- We were fortunate to survive
- I thought there must be a better way to run a business with employees being engaged
- I started Ownership Thinking in 2012 (Open Book, Scoreboards, Huddles and Clear accountability
- It was working but something was missing. The employees were still not fully engaged
- I ran across the book 2 Second Lean. I started our version in 2013
Overview

- Small 16 person Metal-Forming Company based in Columbus, OH
  - Create Aluminum flakes and Zinc shot that can be used in Chemical Catalyst Processes, Roofing, and Blast media
- Around 2012, noticed a need for a culture change in order to show the employees that we respect their ideas, and that we need to reduce worker stress.
- Created a Continuous Improvement Program that gave employees that chance to implement needed changes
  - Decided to follow the principles of Ownership Thinking and Two-Second Lean
What does the business get with this culture change?

We Get:

When we Decrease Stress on the Employees

Cost  Productivity  Quality  Profit
How did we Do it: Change Management

- I changed how we did things. It was not easy. I had to lead the way and take the criticism
  - It is a deep culture change not just a new system
  - Followed two Books: 2 Second Lean & Ownership Thinking
- There was resistance from some at the start
  - “You mean you expect me to tell you how I can save time? Then you will give me more to do?”
  - It is just another different thing that will pass
- Every Wednesday at 8:30 we meet in an office area and then go to each persons work station to see and hear their improvement(s).
  - It is a fun and enjoyable experience with multiple “why didn’t we think of that before” head slaps
  - It was important to involve everyone. Sales, administration and manufacturing
  - In my opinion walking to work stations was important so we could better understand each persons job. This is a huge team building benefit
  - Every employee is authorized no questions asked $200/month and 2 hours of time for improvements. (It is seldom used)
  - We have very few rules but improvements can not make someone else more work.
- Incentives for doing these projects:
  - If each employee makes 4 improvements in a month, we provide everyone a catered lunch. The person with the most improvements that month picks the menu
What has been achieved so far

- There has been about 1500 improvements made in the last 5 years.
- This means there is an estimated **3000 seconds** of Non-Value-Added Activity saved each day across the employees.
- This means that there is an extra 50 minutes of Value Added Activity done each day, which means about **210 hrs of extra Value Added Time each year**.
- Saving an estimate ~$5000/year on overtime, and making countless dollars from increased productivity of the employees, increased morale of employees, and increased quality of the product.
Example Projects: Factory
Example Projects: Factory
Example Projects: Office
What’s did we learn from this experience?

- It is never done as improvements are continuous.
- We now have ALL employees pulling the cart and liking CHANGE
- Employees look forward to our Walk and Talks
- Employees feel more respected as they are giving autonomy of their work processes
- Employees willing to help each other
- Employees improve improvements
- Culture change from 2010 to 2018 is unmeasurable but very valuable
- As a manufacturing company our Profit per employee is now about 8 times above the industry averages
- While all of the improvements can be as simple as to save you 2 seconds of time there are much bigger improvements
- Our biggest took our shot production from 600 lbs/hr to 1000 lbs/hr.
- Orders shipments have sped up to 35% same day and balance the next day. (We used to be 3 days ARO.) All this change was employee driven!
Tim Gase

President, Peerless Saw

*Motto:* Old boss of mine used to say:

“No one comes to work to do a bad job”

*What drives me:* I enjoy the challenge to find ways to constantly improve and outperform the competition at better margins than they can achieve!

*Change that was most impactful to my career:* The day I became the Owner of Peerless Saw Company. You look at operating a business differently if you are the President of a company running it for someone else verses being the owner!

*And the small print:* Under Grad – Bachelors degree in Business, EMBA – From Ohio University.

- 12 years working for Cooper Industries, 9 job titles and perfect attendance
- 4 years as President of Peerless Saw running it for a Finnish Corporation
- Co-owner and President of Peerless Saw for 17 years and Sold business to Employees in 2016 (ESOP)
- 2008 Ernst&Young Finalist for Entrepreneur of the Year - South Central Ohio and Kentucky
- I’m an avid hunter, all over North America. Love the outdoors – summers at Lake Erie, fall and winter in the Hocking hills. My wife Jan’s my best friend. 2 kids Michael, gainfully employed, Stephanie – senior at OSU
What Motivated the Innovation?

- Doug Shull suggested reading the book 2 Second Lean by Paul Akers. I knew of the success Doug was having with implementing this concept at his operation and decided to investigate. Having just sold the business to our employees through an ESOP we thought this might help drive the ownership thinking mentality to them.

- It’s not complicated. We hoped it would help employees feel more appreciated and engaged in their jobs.
What did you do, why and how?

- **What did we do?:**
  Peerless created a biweekly walkthrough schedule in which all the employees share their improvements that were made continuously throughout the week.

- **Why did we do it?:**
  The process was developed to integrate lean methods into the workplace at Peerless. It effectively put employees in a new mindset of continuous improvement and gave them tools to mitigate their “pain points” in production.

- **How did we do it?:**
  We created a walkthrough schedule that integrated all 3 shifts and all of the departments. The walkthroughs encourage idea sharing and open dialogue between operations and different shifts. There are 4 groups (2 in the morning and 2 in the afternoon).
How is it working?

One of the best changes/improvements we have made at Peerless since I’ve been with the company! Here are just a few quick, easy improvements that were made!
How is it working?
What’s DONE look like for you with this?

