



“Sharing Information to Improve Reliability”



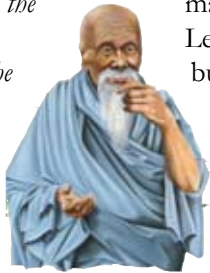
Leading an Organization Through a Reliability Change

Once upon a time there was a wise old philosopher, Lao Tzu, believed to live in China around 600 BC. There is no actual proof of his existence, and many people believe he may have been several mythical people combined into one. Numerous wise old sayings are attributed to him. One of which is:

The wicked leader is he whom the people despise.

The good leader is he whom the people revere.

The great leader is he whom the people say “We did it ourselves.”



In order for organizations to achieve world-class reliability, increases in production rates and sustainable low cost maintenance, they need to engage the majority of their workforce, especially the front-line, in defect elimination and reliability improvements. Good leaders can inspire front-line workers to take action to eliminate defects and the reactive work that these defects create. It takes the right types of people to lead and manage an organization through a reliability change that makes people believe “They did it themselves.”

What is the difference between a leader and a manager? A leader creates change within an organization and a manager

creates order in the organization. A leader shows direction, influences, motivates and inspires. A manager plans, organizes, controls and solves problems. Leadership addresses the question, “what types of changes are needed?” Management addresses the question, “what magnitude of change is needed?” Of course, a manager can be a leader as well. Leadership is not within a person but is a relationship between people. The best kinds of people to lead an organization successfully through change are Level 5 leaders. Level 5 leaders consider the goals and aspirations of the organization

above those of their own. They think in the terms of “we” instead of “me,”—not a “Lone Ranger”, but a team player.

The best way to begin a reliability change is to make sure socio-technical networks are in place and encouraged within the organization.

This encompasses what we call a Manager’s Shield. What are socio-technical networks? The people are the social part of the network and the equipment is the technical part. In a socio-technical network the leaders are the ones who create them and the managers use them as a shield to protect the organization as changes are being made. This maximizes the value of the changes to the organization by mitigating the risks involved.

A socio-technical network includes employees working cross functionally and imparting the knowledge of the equipment and its functioning to each other. A strong socio-technical network of employees uses their collective skill, knowledge, and know-how to not only solve problems but, better yet, to prevent problems from occurring in the first place. In an organization with strong socio-technical networks, anyone can be a leader on a particular subject that he or she understands. As we have stated

in previous articles, Level 5 leadership would allow the individual with the best understanding of the situation to make the decisions. However, in most situations there is not one individual but several individuals who understand the situation from different points of view. A good leadership process would then be to have all of the leaders participate in

Jim Collins wrote a book “Good to Great.” In it he outlines five attributes that are typical of Level 5 leaders such as:

1. They are self-confident enough to set up their successors for success
2. They are humble and modest
3. They have “Unwavering resolve”
4. They demonstrate Workmanlike diligence—more plow horse than show horse”
5. They give credit to others for their success and take full responsibility for poor results. They “attribute much of their success to ‘good luck’ rather than personal greatness.”

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SCHEDULE

Throughout the year, **The Manufacturing Game®** holds workshops for the general public at universities and/or professional organizations.

For more information visit
www.mfg-game.com

Public Workshop

The Manufacturing Game® will be holding a Public Workshop at **IMC 2011**

Bonita Springs, Florida
December 5, 2011

For more information or to register visit:
<http://maintenanceconference.com/imc/workshops/>

Conferences of Interest



SMRP Annual Conference

Greensboro, NC
October 17–20, 2011

To register or for more information please visit:
www.smrp.org



IMC 2011

Bonita Springs, Florida
December 5–8, 2011

To register or for more information please visit:
www.MaintenanceConference.com/imc/
or call (888) 575-1245



Reliability Centered Maintenance Managers' Forum

Fort Meyers, FL
March 20–23, 2012

To register or for more information please visit:
www.MaintenanceConference.com
or call (888) 575-1245

