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2008 Fall Operations Conference Addressing Challenges in Manufacturing



The fall Operations Conference on October 23 focused on “Manufacturing in Transition” and attracted 46 company representatives to Krannert. The topic for the conference was motivated by results of a survey of Global Manufacturing Competitiveness done by the Center with funding from accounting firm Katz, Sapper and Miller (KSM) released in September 2008. The study showed that Indiana manufacturing firms delivering the best financial performance had compensated for high fuel prices, rising commodity prices, the weak dollar and low credit costs by adjusting their operations. These firms had increased batch sizes and thus showed lower inventory turns than other manufacturers, had increased exports

to take advantage of the weak dollar and had effectively increased their working capital to support their operational choices. Our choice of the topic for the fall conference was motivated by these pressures as well as the stress on the automotive supply chain caused by the push by consumers to buy more fuel efficient cars. But the past few weeks have delivered a very different environment for manufacturers. We now have a strong dollar, lower fuel prices than before, falling commodity prices and a tough credit market that demands a careful attention to working capital needs. OEMs are now looking for ways to support the supply chain and guarantee that parts are available to support OEM product manufacture. This environment now suggests a different transition than before. These current pressures were the topic of discussion on October 23.

Tim Fiore from Terex described how the company, a large global OEM that makes material moving equipment, had added working capital monitoring of its supply base as part of its supply chain metrics. Terex now considers its role in supplier financing by sometimes buying in larger batch sizes, sometimes working with banks to assist suppliers in getting credit, sometimes moving to smaller batches etc. Tom Kent from Kimberly Clark described their processes in managing suppliers. The company was now concerned about supplier financing and worked to identify potentially vulnerable suppliers to assist.

Don Foley from Indiana Economic Development Corporation described the economic environment in Indiana and the 50 % increase in exports by Indiana firms between last year and this year. He brought along senior managers from two Indiana companies that have worked with IEDC in improving their competitiveness. Ted Fiock from Anderson Tool and Engineering described how his company had shifted to CNC manufacturing, lowered the floor space footprint, changed their customer mix to generate a more balanced portfolio, decreased lead time, moved to JIT and effectively generated a more flexible manufacturing operation. Kerry Davis and Andy Platte from Personix described how their credit card operation was slowing but their portfolio change notice operation had increased to the extent that their shipments in one week this year had already surpassed all of last year’s shipments. The conference ended with a discussion of the KSM survey results, suggested ideas for future follow up by Professors Bagnoli, Stewart and Iyer and feedback from manufacturers.

The net impact of environment uncertainty was that smaller firms were required to start thinking about enterprise risk and thus evolve a capability to adjust to the changing environment. This meant sometimes decreasing turns and increasing them at other times, changing equipment to permit flexible capacity, focus on capability than on current products as identifying the company etc. The question of how DCMME and manufacturers collaborate to assist through challenges while creating student learning opportunities remained a topic that will continue to be discussed.



2008 DCMME - GSCMI Fall Operations Conference

“Manufacturing in Transition” in Review

Summaries written by DCMME & GSCMI Centers Graduate Assistants



Each fall, the Dauch Center for Management of Manufacturing Enterprises (DCMME) and the Global Supply Chain Management Initiative (GSCMI) host an Operations Conference which brings in a variety of industry and university staff to give presentations focusing on pressing topics in operations.

On October 23, 2008 we had the privilege to host Don Foley, director of manufacturing and logistics for the Indiana Economic Development Center (IEDC). His discussion topic was Manufacturing in Transition. To begin, he mentioned how there is a distinct difference between markets and environments. Specifically, the markets of today's economy are being challenged. "They're struggling to maintain the growth they've seen in recent years. The environments, on the other hand, remain strong, especially in Indiana." To illustrate this point, Don pointed out that Indiana has been voted the #1 place in the Midwest to do business by CEOs. It's also number one in the nation in terms of jobs being placed by foreign investment. Furthermore, exports from the state grew to a record 25.9 million in 2007, while exports to China grew 30%. Pharmaceutical exports have also been strong with an average annual growth rate of 23%. For the year 2008, 16,121 new jobs have come to Indiana, with an average pay of \$22.51/hour, well above the \$18/hour state average.

To talk about the transitions seen around the state, Don introduced Ted Fiok, president of Anderson Tooling.

Ted began his presentation by giving a brief overview of Anderson Tooling's history. The company began in 1945 as a machine shop to the local GM suppliers. Tough times hit the industry around 2001-2003, and 35% of the machine shops around the nation were shut down. Anderson Tooling was able to survive because of their ability to transition their manufacturing, marketing, and services.

Ted was able to improve Anderson's manufacturing position by continually reinvesting in the company. Many investments permitted the company to go from a one-man, one-machine operation to a more flexible cell layout. Ted attributed the success of this transition largely to the employees on the shop floor. Anderson Tooling is an ESOP, where 80% of the company is owned by the employees. This ownership played a large part in the success of the transition, since employees realized initiatives needed to be taken in order to survive.

Marketing was another key area that saw a transition in its strategy. In order to sustain its sales growth, Anderson Tooling took a broad look at what industries it served that had potential growth. The aerospace and military industries seemed to represent growth



for business. Contract work has also been a source of stable revenue for Anderson, especially when they enter extended contracts. Anderson Tooling has even opened up their doors for R&D works for small start-up companies lacking the capital to conduct the research at their own facilities.

