POMS PRODUCTION AND OPERATIONS MANAGEMENT

Warren Hausman

In the production and operations management professional community, Warren Hausman is a name that most of us are very familiar with. We know him through his writings that have formed the backbone of many of our research topics, and we know him through the leadership roles that he has played in our profession.

Warren Hausman started his career as an assistant professor at Cornell University, and after having been a faculty member at MIT and the University of Rochester, he joined Stanford University's Department of Industrial Engineering and Engineering Management (now Department of Management Science and Engineering) in 1977. Prior to Cornell, he did his undergraduate degree in Economics at Yale University, and his PhD in industrial management at the Sloan School of MIT.

Hausman's research used creative ways of modeling real life production and operations management phenomena, addressed relevant problems faced by management, developed innovative solutions and provided great management insights. He has published extensively, mostly in top journals.

His work on sequential decision making for style goods, in which forecasts can be revised so that demand uncertainty is a function of the forecast horizon, represents one of the earliest modeling of non-stationary demand in production problems. Today, there is a rich inventory literature in which demand uncertainty evolves over time. Hausman's original work has often been the key reference in the literature.

Together with Stephen Graves and Lee Schwarz, Hausman produced a set of classic papers on how to design and operate automated warehousing systems. By approximating the real problem with discrete variables by a continuous version, Hausman et al. derived powerful rules on how zoning of a warehouse can improve operations. In multi-echelon inventory systems, Hausman, Steve Nahmias and Nessim Erkip developed one of the first models that incorporate both location and time correlations of demands. Based on a real distribution problem in industry, Hausman et al. developed a simple model that captured such correlations, and came up with a simple solution. Hausman has continued to be a major contributor to the multi-echelon inventory literature.

Hausman's research, from his early career days till now, has also captured interfaces between different disciplines. His earlier research integrated financial decisions like credit granting and cash management with operations management. He later worked on the interface of operations and marketing decisions. More recently he worked on the interface of information technology and operations through his work on RFID modeling. Most recently, he also worked on the interface of logistics and trade. While multi-disciplinary research has now been recognized and promoted in our profession, Hausman has been an early champion of this approach.

Hausman has also contributed to writing to managers. Some of his recent articles are managerial in nature. But he has never stopped doing model-based research. His current research includes analysis of how operational improvements in retail supply chains affect a company's financial performance and market capitalization. Hausman has also been a major force in industry, through executive teaching, industry projects, consulting, and entrepreneurial advising. His consulting clients represent the following industries: general manufacturing, electronics, computers, consumer products, food & beverage, transportation, healthcare, and high technology. He serves on the technical advisory boards of several Silicon Valley startups.

Besides publications, Hausman has also made a huge impact to the profession through his mentoring and teaching. He has advised 24 PhD students, and there are still many that are work in process. Many of his PhD students have had great accomplishments and are now pillars of our profession. Hausman also gave his time generously to junior colleagues and students. Besides intellectual knowledge, Hausman was very good in coaching others on how research should be carried out to stay relevant. He has a special ability to link observations in real life problems to academic research formulation, and his professional life served as a role model for all of us. In advising PhD students, he could bridge the complex theoretical results derived by his students with real world observations, or give inputs to interpret the results for managerial insights.

Our professional societies have also benefited greatly from Hausman's service and leadership. He has served as council member of the Institute of Management Sciences and the Operations Research Society of America; and was President-Elect of ORSA in 1994. He was a Board Member of the Institute for Operations Research and the Management Sciences (INFORMS).

For the significant contributions that Hausman has made to our profession, he was elected Fellow of the Production & Operations Management Society, Distinguished Fellow of the Manufacturing and Service Operations Management Society, and Fellow of INFORMS.

For many, Hausman is a dear teacher, colleague, collaborator and friend. Our profession has been much enriched through his contributions.

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