- There is no “DONE” for this process. After project handoff, there will continue to be a walkthrough process around the plant with continuous improvements!
- A way to tell when the process is mature and the full implementation is “DONE” is when employees are taking the continuous improvement mentality home with them!
- Employees at Peerless that are not officers now run the improvements!
Putting it all together—some thoughts to ponder

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Engage + enable your employees and here’s how you could benefit

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- Increase customer satisfaction rates by 18%
- Multiply your financial success by $4.5$ times
- Decrease employee turnover by 14%

Source: Based on linkage case studies using Hay Group's global normative database
Q&A

- Time Permitting, Scott will review Questions from the ‘audience’ and direct to our speakers

- And, Chapter #1 holds post Webinar GoToMeeting Small group discussions if you are interested. Let us know and we’ll set one up post this webinar....
If you are a member of Chapter #1 IISE, then you have access to IISE Connect for the Chapter.

Go there to see all the:

- upcoming Events (Webinars, Conferences, Networking)
- Monthly Memos (archived)
- Member Profiles, connect with your peers
- And latest blogs, conversations, posts....
March and April Webinars

• **#3 Operational Analytics Part 2**—March 20, 12-1 pm ET
  - Jared Frederic and Scott Sank will provide the second part of their series on Operational Analytics. They will re-review the Intel Analytics Triangle and then zoom in on the Data Manager Role:
    - what decisions do we need to support?
    - What information do we need to support those decisions?
    - What data do we need to provide that information?
    - Where is that data? Do we have it? can we get it? can we trust it? if we don’t have it, how do we get it?
    - What do we do with the data once we get it? (store, organize, etc.)
    - How do we do Exploratory and Confirmatory Data Analysis on it?
    - How do we Portray the data so that it does, in fact, drive timely decisions and actions?

• **#4 Integrated LeanSigma Case Studies**—April 25, 12-1 pm ET
  - The three best, most successful Certification Capstone, year long, ILSS projects will be showcased in this Webinar:
    - **Examples of Candidates for this Webinar are:**
      - Kanban data support model to ensure replenishment decisions are more optimal—Surphen
      - Patient wait time reduction and Flow Improvement—Mount Carmel and OSU Med Center
      - Two Second Lean Implementation—Peerless Saw
      - Lead Time Reduction on Policy Modifications—Grange Insurance
      - Flow Improvements in Palletizing—Abbott Nutrition
      - On-Time Arrival Improvement for Buses—Columbus City Schools
      - Purchase Order Process Improvement—Dublin City Schools
      - Standard Work, Knowledge Management System Development, Risk Management—Transnet
      - Measurement System Analysis Improvement—Abbott Nutrition
      - Improvement of Analysis Productivity—Nestle’s Quality Assurance Lab
Operational Analytics for Integrated LeanSigma Process Improvement Projects
Part II
Presented by Columbus/Eastern Chapter-Region, CISE, Young Professionals - OPEN TO ALL
March 20, 12 p.m. Eastern time
**Presenters:** Jared Frederici, The Poirier Group and Scott Sink, Ph.D., Ohio State University

Part II of our Operational Analytics Series focuses on the data management role of an ISE in a process/performance improvement project. Frederici will lead by sharing a data modelling process that ensures you have the right data and facts to support sustained process improvement. We will share case examples from real DMAIC projects to bring concepts to life.

For more information and registration
Integrated LeanSigma Certification: Project Cast Studies
Presented by by Columbus/Eastern Chapter-Region, CISE, Young Professionals - OPEN TO ALL
April 25, 12 p.m. Eastern time
Student Presenters: Gunnar Smyth, Mount Carmel, Maria Pandolfi, OSU Med Center, Allen Drown, Transmet and Joseph Weger, Peerless Saw
Moderator: Scott Sink, Ph.D., The Ohio State University
This webinar will share three integrated LeanSigma process improvement projects that were completed as part of the Certification Capstone in ISE at Ohio State.

More information and registration
Join me and many of our Students from the OSU, Ohio University, and Youngstown State Student Chapters at our Annual Conference. Check out the Venue and it will make you want to plan a short vacation around the Conference, mix some business with pleasure!! I've done that for over 30 years with Bea...

The Council for Industrial and Systems Engineers (CISE) has put together a program just for Career Professionals. Highlights are below:

CISE will host a Leadership Mixer on Saturday evening that will parallel, run concurrent with the larger Conference Mixer. We invite Student Chapter Leaders but most importantly we invite every Leader/Manager of ISE type functions from business, industry and government. So it is just an outstanding networking event. If you are in Chapter 1 and you attend the conference, we'll get you invited to this.

CISE has designed special programming just for Career Professionals on Sunday and Monday. Here are our sessions:

**CISE Career Professionals T-Model Track (broaden and deepen your knowledge and skill base)**

1. Great Opportunities for ISE's in Value Exchange Optimization. David Poirier and Scott Sink
2. Evolution of Consumer to Prosumer Effects on Utility Business Model. Elaine Johns, CEO Enervision
5. Rebuilding the ISE Network within a major Automotive OEM. Stephen Savole, Manager IE, GM
7. Industrial Engineers in Architectural Practice: Leveraging Skillsets to Inform Design. Rudy Santacroce, CRTKL
8. The Second 7 Great Habits of Successful Young Professionals. Daniel Faucette, VP Tindall Corporation, Jared Duniap, West Monroe Partners, Jared Frederici, The Poirier Group, Scott Sink, OSU.