Pre-Conference Workshop on Partial Least Squares Structural Equation Modeling (PLS-SEM): Assessing and Interpreting Structural Model Results

Academy of International Business (AIB) 2019 Annual Meeting, Copenhagen Business School, Denmark

Sunday, June 23, 2019 – 9:00 to 12:00

Nicole F. Richter and Christian M. Ringle

Partial Least squares is a family of regression-based methods developed in the 1970s and 1980s by the Swedish econometrician Herman O. A. Wold, who vigorously pursued the development of methods for the social sciences where “soft models and soft data” were the rule rather than the exception, and where approaches focusing on prediction would be of great value. One procedure that emerged from Wold’s efforts is partial least squares structural equation modeling (PLS-SEM), which has gained widespread popularity in a variety of disciplines among them international business research.

Along with the increasing prominence of the PLS-SEM technique, researchers have started developing more advanced modeling techniques that enable them to explore the roles of intervening and contingent variables, to control for data structures that pose a threat to the validity of results, or simply to advance interpretation of research findings. The benefits of having such advanced PLS-SEM approaches readily available are tremendous. These types of analyses assist in a more thorough evaluation of PLS-SEM estimations and are increasingly being requested by editors and reviewers. At the same time, however, applying these and other advanced PLS-SEM approaches requires understanding their intricacies and knowing how to assess and interpret their results in a meaningful and appropriate way.
Considering these developments, this pre-conference workshop provides an introduction to advanced issues in PLS-SEM, focusing on ways to interpret and assess structural model results. Specifically, the workshop will - after a recap of standard guidelines of structural model assessment and interpretation - discuss the importance-performance map analysis. In addition to looking at the importance of constructs in explaining other constructs in the structural model, this analysis takes the performance of each construct into account. Therewith, it enriches the model interpretation by enabling a prioritization of managerial actions along both, importance and performance. Furthermore, it will cover prediction-oriented assessment of PLS-SEM results by using the Blindfolding and PLSpredict methods. This will also involve the prediction-oriented model selection. Practical applications and the use of the software SmartPLS 3 are an integral part of the workshop.

Each course participant will get a free two-month professional license for the SmartPLS 3 software.

Date and time: Sunday, June 23, 2019 – 9:00 to 12:00

Place: to be announced - https://aib.msu.edu/events/2019/Program.asp

Preliminary Schedule:

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<tr>
<th>Date</th>
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<tbody>
<tr>
<td>Sunday June 23, 2019</td>
<td>09:00 – 10:20</td>
<td>Assessing and interpreting PLS-SEM structural model results: The importance-performance map analysis (IPMA); SmartPLS 3 application</td>
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<td>10:20 - 10:30</td>
<td>Short bio break</td>
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<td>10:30 – 12:00</td>
<td>Prediction-oriented assessment of PLS-SEM results: Blindfolding, PLSpredict, and predictive model selection; SmartPLS 3 application</td>
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Course set-up:
- Most of the workshop will involve “hands-on” analysis of real-world datasets using the SmartPLS 3 software. The SmartPLS 3 software output diagnostics and interpretation of the results will be covered.
- Potential obstacles and “rules-of-thumb” to ensure appropriate application of the techniques will be addressed.

Requirements:
- It is recommended but not required that participants have very basic PLS-SEM knowledge (e.g., some fundamental knowledge on model development and evaluation).
- Participants should bring a laptop with the SmartPLS 3 software readily installed. The software is available from http://www.smartpls.com. If you encounter any software related problems, please create a support ticket here: http://support.smartpls.com/.
- Course participants will obtain a free two-month license for SmartPLS 3 Professional.

Who should attend? Individuals wanting to learn more advanced PLS-SEM topics and the SmartPLS software for their PhD research and/or top-tier journal publications.
Instructors:

- **Nicole F. Richter** is an Associate Professor of International Business at the University of Southern Denmark. Her research focuses on strategic and international management with a specific emphasis on cross-cultural aspects, and covers articles that relate to research methods in international business. She received her PhD from University of Hamburg in 2009 and her habilitation (state doctorate) from the Hamburg University of Technology in 2015. Her works have been published in well-known journals such as Journal of International Management, International Business Review, International Journal of Human Resource Management, Long Range Planning. Dr. Richter co-authored the German version of the textbook on PLS-SEM and regularly publishes articles applying PLS-SEM. [http://findresearcher.sdu.dk/portal/en/persons/nicole-franziska-richter(8ef03ee7-4531-46c6-bdf7-7b63affcb862).html](http://findresearcher.sdu.dk/portal/en/persons/nicole-franziska-richter(8ef03ee7-4531-46c6-bdf7-7b63affcb862).html)

- **Christian M. Ringle** is a Professor of Management and the Director of the Institute for Human Resource Management and Organizations at the Hamburg University of Technology (TUHH) and a Conjoint Professor at the Waikato Management School, New Zealand. He holds a PhD from the University of Hamburg, Faculty of Business and Economics. His research has been published in well-known journals such as Information Systems Research (ISR), International Journal of Research in Marketing (IJRM), Journal of Business Research (JBR), Journal of Service Research (JSR), Journal of the Academy of Marketing Science (JAMS), Long Range Planning (LRP), MIS Quarterly (MISQ), and Organizational Research Methods (ORM). Dr. Ringle co-authored the textbook on PLS-SEM and is co-founder of SmartPLS, a software tool with a graphical user interface for the application of the PLS-SEM method. [https://www.tuhh.de/hrmo/team/prof-dr-c-m-ringle.html](https://www.tuhh.de/hrmo/team/prof-dr-c-m-ringle.html)

Suggested readings:


