



The Languages of TMG and OEG

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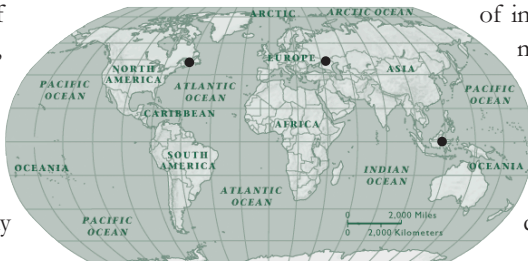
The limitations of being monolingual in a multilingual marketplace have hit home here at Ledet Enterprises. As the use of The Manufacturing Game (TMG) and the Operations Excellence Game (OEG) has expanded outside of the United States, Canada and the United Kingdom, we have had requests to deliver workshops in the native languages of Mexico, Indonesia, Vietnam, Azerbaijan, China and Chile, just to name a few. As if translating from my native Texas-speak to regular

English wasn't challenge enough!! We have tried various methods of bringing our simulations into countries where English is not the primary language with varying levels of success. The two most effective methods have been simultaneous translation and training bilingual local facilitators.

We have conducted workshops using professional simultaneous translation into Japanese for Honda and into Spanish for Pemex with exceptional results. It did slow down the process a little and required some skill and patience on the part of the facilitators. Maybe the hardest adjustment for me as a facilitator was becoming accustomed to the delayed response to my jokes. I kept wondering, "Does that joke not translate well? Is my timing off today? Do I just need to wait for the translation to get the laughs? Or have my friends and family been right all of these years when they tell

What's Inside?

me that I am just not as funny as I think I am?" I also had to constantly remind myself to speak more slowly and pause occasionally to allow the translator to catch up. And speaking of the translator, for this technique to be effective, a highly skilled professional simultaneous translator with the right sound equipment and knowledge



Successful action team stories from around the world.

of industry specific terminology in both languages is paramount.

Locations planning to conduct a number of workshops have typically chosen the second method, training bilingual local facilitators. This method requires conducting facilitator training for local facilitators who speak and read English as a second language. While the facilitator training is conducted entirely in English, once trained, these bilingual facilitators can then use English or their native language as they see fit to present the various talks in the workshop, call the game, conduct the debrief and launch action teams. We were initially concerned about our ability to certify facilitators if they chose to conduct the certification workshop in a language other than English. But to our amazement, we found that it was possible to follow along based on our previous experiences with the dynamics of the workshop and by watching for certain reactions from the participants. Thankfully, these reactions seem to be universal and non-language specific.

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Lube Oil Filling System Improved

At an Operations Excellence Game workshop at BP in West Java Indonesia last January 29th, an action team was created to address the concerns they had with the lube oil filling system at Lima Flow station. Team members, Yuyun R. Yubandi, Nurfahmi Santoso, Ahmad Bunyamin, Yusuf Supriyatna, Muhaimin Somantri, and Natalie, discussed the need for a new system because of many concerns.

The existing system used a pump and 55 gallon lube oil drums. One of the concerns was that the process required four people to move the lube tanks from the main deck to the supply drop point on the cellar deck. The lube tank was beside the equipment in a narrow area. They used a manual transfer pump to transfer oil to the equipment. This process required a crane operator to move the tank from the main deck to the cellar deck, a signalman at the main deck, and two riggers on the cellar deck to help transfer the lube oil. There were also many risks associated with the lifting of the drums. The lube oil drums required extra storage space on the deck and the process created messy spills requiring frequent deck clean up.

The team came up with a new lube oil filling process that utilized a tank with an oil refill line and a gravitational system. This new system is a closed system that minimizes potential house-keeping issues such as slippery deck floors due to lube oil spills. The new process requires only one operator to activate the system by turning on the lube supply valve on the main deck.

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Public Workshop Calendar

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

TMG Public Workshops

March 11-12, 2004
Richmond, VA

May 6-7, 2004
Knoxville, TN

May 24, 2004
MARTS Conference
Chicago, IL

Additional workshops for 2004 may be announced at a later date.

