

Volume 12, Issue 43 ☐ October 24, 2005

Important Dates to add to your calendar...

- ☐ **Oct 25, 9-11 am. HPM Employee Leveraging Tour #2 Member: Samuel Strapping, Host: Daniel Stancescu** 12 Seats only – Register with Nicole.
- ☐ **Oct 25/26: Concluding 2 days - "Achieving Results Thru People" "Effective Lean Management Skills"** for Lean leaders in Lean environments looking for practical tools. www.hpmconsortium.com
- ☐ **Oct 31-Nov. 4: AME International Lean Conference** in Boston. For program details check: www.ame.org
- ☐ **Nov 16, 8 am-12:30 pm: HPM Health & Safety Officers Exchange.** Host: Rockwell Automation – Raglin Facility. Bill Malus will host this freewheeling, open exchange of issues, standards and best practices. Limited to HPM Member Companies.
- ☐ **Nov 22, 9-11 am. HPM Employee Leveraging Tour # 3. Member: Orenda Aerospace. Host: Brenda McIntosh.** 12 seats only available – first come. Register with Nicole at info@hpmconsortium.com
- ☐ **Dec 1, HPM Share Showcase, GE HQ Mississauga.** *Time to pick top concepts to present. If any HPM'ers did not get the e-mailed Guidelines & Registration forms – contact Nicole. Deadline for Presentations: Oct. 31, 05. Participant names by Nov. 15th.*
- ☐ **Dec 13, 9-11 am. HPM Employee Leveraging Tour # 4. Member: Gerrie Electric. Host: Jenny Worthington.** 12 seats only available – first come. Register with Nicole at info@hpmconsortium.com
- ☐ **June 12-15th, 2006 Second Canadian Regional Conference... Kitchener-Waterloo Region Canada.** Consider accelerating your Lean Journey. Download from www.hpmconsortium.com – Click "Resources" on the home site, and then "2006 CDN Conference"

NOTICE: TO HPM HEALTH & SAFETY LEADERS**An issues & Challenges Exchange**

The agenda is coming together now. It will be a frank and open discussion of common issues among HPM professionals responsible for Health and Safety issues and culture in their plants.

We are planning a half day – from 8:30 to 12:30 – hosted at Rockwell Automation, and if there is synergy and an expressed need, a possible formation of a Special Interest Group (SIG) will be considered.

This half day will identify common concerns that will provide the opportunity to learn what other folks are doing, and just who you might add as a new link in your personal "knowledge supply chain" around this very World Class topic.

To register – simply email Nicole at nsyvier@hpsinc.ca or call her at 519-893-6260.

HPM Member-To-Member Training

Hammond Mfg (Enclosures) has a 3-Day course running Nov. 8,9,&10 on site for ISO 9001/2000 Internal Auditor Training. The first 4 HPM folks who register with Nicole before Oct. 28th get the seats.

The Reasons To Get Serious about Lean Are All Around Us

Joe Smith started the day early having set his alarm clock (made in Japan) for 6:00 am. While his coffeepot (made in China) was perking, he shaved with his electric razor (made in Hong Kong). He put on a dress shirt (made in Sri Lanka), designer jeans (made in Singapore), and tennis shoes (made in Korea). After cooking his breakfast in his new electric skillet (made in India) he sat down with his calculator (made in Mexico) to see how much he could spend today. After setting his watch (made in Taiwan) to the radio (made in India) he got in his car (made in Germany) and began his search for a good Canadian Job.

At the end of yet another discouraging and fruitless day, Joe decided to relax for a while. He put on his sandals (made in Brazil), poured himself a glass of wine (made in France) and turned on his TV (made in Indonesia).

As he sat there, he wondered why he can't find a good paying job in Canada.

Understanding The China Factor

HPM'ers are still contemplating the solid information provided at the last Board Meeting. The information was hard-hitting and close to home because the data was provided by HPM Members directly involved in China. The following is more support for some of the points Art Church made in his talk which underlined the lower cost Chinese infrastructure. Art will be a Keynote Speaker at the CDN Regional Lean Conference in Kitchener June 12-15th.

Thanks for the following article go to Bob Adams who writes the Okanagan Lean Enterprise Consortium bi-weekly Newsletter which is provided by the CME, B.C. Division. You can contact Bob at rcadams1@telus.net

What comes to mind when you think about manufacturing in China? Low-quality, low-cost goods? Sweatshop conditions for workers? It's time to think again.

According to a recent large-scale study of manufacturers in China, with metrics directly comparable to U.S. Manufacturers, Chinese Manufacturers are "younger and have a significant cost advantage across all industries".

The study surveyed companies in China that were ISO-certified or in the process of ISO certification. These companies were selected because "they are an elite group and more likely to export and be the competitors that people would outsource to".