The second series of speakers representing Indiana - Kerry Davis and Andy Platte, came from Personix. Personix offers a wide array of products and services, from plastic card manufacturing to electronic



document delivery services. Kerry Davis spoke first on the importance of using lean tools for process

improvement. Personix faced customers asking for more diversification in their product offerings and availability. These smaller batch sizes led to higher overhead costs associated with individual jobs. By improving their metering services on every batch run, Personix was able to significantly reduce the overhead on their print services.

Andy Platte spoke next on the importance of embracing the power of employees. He argued that an investment in employees is more powerful than an investment in machinery or equipment. Personix values its employees very much, investing large sums into their training every year. As a result, in tough economic times, Personix is still able to achieve their annual goals because the employees have the skills to adapt.



Terex and Krannert--a Foundation for Success



At this year's fall Operations Conference, "Manufacturing in Transition", Tim Fiore spoke on what it means to build supply management capability within an organization in these tough times.

TEREX is the 3rd largest manufacturer of construction equipment in the world. They manufacture a range of heavy equipment for a variety of industries

such as: construction, recycling, mining, shipping transportation, utility and maintenance. TEREX employs more than 18,000 people and operates 50 manufacturing facilities throughout the world.

The key to continued growth for TEREX is attracting the "best & brightest" global talent internally and externally, and providing them with opportunities for collaborative professional growth and personal development. Along the way they are building and managing a global supply network for competitive advantage. This includes identifying strategic supplier relationships and establishing selected partnerships along with

ensuring access to new technologies and continuous cost improvements especially when sourcing steel products.

The future of TEREX lies with building a solid foundation through Integrated Information Management (IIM). The IIM focuses on four key areas: eCost, TST, GBT, & TPT. eCost, relates to data warehouse spending. TST, Terex Sourcing Tool, is a system used to efficiently manage RFIs, RFPs and Reverse Auctions.

The IIM will be the key to the future of TEREX in establishing consistent sourcing processes through: supplier quality, supplier deliveries, cash savings, re-order lead times, and advanced sourcing.

2008 DCMME - GSCMI Fall Operations Conference Summer Internship Poster Competition Winners

The 2008 fall Operations Conference took place on Thursday, October 23rd. As a highlight of the conference, a student poster competition took place. Krannert students had the opportunity to explain the objectives and results of a project they were assigned during their summer internship. Industry judges listened intently, asking questions as students presented their summer's work.

The benefits of the competition are twofold: the students have the opportunity to demonstrate their knowledge and skills to industry, while industry personnel are able to learn about the caliber of projects that Krannert students can tackle.

Twenty-four students took part in the competition this year, eleven undergraduates and thirteen MBA's.

Congratulations to this year's impressive winners. A special thanks to this year's event sponsors:



Congratulations to all our **MBA** winners:



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Graduate 1st Place (\$750):
Anisha Nanda – Xerox



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Michael Babbitt - Bank of America

Congratulations to all our **undergraduate** winners:



Undergraduate 1st place
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Delphi Electronics



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Matthew Poselwait –
Kimball Electronics



Undergraduate 3rd Place
(\$200):
Miguel Juraidini –
Rockwell Automation



More than "Post-Its": 3M Makes a Memorable Visit to Krannert

By: Hang Wang
Krannert MBA 2009

Sep. 25th, DCMME (Dauch Center for the Management of Manufacturing Enterprises) and Krannert Operation Club hosted the guest speaker – Mr. Pierre LaMere from 3M.



Mr. LaMere is now a Six Sigma Black Belt in Supply Chain Operations at 3M. His presentation was warmly welcomed by around 40 MBAs

who are interested in Operation and Supply Chain management.

Mr. LaMere's presentation was composed of 3 topics: introduction of 3M as an entire corporation, focus on Supply Chain Operations, and 3M's global presence and potential hiring opportunities. 3M's business focus in 3 areas has been emphasized, namely

enhancing safety and security, making life better around the home, and improving the quality of health care. Mr. LaMere further introduced 6 market-leading businesses: consumer and office, display and graphics, electro and communications, health care, industrial and transportation, and safety, security and protection services.

The mission of 3M's Supply Chain Operation is to "moving closer to our customers" – and serve the global marketplace more effectively. Since the world is fast becoming a true global marketplace, 3M faces customers who demand regional solutions and world-class, responsive service.



To meet the changing needs of customers everywhere, 3M is implementing a strong, strategic vision for international growth. It is reinvigorating and localizing research and development efforts, shortening supply chains and broadening portfolio with acquisitions.

Mr. LaMere received many questions regarding 3M's global presence and hiring potential, mostly from 2nd year MBAs in the job research process. The good news is that 3M is expanding globally, especially in the Asia Pacific area where most of Krannert's international students come from. Naturally, the audience was eager to know more about 3M's activities in their respective countries.

In summary, those in attendance felt Mr. LaMere's presentation was very informative and has given rise to strong interest in 3M Corporation here at the Krannert School of Management.

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For more information on how to register for this event please visit: www.gscmi.org
Registration opens November 24, 2008



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