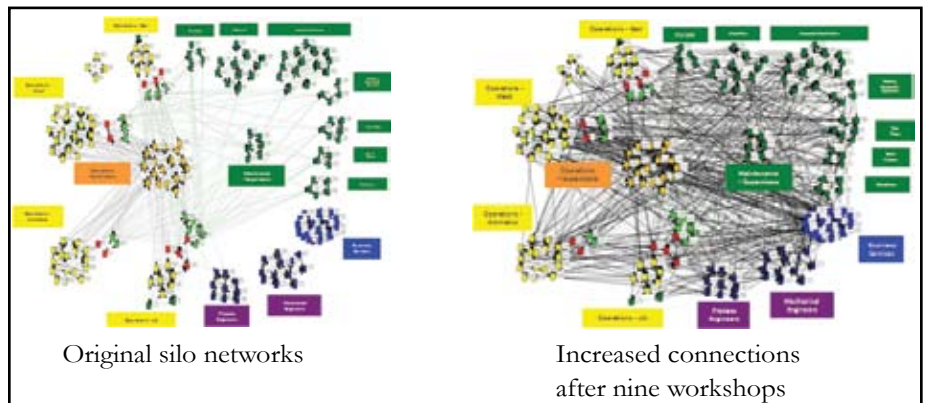
Mark Your Calendar!



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the decision. John Bennett says that understanding is what creates the freedom to act. Therefore, the more leaders you have in an organization, the more likely that the reliability of the equipment will get the care it needs to continue functioning properly.

One example of a facility we've worked with shows how originally everyone worked in their own silos, and only the managers had cross functional connections through management meetings. After only nine Manufacturing Game workshops and the resulting action teams, (where the employees worked cross-functionally to eliminate defects) you can see all the additional connections that were made. Within a 3 month period many more people including front line personnel had connections to multiple people in other functions and therefore had the ability to make a difference.



Changing today's complex industrial organizations requires more than what a single leader or even every manager can achieve. The culture of the organization exists in the habits of the workers, and it takes many repetitions to change habits. Socio-technical networks are very powerful because change is initiated by the high number of connections made. These cross functional networks can be used to prevent the introduction of defects and waste at their source. Eliminating defects and waste prolongs all stages of equipment life. It is also vital to remove the

defects already present in the equipment by not only fixing it but improving it. This is the "don't just fix it, improve it" strategy that we recommend. These networks can also remove defects that generate future failures. Future maintenance requirements will be greatly reduced, guaranteeing a good to great organizational change in production performance. The difference between a facility's capability and its actual production is impacted by its poor reliability.

Creating a Level 5 leadership process for organizational change requires communicating an urgent business need to improve the reliability of the organization. Everyone needs encouragement to use widespread defect elimination with cross-functional action teams to create connections in the socio-technical network matching the needs of the equipment. Freedom is vital so that anyone can lead. Check your egos at the door and

let everyone participate in leading the change. It is also important to build defect elimination work into the work management system to drive the reliability improvement. The number of work orders for a specific piece of equipment can provide the information needed to know what equipment is breaking most frequently and consequently producing the random failures that keep an organization in the reactive domain.

Find out more in the book, *Level 5 Leadership at Work* coming out later this year at
<http://Books.MRO-Zone.com>.

The Mysterious Forms

Apparently this is based on a true incident. A quality management consultant was visiting a small and somewhat antiquated English manufacturing company, to advise on improving general operating efficiency. The advisor was reviewing a particular daily report which dealt with aspects of productivity, absentee rates, machine failure, down-time, etc. The report was completed manually onto a photocopied proforma that was several generations away from the original master-copy, so its headings and descriptions were quite difficult to understand. The photocopied forms were particularly fuzzy at the top-right



corner, where a small box had a heading that was not clear at all. The advisor was interested to note that the figure '0' had been written in every daily report for the past year. On questioning the members of the staff who completed the report, they told him that they always put a zero in that box, and when he asked them why they looked at each other blankly. "Hmmm., I'm not sure about that," they each said, "I guess we've just always done it that way."

