

supply chain SOURCE

GSCMI Center Enagages in A New Kind of Partnership

Ananth Iyer GSCMI Director



Imagine an advisory board consisting of all stakeholders in a community – business representatives, education leaders, the mayor, police chief and economic development officials – all focused on facilitating economic growth in Kokomo Indiana. GKEDA (Greater Kokomo Economic Development Agency) is such an entity. We had an opportunity to meet this group on November 12 and present our proposal for “Supply Chain Transformation”. The presentation was the culmination of six months of coordination with Jeb Conrad, President of GKEDA and a tireless advocate for the region. Jeb encouraged us to consider using Kokomo as a prototype for the project ever since we spoke to him in May and, as we will describe later, succeeded in providing us seed funding from corporate sources for the project to move ahead.

There are over 500 small manufacturers in the greater Kokomo region. With the economic difficulties faced by local auto suppliers (Visteon, Delphi, Chrysler) in the region, many of these companies are in the midst of a transition to other supply chains. Each of these companies can be regarded as a bundle of capabilities (owning machines, people, skill sets, certification, process expertise etc) that can be deployed as part of other supply chains. Given their size, they are more likely to be suppliers to OEMs (Original Equipment Manufacturers). But what process might enable sets of these suppliers to become members of new supply chains? What products might these supply chains produce and with which OEMs?

Our proposal focused on providing systematic ways to showcase the greater Kokomo region. We have created a detailed description of individual company “capability” that we will implement by gathering data from firms in the region. Working with a research approach developed by myself and Professor Avi Kak from Purdue’s School of Electrical Engineering, we will implement algorithms to generate approximate prototype supply chains in response to request from OEMs or proactive proposals developed by economic development officials. The word “approximate” means that the groups of companies identified may lack some capabilities e.g., certification, equipment etc. required to become members of these possible supply chains. GKEDA will then use state or local assistance to enable firms to develop the requisite capabilities and commit such assistance in the proposal to potential OEMs. Such an approach will then increase the competitiveness of proposals submitted for the region and enable relevant clusters of firms to engage with potential OEM representatives when they visit the region. By focusing economic development assistance to such firm clusters, these efforts can be viewed as “facilitating growth” by nudging the natural market forces along for the region.

Ultimately, the success of the proposal will be judged by the industrial competitiveness of the region as it showcases the firms in a competitive manner. A digital representation of firms and a flexible way to view clusters of firms and their ability will increase the effectiveness of its economic development efforts, according to officials in the region.

Jeb Conrad announced at the meeting that the Wal-Mart foundation has provided seed funding for GSCM and GKEDA to execute the project. Additional funding has been committed by The Duke Energy and the Krannert School of Management. All sponsors of the project have demonstrated a tremendous commitment to efforts engaged in facilitating economic development. With GSCMI Managing Director Mary Pilotte coordinating the project, and GSCMI center GAs participating, I hope to provide an update later this year as we implement the research ideas that Avi and I have been developing over the past several months. Until then, please keep sending your suggestions to Mary or myself as we work to create an effective Center to assist students, company sponsors and faculty.

A handwritten signature in black ink, appearing to read "Ananth".

November/December 2009





Krannert Student Organizations - Learning through Industry Engagement

Oshkosh Meets OSCO

by Youjung Kim, Undergraduate BSIM 2011



There was a great opportunity provided for Krannert students at Purdue University on October 28th, to participate in a company information session with the Oshkosh Corporation. Oshkosh is one of the leading manufacturers in the markets of defense, fire and emergency, concrete placement and refuse hauling equipment. There were about 20 students who attended the event, along with staff members from Krannert and a few students who were Co-ops for Oshkosh in the past.

Mr. Bob Murkley, plant manager from Oshkosh, was our guest speaker. He spoke in-depth regarding the company, what kind of businesses they focus on, and how they have grown over the years. Mr. Murkley mentioned the importance of team work and how much the company values their employees and their quality of work.

