On Partial Least Squares Variance Based Component SEM (VBSEM) vs. Covariance Based SEM (CBSEM) for Confirmatory Analysis: The Role of Weights, Components and Variance Explained

By Prof. Wynne W. Chin
University of Houston

Date: 22 Jun 2017 (THU)
Time: 2:30 pm – 4:00 pm
Venue: M802

Abstract
Partial Least Squares path modeling (i.e., PLS) is now a standard tool among Information Systems (IS) researchers since the introduction of PLS-Graph by Chin in 1990 and presentations at the International Conference in Information Systems in Vancouver and Brisbane (1994, 2000). Recently, a new group of naysayers have begun to write papers questioning the value and use of this technique and argued for using CBSEM. In contrast to other disciplines (e.g., chemometrics and genomics), the IS discipline seems unaware of the ontological, epistemological, and pragmatic aspects of PLS. In this talk, the emphasis will be:

• on the role of variance explained in assessing the value of a model,
• the usefulness of PLS component scores,
• using PLS weights to detect poor measurement models,
• ability to detect misspecified models in contrast to CBSEM’s emphasis on covariances, and
• recognizing the rigor and validity of PLS models distinct from factor based SEM.

Prof. Wynne W. Chin is the C.T. Bauer Professor of Decision and Information Sciences in the C.T. Bauer College of Business at the University of Houston. He received his A.B. in Biophysics from U.C. Berkeley, MS in Biomedical/Chemical Engineering from Northwestern University, and an MBA and Ph.D. in Computers and Information Systems from the University of Michigan. Wynne has taught previously at the University of Calgary, Wayne State University, and the University of Michigan and has been a visiting fellow at Queens University, City University of Hong Kong, University of Canterbury, and the University of New South Wales. Wynne’s research focuses on structural equation models related to Information technology adoption, sales force automation, IT service satisfaction and electronic meeting support systems where he has developed measures for group cohesion, satisfaction, and consensus. Wynne has published in journals such as Information Systems Research, Data Base, Journal of Management Information Systems, MIS Quarterly, and Decision Sciences. Wynne is on the editorial board of Structural Equation Modeling journal, Journal of Information Technology, IEEE Transaction of Management, and previously Information Systems Research, Journal of AIS, Data Base (co-editor) and MIS Quarterly. Wynne has received best paper awards from the Journal of Personal Selling and Sales Management in 2003, the Administrative Sciences Association of Canada (IT division) in 1993 and 1998, a MIS Quarterly Reviewer of the Year in 1996, a Management Science Outstanding Reviewer award in 1996, and the First Biennial Award for Outstanding Ph.D. dissertation from the International Communication Association’s Communications and Technology Division. He is one of the foremost exponent of the Partial Least Squares Path Modeling technique with his PLS-Graph software developed in 1990 used by more than 9000+ researchers worldwide, ranked by two separate journal articles as one of the top 10 researchers in both IT Adoption/Acceptance and Human Computer Interaction, and recently received a World Class University (WCU) Professor designation in conjunction with Sogang University in South Korea. Wynne’s research has received over 37,000 citations, a top ten most cited article in MIS Quarterly and top five most cited in Information Systems Research, a Google Scholar H index of 46 that places him among the most impactful researchers in his discipline, and ranked third overall in first authored articles published in the top two IS journals - MISQ and ISR for the period from 1990 through 2012. He was awarded a Fellow of the Association of Information Systems in 2013. Born and raised in San Francisco, Wynne currently resides in Houston.

All interested are welcome.