

Aug 10th, 12:00 AM

## ACM / AIS IS2020: Updating the IS Model Curriculum

Paul M. Leidig

*Grand Valley State University, paul.leidig@gvsu.edu*

Hannu Salmela

*University of Turku, hanna.salmela@utu.fi*

Greg Anderson

*Brigham Young University, greg\_anderson@byu.edu*

Jeffrey Babb

*West Texas A & M University, jbabb@wtamu.edu*

Lesley A. Gardner

*The University of Auckland, l.gardner@auckland.ac.nz*

*See next page for additional authors*

Follow this and additional works at: <https://aisel.aisnet.org/amcis2020>

---

### Recommended Citation

Leidig, Paul M.; Salmela, Hannu; Anderson, Greg; Babb, Jeffrey; Gardner, Lesley A.; Nunamaker, Jr., Jay F.; Scholtz, Brenda; Shankararaman, Venky; Sooriamurthi, Raja; Thouin, Mark F.; and de Villiers, Carina, "ACM / AIS IS2020: Updating the IS Model Curriculum" (2020). *AMCIS 2020 Proceedings*. 2.  
<https://aisel.aisnet.org/amcis2020/panels/panels/2>

This material is brought to you by the Americas Conference on Information Systems (AMCIS) at AIS Electronic Library (AISeL). It has been accepted for inclusion in AMCIS 2020 Proceedings by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact [elibrary@aisnet.org](mailto:elibrary@aisnet.org).

---

### **Presenter Information**

Paul M. Leidig; Hannu Salmela; Greg Anderson; Jeffry Babb; Lesley A. Gardner; Jay F. Nunamaker, Jr.; Brenda Scholtz; Venky Shankararaman; Raja Sooriamurthi; Mark F. Thouin; and Carina de Villiers

# ACM / AIS IS2020: Updating the IS Model Curriculum

*Panel*

**Paul M. Leidig**

Grand Valley State University  
paul.leidig@gvsu.edu

**Hannu Salmela**

University of Turku  
hannu.salmela@utu.fi

**Greg Anderson**

Brigham Young University  
greg\_anderson@byu.edu

**Jeff Babb**

West Texas A&M University  
jbabb@wtamu.edu

**Lesley Gardner**

University of Auckland  
l.gardner@auckland.ac.nz

**Jay F. Nunamaker Jr.**

University of Arizona  
JNunamaker@cmi.arizona.edu

**Brenda Scholtz**

Nelson Mandela University  
Brenda.Scholtz@mandela.ac.za

**Venky Shankararaman** Singapore

Management Univ.  
venks@smu.edu.sg

**Raja Sooriamurthi**

Carnegie Mellon University  
raja@cmu.edu

**Mark Thouin**

University of Texas at Dallas  
mark.thouin@utdallas.edu

**Carina de Villiers**

University of Pretoria  
carina.devilliers@up.ac.za

## ABSTRACT

The Association of Computing Machinery (ACM) and the Association for Information Systems (AIS), two global professional and academic societies with a stake in Information Systems (IS) education, are engaged in a project to revise the Information Systems Curriculum for bachelor's degrees. A joint taskforce on the Information Systems (IS2020) Model Curriculum was created following the report and recommendation of an Exploratory Taskforce. This panel seeks to introduce the work of this taskforce as well as engage the AMCIS community in this effort. The taskforce seeks to facilitate broad feedback during the IS2020 development process through surveys and open feedback requests. Panelists will introduce key components of this process and seek input and feedback. This session should be of interest to all attendees, especially faculty developing college-level curricula in Information Systems.

## KEYWORDS

Information Systems, Model Curriculum, IS2010, IS2020.

## PANEL OVERVIEW AND OBJECTIVE

The field of Information Systems is dynamic in nature and is confronted with a seemingly continuous stream of technological developments, opportunities and trends. Organizations are also deploying technologies in new ways and for new purposes. This dynamic context poses a significant challenge for faculty and administrators that are tasked to educate future generations of IS professionals. Furthermore, it forms an important basis for the assessment of current and future curricula development efforts. There have been a significant number of studies since the publication of the IS2010 model curriculum (Topi, H., Valacich, J. S., Wright, R. T., Kaiser, K. M., Nunamaker Jr, J. F., Sipior, J. C., & de Vreede, G. J. (2010)) that report a lack of adherence to the model's core recommendations. A reoccurring theme is that industry is looking for stronger technical skills than current graduates appear to possess. This panel, moderated by the Taskforce co-chairs, Paul M. Leidig and Hannu Salmela, will provide a high-level outline of the current field of Information Systems in terms of the nature of the IS discipline and relevant changes necessary in further development of an IS model curriculum. The primary purpose of the panel is to elicit feedback and input in the process of developing IS2020.

## PANEL LAYOUT/DESIGN

- Introduction (5 minutes) – an introduction to the goals and purpose of the IS2020 taskforce.
- Current landscape of the IS model curriculum (10 minutes) – an articulation of the current (IS2010) model curriculum, and artifacts related to concerns or issues suggesting updates.
- Value of a model curricula and competency models (10 minutes) – an explanation of current model curriculum trends and movement towards the use of competency models.
- Assessment of IS2010: Gap Analysis (10 minutes) – a short overview of an initial assessment of the adequacy of IS2010.
- IS2020 Guiding Principles (5 minutes) – key principles mandated by the Exploratory Taskforce guiding the IS2020 efforts.
- Activities and Timeline (5 minutes) – sharing of the IS2020 project plan and key milestones.
- Open discussion (30 minutes) – time for questions and feedback.

## PANEL PARTICIPANTS

Along with the two co-moderators, several of the following taskforce members will serve as panelists:

- **Paul Leidig**, Grand Valley State University (co-chair). Dr. Leidig is a Professor and the Director of the School of Computing and Information Systems at Grand Valley State University. Leidig holds positions with the Computing Sciences Accreditation Board (CSAB), the Association of Computing Machinery (ACM) Education Council, and was a Commissioner on the Computing Accreditation Commission of ABET. Leidig currently serves as chair of the CSAB Criteria Committee, co-chair of the Information Systems IS2020 Curriculum Taskforce, co-chair of the ACM Data Science Taskforce, and the Computing Curricula 2020 Report group. He is a past-president of the Association of Information Technology Professionals (AITP) Education Special Interest Group (EDSIG), and was named an AITP-EDSIG Fellow.
- **Hannu Salmela**, University of Turku (co-chair). Dr. Salmela is a Professor of information systems at Turku School of Economics. He held research and teaching positions at the University of Kentucky, University of Vaasa, West Georgia State University, and University of Twente. He served as Head of Department of Management and Vice Dean of Turku School of Economics. He was involved in developing international master's programs with Tilburg University, University of Passau and Central China Normal University. Salmela currently serves as co-chair of the Information Systems IS2020 Taskforce.
- **Greg Anderson**, Brigham Young University. Dr. Anderson is a professor of information systems at Brigham Young University. He has over 30 years of industry experience and was Chair of Computer Science at Weber State University for almost 9 years. He has been a contributing editor of several magazines. He has been active in Information Systems conferences ICIS and HICSS.
- **Jeff Babb**, West Texas A&M University. Dr. Babb joined the Paul and Virginia Engler College of Business at West Texas A&M University in 2009. He received a B.A. in geography from the University of Hawaii in 1991, a master's of urban and regional planning from Virginia Commonwealth University in 2000, an M.S. in information systems from Virginia Commonwealth University in 2005 and a Ph.D. in business and information systems from the Virginia Commonwealth University in 2009.
- **Lesley Gardner**, University of Auckland. Dr. Gardner is an Associate Professor in Information Systems and Deputy Head of Information Systems and Operations Management. She is a member of the Institute of Information Technology Professionals Member of the British Computer Society – the Chartered Institute Fellow of the Royal Geographical Society.
- **Jay F. Nunamaker Jr**, University of Arizona. Dr. Nunamaker is the Regents and Soldwedel Professor of Management Information Systems, Computer Science and Communication. He founded the MIS Department and the Center for the Management of Information, University of Arizona. Nunamaker has served as major professor to over 80 doctoral students from 1968–present. Students that currently hold, or have held, positions at Harvard, University of Michigan, Indiana University, University of Iowa, University of Florida, University of Georgia, University of Washington, Carnegie Mellon University, Texas A&M University, University of Hawaii, and other top MIS institutions. Nunamaker has been featured in a Forbes magazine issue on technology as one of eight key innovators in information technology. In 2002, he was the recipient of the LEO (lifetime achievement) Award from the Association of Information Systems, at ICIS in Barcelona, Spain. In an article in Communications of the Association for Information Systems, he was recognized as one of the most

productive information systems researchers. His publications span more than 250 papers and seven books, and editorial positions on major journals, in computer science and engineering, information management, and security informatics.

- **Brenda Scholtz**, Nelson Mandela University. Dr. Scholtz is a Professor and Head of Department at the Computing Sciences department at the Nelson Mandela University. Her main research area is in data analytics and business intelligence. She has published over 60 articles in accredited conferences and journals. She is also a reviewer for several top IS and Computer Science journals.
- **Venky Shankararaman**, Singapore Management University. Venky Shankararaman is a Professor of Information Systems (Education) and Associate Dean (Education) at the School of Information Systems, Singapore Management University. His current areas of specialization include business process management and analytics, enterprise systems architecture and integration, and education pedagogy. He has over 25 years of experience in the IT industry in various capacities as a researcher, academic faculty member, IT professional and industry consultant. Venky has designed and delivered professional courses for government and industry in areas such as business process management and analytics, enterprise architecture, technical architecture, and enterprise integration. He has published over 65 papers in academic journals and conferences. Venky currently serves as President of AIS-SIGED.
- **Raja Sooriamurthi**, Carnegie Mellon University. Dr. Sooriamurthi is a teaching professor in the Information Systems Program (Dietrich College) at Carnegie Mellon University. He has held positions at Indiana University, the University of West Florida, and Madurai Kamaraj University. Raja has received numerous teaching awards.
- **Mark Thouin**, University of Texas at Dallas. Dr. Thouin is a Clinical Professor of Information Systems and Director of Graduate Information Systems Programs at University of Texas at Dallas. He served on the Joint ACM/AIS MSIS 2016 Task Force, developing the MSIS 2016 Global Competency Model for Graduate Degree Programs in Information Systems.
- **Carina de Villiers**, University of Pretoria. Dr. de Villiers is Professor and Head of the Informatics Department at the University of Pretoria. She is co-chair for Africa of the AIS Special Interest Group for Global Development, and has published in the Journal of Global Information Management. Dr. de Villiers is part of the task team developing a South African Computing Accreditation Body (SACAB) to do accreditation of computing degrees in South Africa.

## REFERENCES

1. Topi, H., Valacich, J. S., Wright, R. T., Kaiser, K. M., Nunamaker Jr, J. F., Sipior, J. C., & de Vreede, G. J. (2010). Curriculum Guidelines for Undergraduate Degree Programs in Information Systems. *Communications of the Association for Information Systems*, 26, Article 18.