As mentioned on the Oshkosh company website, Oshkosh builds and designs the world's toughest trucks with different specialties and truck bodies. They build the best equipment by getting to know the people who use them. Since Oshkosh provides a diversified product offering, they compete aggressively across many different markets. As a company producing and offering products around the global, it has grown revenues from \$1.3 billion in fiscal 2000 to \$7.14 billion in fiscal 2008!

The undergraduate Operations and Supply Chain Organization (OSCO) and the Dauch Center for the Management of Manufacturing Enterprises would like to give special recognition and thanks to Mr. Bob Murkley for taking time from his busy schedule to meet with us here at Purdue. The entire group was very impressed with Oshkosh, and we hope to have opportunities in the future to learn more about them!

OSCO Visits SIA

by Mark Wolfred, MBA 2010



A group of undergraduate students from the Krannert Operations and Supply Chain Organization (OSCO) toured the Subaru of Indiana assembly plant in Lafayette, IN. in October. The tour

provided a comprehensive view of how Subaru assembles their vehicles. From stamping of the steel coils to welding of the body to painting of the components, visitors were able to see how these processes came together in this world class assembly line.

Keen observers also noticed Subaru's commitment to the environment through its reduced emissions and waste disposal systems. Lastly, Subaru's quality testing department ensures that its vehicles on the road are held to some of the highest standards in the industry. SIA allows Lafayette, Indiana to be home for one of the premiere automotive plants in the country and OSCO greatly appreciated the opportunity to learn from this road trip.



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Krannert School of Management



1. [Registration is now open – REGISTER NOW](#) for the upcoming "spring" Global supply Chain Management Conference entitled: **Powering the Global Supply Chain!**
2. [VISIT the website](#) for the latest copy of the **Supply Chain Source Newsletter!** Read all about recent project grants & student activities around the Center...
3. [SEND US](#) your updated contact info! We are in the process of updating our contacts database for the purpose of expanding to professional networking sites. **Let us know what sites you belong to!**

The DCMME/GSCMI Centers would like to thank our upcoming event sponsors who continue to support our goals and mission



Guest Columnist



Internships: A Critical Piece to Economic Recovery

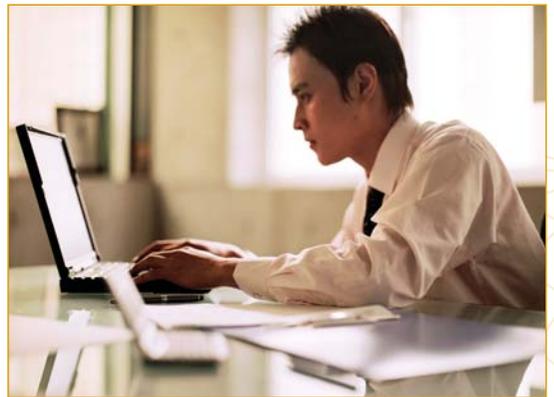
By Pam Norman, Executive Director/Indiana INTERNnet, Inc.



It is great to see so many Indiana businesses recognize the power of internships. As a talent acquisition initiative, internships are a way for employers to assess the skills of a prospective employee – which is particularly enticing in an economic environment in which a bad hire can cost thousands. As a job search component, internships offer students a chance to test drive a company's corporate culture as well as apply the hard earned classroom knowledge through the completion of meaningful internship assignments.

According to the 2009 State of Indiana Internships Report released by Indiana INTERNnet, the majority of Indiana students have participated in an internship by the time they reach the first semester of their fourth year with 59% of those occurring in for-profit corporations. In this same report, advanced manufacturing is number two on the list of industries being served by Indiana interns.

Specifically, these interns are looking for a place to learn new skills and gain hands-on experience as well as opportunities to make professional contacts for future networking.



Eventually, our state's economy will recover. Will your organization be positioned with the right players in place? Both national and state data continue to show that over 50% of interns accept employment offers from their internship companies. I encourage you to do your part to keep the best and brightest in Indiana by hosting one or more interns as an antidote to tough economic times.