Among the findings of the survey:

- Plants in China planned to spend 20% of sales on capital equipment in 2004, compared to 3% in U.S. plants.
- 72% of Chinese plants expected to increase that level of capital equipment spending in 2005 compared to 53% of U.S. plants.
- Monthly wages in China averaged \$120.80 compared to \$2160.00 in the U.S.
- 75% of Chinese plants expected to increase IT spending in 2005, compared to 42% of U.S. plants.
- As a percentage of sales, Chinese plants invested 5% in IT compared to 1.4% for U.S. plants.
- The top market objectives for Chinese plants were 1) Quality, 2) Innovation, 3) Service, 4) Total Value. For U.S. Plants the ranking was 1) Quality, 2) Service, 3) Total Value, 4) Innovation.

Manufacturers in China are investing in information technology at a rate 3 times their U.S. counterparts.

Overall, the survey shows that China's manufacturing base is younger, cheaper, more heavily invested in IT and capital equipment, focused on innovation and achieving surprising quality.

Also, China has recently accomplished dramatic science and technology breakthroughs in supercomputers, nanotechnology, biomedical, satellites, nuclear energy and other fields that will likely help to further strengthen their manufacturing sector.

How should North American Manufacturers Respond?

First, North American firms have an advantage right now using "lean" manufacturing methods, especially considering their proximity to domestic customers. In China, 65% of the firms surveyed were using Total Quality Management (TQM).

Second, North American companies should focus on empowering workers. Companies that are organized around self-managed work teams have an advantage, because empowered workers are more likely to support a major improvement program and "sustain" the changes. In China, the concept of work teams is not well known. While Chinese manufacturers may not be using work teams, they are providing more training to employees, even beyond North American manufacturers who are considered "World Class". This is partly in response to the migration of people to the cities from rural areas of China, but more so, a recognition of the value of cross training. "The most expensive employee is the one who only does one thing".

Third, beyond improvement methods and employee empowerment, North American firms need to strategically reposition themselves. The key is to avoid the commodity trap, where, when feeling squeezed by increased cost pressures and competition overseas, mfrs cut costs, margins and innovation. World-Class manufacturers have been able to avoid that trap by executing well, using Lean and Best-in-class practices, embracing innovation and, more broadly, applying Strategic Repositioning in order to grow and compete.

North American mfrs should think of themselves as providers of solutions, and figure out how to package a whole set of services and products together as a total

solution. This is what Strategic Repositioning accomplishes, by helping companies uncover areas ripe for innovation, such as offering new technologies, products and services, rethinking distribution and processes, and discovering new markets and niches. The firms least likely to see work go overseas are those that are most tightly integrated with their customer base, offering so many other services that the cost of the product is less of an issue. North American manufacturers must look differently about their business. They should look at every aspect of how they can make their customer **"SUCCESSFUL"**.

The threat from Chinese manufacturers is real, given what they've accomplished without the use of Lean or employee empowerment. Don't think your company is immune. We can meet and overcome this challenge with positive action, but you must take action.

... Bob Adams

Tidbits to Ponder... things few know

At the coming CDN Regional Conference in June, Dan Joseph, who lives in China, will be putting the 'China Factor' into a clearer perspective. He was the top panelist (by far) at last year's AME Int'l conference in the "Great China Debate" led by Larry King. Here are some 'ponderables' which you might raise with Dan next June.

- There will be 8 'Calgary size' cities in China showcasing the Beijing Olympics in 2008
- In 1988 there were only 275 km in its national highway system. In 2006 there were 28,000 km and as of this year there's 82,077 km. The US has 75,000 km.
- There are now 9 nuclear plants operating in China with 27 more to be built in the next 14 years
- There are 300 car-making plants in China... everyone from GM to Nissan and BMW
- China used more than 50% of all cement used on this planet last year
- China's steel consumed 40% of all steel used in the world last year according to Barron's
- China has stashed away in its central bank \$474 billion in gold and foreign exchange reserves... and that is 500% more than that the US has stockpiled
- 20,000,000 vehicles are in use today in China – and in 15 years they expect 120,000,000... still wondering why all the western car makers are making tracks to set up there?
- The fastest train in the world peaks at 500 km per hr – as it runs in Shanghai... although normally it only chugs at 430 km per hour
- While the developed world has been growing, China's average annual growth rate is 9.4% year after year – that's 400% faster over the last 25 yrs
- China's GDP is 1.64 trillion USD – up 1,100 percent in less than two decades. They're now 3rd largest trading nation in the world
- \$5.6 billion USD is the value of last year's imports. It is much more than a producer of low cost goods – it is also a lucrative consumer market all on its own

- 50,000 babies are born in Beijing each year
- China holds \$21 billion of the US debt through treasury bonds... which means that each and every US citizen owes China \$6,506.
- On another note, It has some challenges – for example in Shanghai in 2004 - 8,000 manhole covers were stolen over a six month period. Each brought the thief \$4 USD which is equivalent to a typical day's wage. Unfortunately 8 people were killed falling into the open holes. [Ref: KW Record acoates@therecord.com]

There is much credibility in the increasingly used phrase which is taking on a credible ring:

"With the addition of China to the world manufacturing stage, manufacturing as we know it will never be the same again."