To register and for more information, please visit our web site:
www.manufacturinggame.com/inaction.html

Project Value Game Public Workshop

April 2-3, 2004
Burke, VA

For details or to register go to the PMI Chapter Web site:
www.pmiwdc.org
or contact
John Cormier at (703) 250-2806

Additional PVG workshops for 2004 may be announced at a later date. For more information, Please visit our web site:

www.practicefields.com/seegamebody.html

Conferences of Interest

National Plant Eng. & Facilities Mgmt. Reliability Pavilion

February 23-26, 2004
Chicago, IL

To register and for more information visit:

www.manufacturingweek.com

Offshore Technology Conference

May 3-6, 2004
Houston, TX

For more information, visit:

<http://www.otcnet.org/2004/index.html>

NPRA Maintenance Conference

May 25-28, 2004
San Antonio, TX

To register and for more information please visit:

www.npra.org/meetings/maintenance/

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Another helpful trick for the certifier is to learn just a few words in the other language, like the colors represented on the game board, the numbers from 1 to 10 and the words for "here" and "there". This small bit of vocabulary plus a lot of pointing seems to do the trick most of the time. In some cases, the new facilitators have translated the step sheets, some of the presentation slides and even the assessment booklet into their own language. But fortunately, because of the iconic nature of the game board itself, it has not been necessary to translate the game boards.

After overcoming obstacles both large and small to delivering workshops in 18 different countries, the most important lesson learned is that while the languages might not be the same from location to location, the issues are very much the same. The negative impact of defects on production, product quality, safety and environmental performance, waste and

profitability are universal. No company, location, country or language seems to make an organization immune to the bite of the defect bug. And, around the globe, the enthusiasm of the workforce for finding and eliminating defects also seems to be universal. The game's hands on experience of the impact of wide spread defect elimination within an organization has inspired technicians, supervisors, managers, engineers, purchasing agents and support personnel alike to do their small part in identifying and eliminating defects; knowing that the combination of all of these efforts creates an impact where the whole is far greater than the sum of the parts. As Richard Tanner, OEG facilitator with BP is fond of saying, "It's the way you have to eat an elephant. Just one bite at a time."

In the end, it turns out that language is but a minor issue when the passion for improvement has been sparked. ♦

ISO 14001 Compliance in Luminescent Lamp Disposal

At an OEG workshop at BP in Azerbaijan on July 5, 2003, an action team was created to address the disposal of luminescent lamps (fluorescent tubes) at their site. Team members, Rovshan Musayev, a Deputy Team Leader, Javanshir Suleymanov, an Operations Supervisor, Jakob Shogolev, SCM, and Eldar Shukurov, Sr. Environment Advisor met to discuss this important issue. They recognized that people at various sites did not have any idea how to collect, segregate and dispose of the luminescent lamps.

During the action team discussion, it was also determined that it was very important to have proper waste disposal at their site in order to be in compliance with ISO 14001 certification. ISO 14001 is an internationally recognized environmental management system standard that provides a highly effective, globally accepted framework for establishing and continually improving applicable management system processes. ISO 14001 outlines key requirements companies should comply with in order to operate in an environmentally responsible manner. The ISO 14000 elements provide diverse organizations a framework for managing

and continually improving their environmental programs.

During discussions, they determined that the support of the person who was in charge of making the decisions regarding proper waste disposal was important and set out to discover who that person was. Javanshir Suleymanov with Sitara Sultanova's help, researched and contacted companies to transport the hazardous luminescent lamps and created a new procedure for the collection and transportation of these lamps. They determined that the old fluorescent tubes were to be containerized or replaced in the box packaging that the new tubes arrived in. They determined that proper labeling and separate transfer notes should be prepared for this waste stream. They immediately implemented this new procedure into the daily routine of all pertinent employees.

Team members were key in creating and implementing this new procedure and are happy to report the success of this HSE improvement. As one team member put it, "Better start to eliminating defects now, before the defects start to eliminate us. There are a lot of defects surrounding us, but we are much stronger so we can manage to stop them." ♦

Team Dramatically Cuts Machine Interventions

At a Manufacturing Game[®] workshop at Michelin in New Glasgow on February 28, 2003, an action team was created to address the problems they were having with the Tire Building Machines.

Action team members, Scott Bird, Lenny Helpard, Rita Casey and Grant Crosby discussed the necessity of constant interventions to make adjustments to the tire building machines. These interventions were due to overstretching of bead rubber that was causing a lot of time, rework, and decreased throughput not to mention the fact that all of these adjustments were making a 12-hour shift seem much longer to the operators.

The problem was more specifically related to two strips of rubber product that had to be applied to the tire simultaneously. Every 8 tires, the operator had to cut out a strip from one side in order to even out the two strips because one side would slip and stretch while being applied to the tire. At the end of The Manufacturing Game workshop, during a brainstorming session, they determined that the root cause of the

problem might be related to the slipping of the product on one of the drive rollers. The maintenance troubleshooter and the operator revealed that only one side was a problem. This led to the realization that maybe all that was needed was reduced slippage on one side. The challenge was to determine how to reduce the slippage. Initial thoughts surrounded redesigning components to achieve the result. They eventually determined that a way to overcome this problem would be to apply more pressure to one side to hold the product against the drive roller.

