

PROMOTION RECOMMENDATION
The University of Michigan
Stephen M. Ross School of Business

Peter J. Lenk, associate professor of statistics, management science and marketing, with tenure, Stephen M. Ross School of Business, is recommended for promotion to professor of operations and management science, with tenure, Stephen M. Ross School of Business.

Academic Degrees

PhD	1984	Statistics, University of Michigan
MA	1981	Statistics, University of Michigan
MA	1979	Mathematics, Indiana University
BA	1977	Mathematics, Indiana University

Professional Record:

1994-Present	University of Michigan, Stephen M. Ross School of Business Associate Professor with tenure of Statistics and Management Science
1989-1994	University of Michigan, Stephen M. Ross School of Business Assistant Professor of Statistics and Management Science
1984-1989	New York University, Leonard N. Stern School of Business Assistant Professor

Summary of Evaluation:

Teaching: Professor Lenk teaches in the BBA and MBA programs, teaching primarily the quantitative course on statistics. He is a thoughtful instructor who clearly invests in his courses. He consistently scores a 4.0 on a scale of 5. Professor Lenk participates also in teaching in the Multi-Disciplinary Action Program (MAP). This is a required course in the MBA program. He has advised over 100 projects in the past 10 years. He also teaches a short elective on Applied Business Forecasting. The course motivates the forecasting models with examples from business and economics. He has mentored many PhD students over the years.

Research: Professor Lenk's research centers on the areas of Bayesian modeling. In fact, Professor Lenk is one of the pioneers in modern Bayesian analysis, particularly the development of Bayesian, nonparametric models and elaboration of Bayesian inference. He also has been instrumental in applying Bayesian models to business and economics, including marketing research, information systems and finance. For example, he developed software for implementing certain types of Bayesian procedures before commercially generated software was available. He is known to be an expert at the application of statistical procedures, particularly, Hierarchical Bayes analysis to marketing problems. His work is carefully done with extreme care to technical details. He has 36 publications, at least 70% of which are in high quality journals. He has published in the *Psychometrika*, *Management Science*, *Marketing Science*, *Quantitative Marketing and Economics*, *Journal of the American Statistical Association*, and more recently in *Leadership Quarterly*. He has several papers in review and a number of very interesting working papers.

Recent and Significant Publications:

K.A. Lawrence, R.E. Quinn, **P. Lenk**. Behavioral Complexity in Leadership: The Psychometric Properties of a New Instrument to Measure Behavioral Repertoire. *The Leadership Quarterly*, In Press 2008.

M. Wedel, U. Bockenholt, **P. Lenk**. Bayesian Estimation of Circumplex Models Subject to Prior Theory Constraints and Scale-Usage Bias. *Psychometrika*, 71 (1): 33-55, 2006.

R. Zeithammer, **P. Lenk**. Bayesian Estimation of Multivariate Normal Models when Dimensions are Absent. *Quantitative Marketing and Economics*, 4 (3): 241-265, 2006.

P. Lenk, L. Bacon, J. Durall. Item Response Theory (IRT) Models: Basics and Marketing Applications. *2004 Sawtooth Software Conference Proceedings*, 187-206, 2004.

P. Damian, S. Walker, **P. Lenk**. On Priors with the Jullback-Leibler Property. *Journal of the American Statistical Association*, 99 (466) 404-408, 2004.

Service: Professor Lenk is a member of the Ross School's Community Values Committee, and the Executive Committee for Center for Statistical Consulting and Research. On the national front he is on the Editorial Board of *Marketing Science*, past Associate Editor of *Journal of Business and Economics Statistics* and a previous Guest Editor for the *Journal of Marketing Research*. He has been an Ad Hoc referee for numerous statistics and marketing journals and occasionally management and operations journals.

External Reviewers:

Reviewer (A):

"Peter Lenk has long been, and continues to be, an outstanding leader in the development of practical Bayesian methods and their application to a wide range of business related problems. Lenk's early work was seminal. I particularly like some of his most recent work. The JASA paper is an important theoretical contribution on the properties of Bayesian nonparametric estimators. Lenk continues to produce important research on problems that matter. He is very deserving of the promotion."

Reviewer (B):

"Peter's research is original, impactful and well respected among the community of marketing scholars. In the area of statistical modeling, I rank Peter Lenk among the top ten active scholars in the field of marketing. Peter continues to innovate in his work and his working paper with his co-author shows the critical role of a loss function in Bayesian models. I feel that this is an important and under-researched area and this paper is likely to be impactful. I wholeheartedly support his promotion."

Reviewer (C):

"He is well-known and well-regarded in the marketing community as being one of the top people in applying Bayesian statistics to marketing problems, more specifically in the area of hierarchical Bayes methods and Markov Chain Monte Carlo. Although perhaps not as prolific as some, Peter produces work of consistently excellent quality. I also know that other Bayesian

modelers in marketing who I respect, hold him in high regard. Putting all this together, I think that Peter's case merits promotion to full Professor."

Reviewer (D):

"Professor Lenk can be considered as a pioneer in the use of Bayesian methods within marketing. Professor Lenk made early contributions in modeling diffusion and in accommodating non-stationarity in stochastic modeling of consumer purchasing data. Since then, he has written excellent papers on the use of Hierarchical Bayesian methods for accommodating heterogeneity in choice models and conjoint analysis. In summary, given his excellent research and service contributions to a number of fields over the years, I believe that Peter Lenk deserves to be promoted to a full professor. I enthusiastically recommend that Michigan promote him to a full professor."

Reviewer (E):

"Professor Lenk is known to be an expert at the application of statistical procedures, particularly, Hierarchical Bayes analysis to marketing problems. Moreover, his work is always interesting, showing how statistical tools can be used to address practical problems. His published work in marketing is excellent, and he clearly has been instrumental in the spread of Bayesian inference in marketing. Assuming that teaching and service portfolios are satisfactory, there is no question that Professor Lenk would be awarded the rank of Full Professor at most research-oriented business schools in the United States."

Summary of Recommendation:

The outside reviewers' comments and the placement of his work in the top journals in the field attest to the fact that Professor Lenk is a leader in his field. His research is of excellent quality. Professor Lenk is able to exploit the strength of his work in order to maximize its impact. He adds considerable value to the Operations and Management Sciences area's research portfolio, to the area of business marketing, and overall to the reputation of the Ross School of Business and University of Michigan.

Professor Lenk's case for promotion is really made by the quality of his research contributions, his solid teaching, his service to the Ross community and the field of operations and management science education.

With this in mind, the Executive Committee and I strongly recommend Professor Lenk's promotion to professor of operations and management science, with tenure.



Robert J. Dolan, Dean
Stephen M. Ross School of Business

May 2008