CPBIS Research Highlights

DuPree’s Dr. Soumen Ghosh has provided the following article, the second in a series on the CPBIS Research Program. He is one of the investigators conducting the project entitled “A Study of the MRO Supply Chain for Pulp and Paper Mills.” The team also includes Dr. Yih-Long Chang, Dr. Cheryl Gaimon and Dr. Vinod Singhal, all of the DuPree College of Management, together with graduate students Erik Lystad and Patty Swafford.

The importance of Supply Chain Management (SCM) has emerged as a consequence of the current business environment, characterized by global competition, globalization of supply chains, short product life cycles, rapid changes in technologies, the need to provide higher levels of customer service, and the constant pressure to reduce costs and improve asset utilization. While many firms in the automotive, consumer goods, and electronics industries have exploited the value creation potential of SCM, firms in the pulp and paper industry are just beginning to recognize the vast scope of the potential opportunities that exist.

Generally, the supply chain of the pulp and paper industry can be segmented into the following four sub-chains: 1) fiber procurement; 2) pulp and paper manufacturing; 3) customer fulfillment; and 4) non-fiber procurement, which includes the activities required to manage maintenance, repair, and operating (MRO) supplies. This research will focus on the MRO (or non-fiber) supply chain for paper mills. Examples of MRO supplies are bearings, valves, electrical components, lubricants, machine clothing and office supplies.

The primary objective of the research is to understand and study the key characteristics of the MRO supply chain for pulp and paper mills. More specifically, the investigators will: 1) develop an in-depth understanding of current practices of the supply chain, including an understanding of the challenges of integrating supply chains across organizations; 2) gather information on supply chain performance and its primary drivers; 3) rigorously analyze the information in order to identify the critical areas providing the greatest opportunity to improve the effectiveness and efficiency of the supply chains; and 4) identify specific initiatives to improve supply chain performance, quantify the bottom-line impact of these initiatives, and develop approaches to successfully implement the most critical initiatives.

The research will examine both the hard and soft factors that drive supply chain performance. Hard attributes include existing capacity and location factors, existing process technologies, investments in new technologies, and the information technology infrastructure. On the soft side are organizational issues such as the integration across various supply chain partners, sharing of information and plans, coordination and control of supply chains, incentives, and performance metrics and how they influence decisions and behaviors.

The research approach will be based on field site visits, a comprehensive mail survey, and use of secondary sources of information. The site visits and mail survey will provide the data and insights needed to understand, describe, analyze, and recommend initiatives to improve the performance of the supply chain, and to develop a baseline against which the future performance can be compared. It will also allow the development of economic models to project the operational and
financial benefits from effective supply chain management initiatives.

Welcome, Pat McCarthy

Dr. Patrick McCarthy has been appointed Associate Director of Research for CPBIS. He will provide a vital link between the CPBIS and Georgia Tech’s School of Economics, which he chairs. Pat recently came to Georgia Tech from Purdue University, where he most recently held a joint faculty appointment in Economics and Civil Engineering. As Associate Director of Research, he assumes the responsibilities that, until now, have been so ably discharged by Dr. Steven Vallas, who has elected to devote more time to his other scholarly pursuits. Steve will, however, remain with CPBIS in a strong supporting role as Senior Research Associate, in addition to being one of the Principal Investigators on an active CPBIS research project.

First CPBIS Faculty Workshop

On October 30 at IPST, the CPBIS research teams will participate in the First CPBIS Faculty Workshop. The purpose will be to exchange ideas on research strategies and methods. The theme, “Research Strategies: Understanding and Measuring Performance in the Paper Industry” will provide a framework for the discussion.

Year 2 Research Program

Be on the lookout for the next round of Center-sponsored funding. To improve and expedite the funding process and ensure that funding decisions are effective and timely, the funding cycle this year will start with a Request for Concept Papers (RFCP). The RFCP will be issued to the CPBIS Industry Advisory Board, the Faculties at IPST and Georgia Tech and other key interested entities.

The concept papers are expected to be 1 – 3 pages in length and are meant to provide a set of research areas and topics for possible Center funding. The concept papers, together with feedback from the Research Operations Committee, will become the basis of a Request for Proposals (RFP) that more precisely targets specific areas of interest for this year’s research.

Within the next ten days, information on the RFCP and full details of this year's funding cycle will be sent electronically. If you have any questions, please contact Pat McCarthy, CPBIS Associate Director for Research.

Recent CPBIS Events

Gary Helik, Director, North America Pulp and Paper Division, Tradition Financial Services presented “The Cost of Price Uncertainty on Shareholder Value” at IPST on September 21. He made the case for hedging as a strategy to alleviate the problem of price uncertainty. The seminar was well attended by graduate students and faculty from both IPST and Georgia Tech, as well as some visitors from the surrounding community.

Jim McNutt, Executive Director, CPBIS, presented “The Paper Industry—Will We Ever Learn?” to an audience of approximately 25 faculty and students at Georgia Tech on October 9. Jim also made a presentation at the Annual Meeting of the North Carolina Forestry Association on October 4 entitled “New Faces, New Ideas – An Industry in Evolution or Revolution?” A common thread was the unprecedented pressures for change the paper and forest products industries are facing and how the industry should respond to them.

A highly successful mill tour took place at Caraustar Industries, Austell, GA, on Tuesday, September 25. In addition to showcasing the Caraustar facilities, CEO Tom Brown painted a detailed picture of the key issues confronting the industry for the audience of some 30 visitors.

A final news item is that Jim McNutt has been appointed to the Paper Industry Management Association (PIMA) Board of Trustees as CPBIS representative.

Upcoming Events

Research Workshop: Tuesday, October 30, IPST.
CPBIS/IPST Seminar: Professor A. Giebelhaus, Topic TBA, Friday, November 2, IPST
Brown Bag Seminar, Tuesday November 13, Topic TBA ▪