A lot of the operators around the machine did not think this simple modification would work. Regardless, Scott Bird (Operator) and Grant Crosby (Maintenance) carried out the installation of the independent regulator during their shift and began the test.

They had the ability to control the pressure with a roller on each side fed by a single line. They tubed another line from the valve block with an independent inline regulator. This now gave the flexibility for different pressures on each roller.

After initial setup, the number of interventions dropped from 14 per shift to 2 per shift. Each intervention was about 30 seconds. The production benefit was an approximate increase in production of 6 tires per day from one machine.

They determined that if they applied the same solution to the other machines, there could be substantial productivity gains. The team decided to take it upon themselves to carry out the installation on other machines reducing rework and interventions not to mention operator frustration while increasing throughput. ♦

Action Team Minimizes Welding Activities and Freon Leaks During AC Repairs

At an OEG workshop at BP in West Java, Indonesia on October 9, 2003, an action team was created to minimize hot work or welding activities associated with AC repairs. They were also interested in eliminating freon leaks that can occur during these AC repairs.

Action team members, Jack Hermanjoko, Dani L. Pahu, Lutfi Hasyim, and Ragil Samidi met to discuss the current method for eliminating freon leaks in the area of the suction/discharge tube line of the air conditioning compressor which involved replacing the leaking line with a new line. This process required welding activities (hot work). They concluded that the leakages could be stopped using connection ferrules to replace any leaking section along the suction/discharge line of the AC compressor instead of welding a new replacement line. This eliminated the need for hot

work, minimizing operational and safety risks.

In addition, freon escaping into the environment during these repairs has now been minimized and in some cases stopped completely by sucking the freon out of the AC system, temporarily storing it and then re-injecting the freon back in to the unit after the AC has been repaired.

Team member are pleased that this action team has had such good results in eliminating safety and environmental risks. This improvement has been in support of the Green House Gas and ISO 14001 programs. ♦



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Using the tank with a bigger storage capacity instead of numerous drums reduced the lifting frequencies and the safety hazards along with it. The new tank also requires less storage space. The tank is equipped with a level indicator and low-level alarm making it easy for the operators to monitor the amount of lube oil remaining in the tank.

The action team is very pleased with the new gravitational lube oil filling system and the benefits that this new system has provided. The new lube oil filling system has reduced the safety risks, reduced messy clean ups, reduced the need for storage space, and freed up employees to work in other areas. The action team members all agree that this was a very successful action team!





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TMG News

BP Azerbaijan Chirag-1 Platform Goes Green!

In an Operations Excellence Game workshop at BP Azerbaijan on July 5, 2003, an action team was created to expand the Green Office Initiative to the Chirag-1 Platform.

Many BP offices around the world have adopted an environmental improvement program known as the Green Office Initiative (GOI). GOI is a program designed by staff that wishes to play a role in reducing the impact of their work practices and buildings on the environment.

In general, a green office is a smarter and better office. It is ecological (using nontoxic, recycled, environmentally friendly products and supplies), efficient (using as little energy and other resources as possible, and putting out the smallest amount of waste as possible) and healthy (with as little visual, noise and physical pollution as possible). For example, a green office may choose to use energy-efficient lighting and

office equipment and may rely on natural light as much as possible. It may choose to recycle everything from paper to printer cartridges and may encourage e-mail and telecommuting. Ideally it is built from the ground up, inside and out, using non-toxic, durable recyclable/reusable flooring carpets, wall coverings, paints and furnishing. As a result, a green office saves money, is a more pleasant place in which to work, and is easier on the environment.

The action team created to expand the GOI program at the Chirag-1 platform, consisted of Victor Melejko, Raul Aliyev and Dimitri Gorshenin. Before proceeding with the implementation of the GOI program, detailed research was done on current paper usage and estimated potential cost savings. The team identified excess paper usage as a source of waste (defect) and worked on improving communications and procedures to limit paper usage.

They networked with operational management about the necessary changes required to limit paper usage and gained approval from the operations line managers to implement the GOI program. They not only communicated the importance of encouraging commitment and support when rolling out the initiative but also networked with the Infrastructure Team to ensure the process was flowing appropriately.

Even though they faced many challenges networking and selling the ideas of a "Green Office" to employees, the program was implemented, and administrative staff at the platform has seen a 20% reduction in paper consumption. They are now sending used paper out to be recycled and are experiencing reduced waste, reduced cost in materials and improved HSE performance. ♦

