



# Center for Paper Business and Industry Studies

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*Newsletter of the Center for Paper Business and Industry Studies*  
*A Sloan Foundation Industry Center ♦500 Tenth Street ♦Atlanta, GA 30332 ♦<http://cpbis.gatech.edu/>*

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Vol. IV, No. 8

November 11, 2004

## **Student Profile: Hannes Toivanen**

*by Aselia Urmanbetova*

*Editor's Note: This is the first in a series of articles about the graduate students of CPBIS, and is itself a contribution from a CPBIS graduate student, Ms. Aselia Urmanbetova. Aselia has a dual master's degree in international relations and economics from Georgia Tech. She is a CPBIS Fellow and is pursuing the Ph.D. degree. Her dissertation research, "Market Concentration, Profitability, Regional Clustering and Innovation in the US Pulp and Paper Industry." was briefly described in the May 2004 issue of this newsletter.*

Hannes Toivanen, one of the first graduate students to sign on with CPBIS, completed his Ph.D. in Georgia Tech's School of History, Technology, and Society in May 2004 under the guidance of his major advisor, Professor Steve Usselman. Earlier, Hannes had received a Master's Degree in History from the University of Helsinki, and worked as a researcher at the Finnish Centre of Technology.

During his tenure with CPBIS, Hannes produced an impressive array of conference papers and presentations, but the ultimate achievement of his research was the 350-page dissertation, *Learning and Corporate Strategy: The Dynamic Evolution of the North American Pulp and Paper Industry, 1860-1960*. In this work, Hannes departs from the traditional views of pulp and paper industry historians and offers a new understanding of the industry's evolution. His main argument contends that the story of the US paper industry is more than just a story of mature markets, stable product lines, and slowly changing process technologies. Instead,

the industry's development can be viewed as a process punctuated by radical technological departures, strong intellectual property rights, rather political processes of product standardization and a migration of the seedbed of innovation and productivity improvements from large-scale, vertically integrated paper producers to their more specialized equipment suppliers. The thesis opens up new avenues of investigation for researchers interested in innovation and competitiveness of the contemporary US pulp and paper industry specifically and other traditional industries in general.

Upon his departure from CPBIS, Hannes returned to his native Finland, where he joined the Lappeenranta University of Technology as a senior researcher. His responsibilities include lecturing and management of a project focusing on technology, environment, and culture in the Finnish-Russian border regions.

When asked about his interests outside of work, he said: "I try to spend as much time as I can at the sea, more precisely in the Finnish archipelago, usually fishing or sailing around in a boat ... a very healthy antidote to the hard and pressing dissertation work." Hannes also considers studying languages a hobby, and is currently working on improving his Portuguese, as well as taking his first steps with Russian.

As one of his classmates, I viewed Hannes as an exemplary embodiment of scholarly discipline and achievement. Outside of class, he always appeared well-mannered, cheerful, and light-hearted. In class, he stood out as someone who preferred not to go

with the flow of opinion of the majority, but to base his arguments on his own understanding of the material. As already noted, this independence of thought is readily apparent in his thesis.

We thank Hannes for contributing his insight to our understanding of the paper industry, we wish him well in his future endeavours, and we look forward to opportunities to work with him in the future.

## **HRM, Performance and Skills**

The recent Forest Products Techno-Business Forum, jointly sponsored by CPBIS and IPST, was keynoted by Kathryn Shaw, Ernest C. Arbuckle Professor of Economics at the Stanford Graduate School of Business. Nearly 100 delegates from industry, academia and government convened for the forum at the Georgia Tech Hotel and Conference Center on October 26 and 27 to discuss evolving industry opportunities and the potential of academic research to improve industrial performance.

In her keynote address, Dr. Shaw pointed out that, within about the last half decade, the rate of labor productivity growth has been higher than in the previous two decades, and that the growth in both manufacturing productivity and business sector productivity has accelerated in similar fashion during the same period. A part of the improved productivity growth can be ascribed to increased capital spending on information technology (IT), but much of it cannot be explained on this or any other readily apparent basis. Using "Insider Econometrics" (field-based industry research), Dr. Shaw made the case that a human resources management (HRM) "technology shock" could be responsible for at least part of the unexplained productivity growth improvements. Adoption of such practices as problem-solving teamwork, rotation across jobs, information sharing, screening of new hires, job security and incentive pay correlated with improved returns if they were adopted in sets (rather than individually), especially if they complemented IT investments or other innovations. There is a caveat, however: innovative HRM practices require combinations of worker skills that may not be present to the needed degree. These include cognitive skills (reading, math, writing, creativity) non-cognitive skills (motivation, "can do" attitude), and interpersonal skills (teamwork, cooperation). In assessing the potential of innovative HRM practices, firms need to be aware of these skill requirements and strategies for acquiring the needed skills, either through hiring practices or training programs. Studies have shown that basic skills are taught best to the young and are very hard to teach later, while some non-cognitive skills can be taught

later. This suggests that government investment in human capital should be focused on basic education and community colleges, allowing industry to focus on hiring practices and teaching specific skills to better educated workers.

## **CPBIS Management Course a Hit**

Though he did not intend for it to be widely distributed, we reproduce below an e-mail from Professor Vinod Singhal, CPBIS Associate Director, Education, received shortly after the Oct. 26 – 29 offering of the CPBIS course, *Management Development for Enhanced Performance*:

"Folks: Just wanted to let you know that the course went really well. The attendees were very happy and satisfied with all aspects of the course - course content, instructors, food and logistics. Some mentioned that the industry must be made aware of the course and will help to do so. We had 9 people who stayed very involved throughout the week. I will share the evaluations soon. Most of the scores were 4's (40%) and 5's (60%) [on a scale of 1 to 5 (highest)]. Vinod"

There will be room for more than 9 participants at the next offering of the same course, May 9-13 2005, but space is not unlimited, so sign up now. Go to <http://www.cpbis.gatech.edu/mgtdev> for more information and to register.

## **Upcoming Events**

**Six Sigma.** The PIMA/CPBIS Webcast Course on Six Sigma concludes on November 17 with an open discussion forum. Topics and questions submitted by forum participants will be discussed. See <http://www.pimaweb.org/training/fall04seminar2.html>

**Market Pulp Seminar.** Nov. 18, IPST, Atlanta. How users and suppliers can best use the extensive market pulp properties database that is one of the products of a CPBIS-funded project. See <http://www.cpbis.gatech.edu/marketpulp>

**TAPPI-PIMA Student Summit.** Jan. 14-17, Radisson River Walk Hotel, Jacksonville, FL. See <http://www.tappi.org> or <http://www.pimaweb.org>

**CPBIS Industry Advisory Board (IAB) Meeting,** Thursday Jan. 20, IPST at Georgia Tech. Themes: State of the Center and Industry Connectivity. For more information, contact Colleen Walker, 404-894-5756.

**Management Development Course.** May 9-13, IPST. See <http://www.cpbis.gatech.edu/mgtdev> ■