

2016

Celebrating 50 Years of Management Information Systems (MIS) Research and Teaching

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Recommended Citation

Power, Daniel; Hadidi, Rassule; and Scheibe, Kevin P. (2016) "Celebrating 50 Years of Management Information Systems (MIS) Research and Teaching," *Journal of the Midwest Association for Information Systems (JMWAIS)*: Vol. 2016 : Iss. 2 , Article 1. Available at: <http://aisel.aisnet.org/jmwais/vol2016/iss2/1>

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Editors' Comments

Celebrating 50 Years of Management Information Systems (MIS) Research and Teaching

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Management Information Systems (MIS) is now in its fifth decade as a discipline. In 1966, Professor John Dearden and his student F. Warren McFarlan, both at Harvard University, co-authored the book "Management Information Systems: Text and Cases". Dearden and McFarlan's book is a landmark in the teaching of computerized information systems. A few years earlier Leavitt and Whisler (1958) identified the conceptual foundations of what we now call the discipline and practice of Management Information Systems. They predicted that "Information Technology" (IT) would become a new tool to better manage organizations. In 1959, Harvard Business School wanted to provide more course work in IT. In response to that perceived need, Dearden joined the Business School faculty and created a new course titled Management Information Systems. Dearden was a major figure in the early development of Management Information Systems teaching and research. Chris Argyris (1971), Gordon Davis (1974), Robert Head (1967), and Gary Dickson (1981), among others, also made important contributions to the development of the MIS discipline. Mary Culnan (1986) documented the "intellectual development" of MIS from 1972 to 1982.

In 1968, Gordon Davis established the first formal MIS degree program at the University of Minnesota (Dickson, 1981), and his subsequent efforts led to the preparation of many faculty in the field of Management Information Systems. Davis has been supportive of efforts to expand the scope of Information Systems and create new organizations notably AIS and MWAIS where scholars could meet in a collegial setting and share ideas. He gave the keynote address at the 1st Annual MWAIS Conference at Grand Valley State in May 2006.

While many of Leavitt and Whisler's predictions were incorrect or at least premature, the vision they presented of Information Technology eliminating or significantly reducing middle management jobs and automating decisions did result in changes in preparing future managers. Over time, more IT was introduced into business curriculums and research about IT impacts was initiated. Managers learned about Management Information Systems. Leavitt and Whisler had argued relative to IT, that "perhaps the biggest step managers need to take is an internal, psychological one. In view of the fact that information technology will challenge many long-established practices and doctrines, we will need to rethink some of the attitudes and values which we have taken for granted" (p. 48).

In his Harvard Business Review article "MIS is a Mirage," Dearden (1971) argued that the term management information is "embedded in a mish mash of fuzzy thinking and incomprehensible jargon" (p. 90). To clarify the term, Ives, Hamilton,

and Davis (1980) defined MIS as a “computer-based organizational information system which provides information support for management activities and functions” (p. 910). Banville and Landry (1989) were especially negative in their assessment and stated that “MIS is a fragmented field or, to put it in other words, an essentially pluralistic scientific field, especially in view of its vocational character” (p. 58). There has been controversy for 50 years about what a Management Information System is and is **not** and more generally what is the concept of an Information System (Dickson, Benbasat, & King, 1980; Banville & Landry, 1989; Farhoomand & Drury, 2001; Cecez-Kecmanovic, 2002; Taylor, 2005). Researchers debate the need for an overriding theory of IS or MIS, the need to include an IT artifact in IS research, the need to establish a boundary for what is MIS or IS research, cf., Weber, 2003.

Today, MIS has matured as both a research area and a teaching topic. MIS is the study of people, technology, and organizations, focusing on computing in the context of organizations. The objective of much of the research and theorizing about Management Information Systems has been about the use of information technologies to improve the efficiency and enhance the effectiveness of businesses and other organizations. MIS research has been both theoretical and applied.