Here's Jim Womack's Serious Look at Delphi

Dear David,

One of the hardest things in my line of work is seeing a company make enormous strides in getting lean and yet fail to prosper. Today's heartbreak is Delphi, the giant American auto-parts company that was one of the founding sponsors of LEI and which has been a test bed for our ideas and publications over the past eight years. As you may know, Delphi filed for bankruptcy on October 8 and is now in reorganization.

I have walked through dozens of Delphi facilities in many countries and in my recent walks I have seen some of the leanest practices I have ever found outside of Toyota City. Delphi retained the very best ex-Toyota sensei, **pursued kaizen and kaikaku with a vengeance, and took out billions of dollars of operating costs.** At the same time quality was dramatically improved (down to defects-per-million-parts in the single digits), responsiveness to changing customer requirements was enhanced, investment requirements for a given increment of capacity were slashed, and inventories shrank. In short, Delphi took all the necessary steps to transform its production system, but these steps alone weren't sufficient.

So what went wrong? Delphi was caught in the middle between promises made to employees as it departed General Motors and demands from its largest customer (also GM at 50% of Delphi sales) as it struggled to adjust to today's hypercompetitive world economy. When Delphi gained its freedom in 1999, the hope was that there would be enough time to make the transition. Delphi would honor wage and pension agreements with existing employees working on GM business in North America while it steadily diversified new business away from GM, which initially accounted for 90% of Delphi's sales. Then as Delphi's unionized workers in the U.S., working at very high "GM wages," retired they would be replaced by young workers with "Tier One" wages comparable to those at Delphi's competitors in the supplier industry. At the same time, GM would acknowledge Delphi's cost problem on its GM business and keep price reduction demands in line with Delphi's ability to remove costs.

For five years, as Delphi steadily increased its productivity through its lean initiative and as its high-wage workers retired, it seemed that the equation might work. But then energy prices zoomed, the big SUV and pickup segments where GM still made good margins stagnated, and lean competitors like Toyota launched products in each of GM's remaining profitable niches. GM responded by pushing harder and harder on Delphi's product pricing to a point where Delphi losses soared. (The irony for Lean Thinkers is that lean-leader Toyota beat GM and GM responded by beating up Delphi which has become one of Toyota's most eager pupils. **If only Delphi had Toyota as its major customer!**)

Something had to give and Delphi decided that bankruptcy was the only way to deal with money-losing activities in the U.S. even as the company has had good financial performance elsewhere in the world, aided in every case by lean production.

So what's the takeaway for lean thinkers? Simply fixing operations may not be sufficient if managers wait too late to start and factor costs (principally wages and healthcare costs these days) are too far out of line. Delphi will now go through a reorganization process in which the bankruptcy judge rather than senior managers, union leaders, or customers will decide how to divide the pain. And here is a contrarian prediction: I believe Delphi has a great future as the world's leading car parts supplier once promises made in a much less competitive past are addressed. This is because the lean foundation for success has been laid.

Many observers assume, of course, that a key step for Delphi will be to move practically all U.S. and West European operations to low labor-cost countries. And this may be part of the solution. But again, let me be a contrarian and point out that this step, although necessary in selected cases, can never be sufficient.

After all, anyone can chase labor. If Delphi simply moves all operations to China – assuming that this is the global low-cost location – but runs its operations like a mass producer, how can sustainable competitive advantage be gained as competitors pursue the same strategy at the same rate? In fact sustainable advantage lies in combining truly lean practices in product design, operations and logistics, purchasing, and customer touch with appropriate labor costs at the right location to serve specific customers.

What these costs are and where activities should be located depends on the specific customers to be served. (You'll need some "[lean math](#)" to get the right answer.) But I predict that in many cases the right location for Delphi will be closer to the customer than most observers believe today. In any case, and for any company in any industry, only lean processes in the right location will prove both necessary and sufficient.

Best regards, Jim Womack, President and Founder
Lean Enterprise Institute. [NOTE: There's a free Webinar Nov 15 @ 2pm. You can learn more and register at <http://www.lean.org/Events/WebinarDescriptions.cfm>]