For more information on Indiana INTERNnet please visit www.indianaintern.net

Meet Our Center Graduate Assistant - Mark Wolfred

by Jenny Tvedt, MBA 2011

Mark Wolfred is a second year MBA student concentrating in operations management and global supply chain at Krannert School of Management. Mark studied industrial engineering as an undergraduate, maintaining a 3.89 GPA, while competitively swimming for Purdue University. He spent the summer of his senior year working for Raytheon Missile Systems in Tuscan, Arizona improving workstation databases and manufacturing system within his division.



Upon graduation in 2006, he embarked on a his first career

for Bastian Material Handling, designing distribution upgrades and leading the successful installation of a relocated distribution center. In September of 2008, Mark decided to return back to Purdue to continue his education with a masters degree in business administration.

Mark continues to be very successful in his studies, maintaining a 3.95 GPA and working as a graduate assistant for the Dauch Center for the Management of Manufacturing Enterprises and Global Supply Chain Management Initiative at Purdue. He has had the opportunity to assist with the center's annual fall and spring conferences in addition to utilizing his knowledge and skills to improve systems at the Wabash Center in the spring of 2009. Mark personally feels the center facilitated his knowledge of industry operations and supply chain management while providing real-life experience outside the realm of academia. Mark also put his knowledge to the test during his summer internship with Amazon.com Inc. in 2009; re-designing the gift wrap operations to accommodate a forecasted 185% increase in sales throughout holiday season.

Upon graduation in May of 2010, Mark is excited to enter back into the business world, taking with him the knowledge and skills learned at Krannert, and utilizing his expertise to positively contribute and add value to a future organization.



Visit www.gscmi.org under About Our Centers and Our People, to meet all our Center Graduate Assistants



Innovations at the Bottom of the Pyramid

by Jenny Tvedt, MBA 2011

On November 16th, Purdue University CIBER and The Burton D. Morgan Center welcomed Mr. Avisek Das, Director of Business Development at Tata Sons Limited, to discuss with students and faculty the available “Bottom of The Pyramid” (BOP) business development opportunities for entrepreneurial and corporate models. The event kicked off Purdue’s Global Entrepreneurial Week and it was well attended by MBA students, faculty and local business leaders for whom it proved to be an incredible opportunity to engage in a lively discussion with Mr. Das and learn about the groundbreaking innovations emerging within the BOP market. Mr. Das has spent the majority of his career managing business and strategy development, in addition to corporate solution operations with the Tata Group. His comprehensive analysis of the emerging BOP market in China, India, and Mexico opens up a new frontier of business opportunity for social entrepreneurs, start-ups, and multinational corporations.

Businesses ranging from small local companies to large global enterprises are developing new products and services that bring sophisticated technology, research, and low price points to the world’s poorest socio-economic group comprising over 4 billion people living on less than \$2 per day. Recent innovations include a small refrigerator cooled by a single chip costing \$70, a portable banking system called “Zero” costing \$200, and a wood-burning stove that provides heat for \$23. Mr. Das discussed

how the synergy between innovations in operations, marketing, distribution, and financing has increased the potential profitability for companies operating in the BOP market, thereby increasing participation in this nascent segment. However, the challenge remains transforming products and services needed by the BOP market from unprofitable to profitable ventures, which requires continued innovation and improved efficiency. Mr. Das remains optimistic in saying that “the process is difficult, but feasible. The next step is fragile, but rewarding...the future is upon us.”

While growth opportunities in the BOP market are evident given the tremendous unmet needs of the world’s poorest consumers, the private sector must continue to adapt traditional products, services and management processes to overcome the challenges in serving these consumers. With a potential market size of \$13 trillion, BOP consumers have captured the interest of multinational companies in the food and consumer product industry as well as small start-ups and social entrepreneurs focused on housing, agricultural, and financial services. What will prove to be the next innovative product addressing the needs of BOP consumers and producers? It may be new mobile services, a healthcare device to fight malaria in Africa or a water treatment product. The possibilities are endless and the current pace of technological innovation is unparalleled in our history; this is truly an exciting time to target an untapped market to drive future growth.



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