Intrigued, the consultant visited the archives to see if he could find a clearer form, to discover what was originally being reported and whether it actually held any significance. When he

found the old reports, he saw that the zero return had continued uninterrupted for as far back as the records extended—at least the past thirty years—but none of the forms was any clearer than those presently in use. A little frustrated, he packed away the old papers and turned to leave the room, but something caught his eye. In another box he noticed a folder, promisingly titled 'master forms'. Sure enough inside it he found the original daily report proforma master-copy, in pristine condition. In the top right corner was the mysterious box, with the heading clearly shown.....

'Number of Air Raids Today'

Do you do the same things each day out of habit without questioning how or why?

On the Hill Easier Access to Clean Wipers and Windows

In the cold, snowy climate of Alaska the use of the snow loaders is a common sight. One of the biggest problems is keeping the windshield and



Basic loader

wipers free of snow and ice buildup. Previously the operators would have to climb over the snow covered loader frame to clean the ice buildup on the wipers of their snow loader.



No platform

The snow loader used by CH2M Hill had no platform to stand on for stable footings, no ladder to climb up for easy access to the windshield, and nothing to hold onto for stabilization



No ladder for access

making it a good possibility for a slipping incident. The Action Team of Kevin Field, Larry Armstrong, Ken Lyman and Greg Raver decided to modify the grab rail and platform system from a later model machine and make it work with their equipment.



Platform installed

They installed a platform to stand on, a top grab rail, a lower grab rail to hold onto and a lower step to hoist themselves up on. They also made the mirrors pivot upward



Upper and lower grab rails and step installed

for clearance. This provides safe and user friendly access to the wipers, reducing the possibility of slips, trips, and falls.



Mirrors pivot



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Ability is what you're capable of doing.

Motivation determines what you do.

Attitude determines how well you do it.

—Lou Holtz

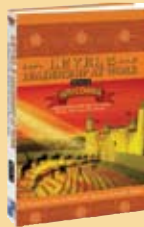


TMG News

What's Happening!

Level 5 Leadership at Work

The second book in the Heroic Change Series *Level 5 Leadership at Work* is coming out later this year and will be available at <http://Books.MRO-Zone.com>



Find out what it takes to become a Level 5 leader and lead your organization through a reliability change. Learn about Socio-technical networks and how they can bring about change. Establish a Manager's Shield to protect the organization while the change is in progress. A must read for everyone regardless of your position in the organization.

If you haven't read *Don't Just Fix It, Improve It!*, it is also available at <http://Books.MRO-Zone.com> or Amazon.com

A Manufacturing Game Public Workshop will be held at the IMC Conference December 5, 2011

The IMC Conference will be held in Bonita Springs, Florida December 5–8, 2011. If you haven't experienced a Manufacturing Game Workshop this is the perfect opportunity.

The Manufacturing Game® is an interactive workshop, that introduces a cross functional approach to engage the workforce in equipment reliability through defect elimination. It employs organizational learning to collapse time and move from reactive to proactive maintenance and operations in order to increase production while reducing outages, waste and high costs. For additional information or to sign up for WS4: The Manufacturing Game®—Creating a Reliability Culture visit www.maintenanceconference.com/imc/workshops/

New in 2012

Reliabilityweb.com will be holding Reliability Leadership Classes. The Manufacturing Game® will be part of a 3-day class at the Reliability Performance Institute in Fort Meyers, Florida.

A large number of top performing companies are implementing Operation Excellence initiatives. On the first two days John Mitchell will go into detail about the components and implementation of a comprehensive Operations Excellence Program for physical assets. The third day will show how a proactive approach to organizational change can lead to sustainable business performance by The Manufacturing Game®.

There will be two sessions. Dates for the classes are April 24–26 or November 13–15, 2012 for information visit: www.maintenanceconference.com