



Center for Paper Business and Industry Studies

Newsletter of the Center for Paper Business and Industry Studies
A Sloan Foundation Industry Center ♦500 Tenth Street ♦Atlanta, GA 30318 ♦<http://PaperStudies.org/>

Vol. I, No. 8

November 21, 2001

CPBIS Research Highlights

Carol Carmichael of Georgia Tech's Manufacturing Research Center and Dr. Bert Bras, Associate Professor in Tech's Woodruff School of Mechanical Engineering, have contributed the following article. It is one of a series describing ongoing CPBIS research. Carol and Bert are part of a team conducting the project, "Integrated Environmental and Economic Performance Monitoring of a Paper Manufacturing Operation." The team also includes Dr. Leon McGinnis and Dr. Chen Zhou, both of the School of Industrial and Systems Engineering, P.J. Newcomb of Mechanical Engineering, and graduate students Melissa Bargmann and Scott Shipley.

When leaders in the pulp and paper industry committed to sustainable forestry practices, they did so because it made good business sense. We often have to remind our students that, in spite of feel-good rhetoric about the environment, the business of business is to meet customer needs efficiently and profitably, not to save the earth. Corporate leaders have always been expected by their stakeholders to be wise stewards of the capital resources in the firm. The commitment to sustainability was not so much a foreign concept as it was an expansion of a traditional concept to a wider set of capital assets. The sustainability perspective expands the definition of corporate "performance" by considering the effectiveness of the firm in transforming *all* forms of capital—financial, technological, natural, and social—into value-added products and processes and, subsequently, shareholder value. The performance assessment would extend to the entire product life-cycle and its associated financial, environmental, and social effects. It would extend beyond the production of a particular product to include the extraction and beneficiation of raw materials, the production processes, distribution of

the product to customers, use of the product by the customers, and recycling or remanufacture of the product or its constituents into new products.

The focus of our CPBIS project is narrower than the sustainability perspective, but is intended to provide a foundation for more complex assessments in the future. The initial focus of our project team is on a particular enterprise, a manufacturing facility and its products, and the relevant measures of financial, technological and natural capital resource effectiveness. Our team will explore ways in which resource data (mass, energy, water, etc.) from steady-state and dynamic models of a production facility can be combined with financial data from an existing financial model used by the firm. For comparison, we will also develop a so-called "enhanced" activity-based cost (ABC) model that integrates financial data with data on other resources (such as mass and energy) used by the manufacturing site. Future studies will address the product life-cycle perspective on effectiveness (with respect to environmental and financial performance) and the relationship between performance measures of a facility and the enterprise. Our team's goal is to develop a tool to support both operational and strategic decision-making by providing simultaneous views of the facility/enterprise from manufacturing process, financial, and environmental perspectives.

Partners in this project are Dr. Paul Stuart, the NSERC chair in process integration at the École Polytechnique in Montreal, Quebec, Canada, his students, and representatives from a paper mill in northern Ontario. The École Polytechnique team

will develop the steady-state and dynamic process models of the facility as well as provide an initial study on the existing financial model used by the firm. The CPBIS/Georgia Tech team will develop the enhanced ABC model of the facility. Together, the Georgia Tech/Ecole Polytechnique team will explore performance metrics and other data interpretation schemes that combine financial data with material/energy data and take into consideration contextual factors associated with environmental effects.

Paper Business, of Course

In the July issue of the Newsletter, we reported that the first formal CPBIS course, “Studies in American Manufacturing – Pulp and Paper,” was about to be offered on the Georgia Tech Campus. Later in the summer, we decided to postpone the course until the winter/spring semester to provide the time needed for the development of a higher-quality offering. The new, improved class (HTS 4875A) will be offered on Mondays, 3:00 p.m – 6:00 p.m., starting January 7. The course will examine the history, technology, modern development, and current business structure of the American pulp and paper industry. There will be special presentations by guest speakers from the industry and from CPBIS. The course director is Professor August (Gus) W. Giebelhaus of Georgia Tech’s Ivan Allen College. (Gus is CPBIS Associate Director for Academic Affairs.)

Are Mergers History?

Gus also found the time to compose and deliver a CPBIS-sponsored seminar, as part of IPST’s regular Friday series. In the well-attended November 2 presentation, entitled “Merger and Antitrust in Historical Perspective,” Gus illustrated the uses of business history in analyzing the significance of firm consolidation and resultant public policy responses. (The next CPBIS-sponsored seminar in this series will be on Friday, December 7 – see below.)

Successful Faculty Workshop

The First CPBIS Faculty Workshop took place on October 30 at IPST. Faculty and student representatives of all seven research teams exchanged ideas in accordance with the workshop’s theme, “Research Strategies: Understanding and Measuring Performance in the Paper Industry.” The project teams shared their plans, and some were able to identify areas of common interest and potentially

beneficial interaction. Watch this space for information on future workshops.

A New Box of Tools

It’s hard not to use the word “nifty” when describing the new Paper Industry Toolbar, just released last Friday. CPBIS, IPST, Forestweb, PIMA and TAPPI have teamed with @hoc to offer the toolbar, which imposes order on the chaos of the Web. It provides customizable, quick, and orderly access to the content provided by the above organizations, as well as a wealth of other resources made available at reviewed sites. Download it at

<http://www.paperindustrytoolbar.com/?mktmsg=TJ40>

or by visiting the CPBIS Web site.

Research Needs

We’d like to have the benefit of your thinking on research needs when we construct the request for proposals for the next round of CPBIS-funded research. Send them to Pat McCarthy at Pat.McCarthy@PaperStudies.org by Monday, November 26.

Upcoming Events

CPBIS Brown Bag Seminar: Dan Cenatempo, Jacobs Consultancy, “Knowledge-Sourcing: Creating Value In Turbulent Times,” 11:00 a.m., Tuesday, November 27, Room 119, Instructional Center, Georgia Tech.

CPBIS/IPST co-sponsored seminar: Professor David H. Newman, University of Georgia, “Property Taxes and Forest Sustainability in Georgia,” 11:00 a.m., Friday, December 7, IPST.

CPBIS Brown Bag Seminar: Tom Brown, CEO, Carastar Industries, Thursday, January 10, Georgia Tech. Details forthcoming. ■