One important aspect of both theoretical and applied MIS research is continuing advances in technology. Advances in IT open up other possible processes that were not previously available for support and automation. This is the essence of MIS. This is why MIS is more than simply technology and its application to business. It is also about how business is changed by technology and its influence on people, organizations, and business processes. The discipline of MIS is as important now as it has ever been. Other disciplines are becoming more technology savvy as they tap into automation, telecommunications, and industrial science. For example, Marketing and Customer Relationship Management (CRM), Accounting Information Systems, Supply Chain and Material Requirement Planning (MRP) and Enterprise Resource Planning (ERP) systems clearly demonstrate how technology is becoming embedded across disciplines. However, many of the core functions of MIS such as requirements analysis and system design are as critical as ever and remain strongly anchored in the MIS discipline. These core functions are also why many MIS jobs cannot be offshored. Proximity between the analysts and the business problems is a necessity.

MIS remains relevant as a viable career for students and it continues to expand in research importance. We now live in the big data era where knowledge is discovered or created from disparate sources in real time. Many of the big data concepts can trace their roots to decision support systems (DSS), which developed initially as part of MIS. Many DSS are computerized MIS that use data and/or models to help decision makers solve semi-structured and unstructured problems. In other words, DSS are the application of Information Systems in an organizational context to enhance business decisions. While the terminology may change, the underlying IS concepts remain. When we understand that MIS includes hardware, software, data, networking, people, and procedures, we begin to realize that IS research should be increased and encouraged. There is no one size fits all in information systems. IS research can and should touch every aspect of business. We should examine new systems analysis and design methods by moving from waterfall development to agile development, to the creation and storage of knowledge in the form of knowledge-based management systems or transactional memory systems, to optimized logistic networks to mitigate supply chain disruptions, to distributed cloud based information systems. There is no shortage of IS, DSS, MIS research questions that still need to be addressed.

Gary Dickson (1981), the first Editor-in-Chief of MIS Quarterly noted “in the simplest, most straightforward terms, MIS deals with all information and decision-making activity associated with operating an organization. It is the desire of those working in the MIS area to encourage better organizational efficiency and effectiveness through facilitating information provision and decision support to management” (p. 4). Management Information Systems have transformed the management of organizations in a little more than 50 years and the transformation continues and is perhaps accelerating.

The Journal of the Midwest Association for Information Systems (JMWAIS) reports research broadly within the domain of Information Systems and that includes Management Information Systems and Decision Support Systems. Our journal builds on the work of many researchers and scholars. Research in our discipline was formalized with the founding of Management Information Systems Quarterly or MIS Quarterly (MISQ). Strong scholarly journals have been an important reason why the Information Systems academic discipline has adapted, evolved, and "flourished."

We are celebrating more than 50 years of MIS research and teaching and next year we will celebrate the 40th anniversary of MIS Quarterly, the 12th anniversary of MWAIS and the 3rd volume of JMWAIS. We hope that Management Information Systems scholars from the Midwest United States and beyond will join us May 18 and 19, 2017 during our Annual MWAIS conference in Springfield, Illinois. Come celebrate with us.

We at the Journal of the Midwest Association for Information Systems (JMWAIS) hope to continue to share quality Information Systems scholarship. We remember Leavitt and Whisler, Dearden, McFarlan, Argyris, Davis, and Head as well as all who contributed to Management Information Systems research and teaching. Organizations continue to need Management Information Systems and the topics we study are increasingly complex and mission critical. Long live MIS!

Overview of the contents of this issue

This issue of the journal includes four articles. One traditional research article, a tutorial, a teaching case study, and a course design related article.

Sikolia and Biroš apply grounded theory methodology to find a meaningful approach to motivate organizational employees to comply with information security policies. They have developed a framework for how to motivate employees to comply with the organizations' information security policies.

Schiller, Merhout, and Sandlin have looked at the information technology asset disposition process from both enterprise sustainability and regulatory compliance view points and have developed and documented a detailed and step-by-step tutorial for enterprise IT asset disposition.

Bassani, McCubbrey, and Watson have developed a teaching case based on the Open Educational Resource concept and the Global Text Project that was initiated in 2006. Their teaching case describes the efforts of students and other volunteers to translate the available Global Text Project books into the Spanish language. The case raises many issues including using machine translation to increase productivity.

Klein describes her efforts to develop an applied management course that integrates foundational concepts from economics, statistics, information systems, and organizational behavior as a part of an MBA curriculum. Her experiences from offering the course and students' feedback are presented in the article.

We appreciate and wish to acknowledge the contributions of the reviewers for this issue of the journal, including Dennis Acuna (Dakota State University), Gaurav Bansal (University of Wisconsin, Green Bay), Mari Buche (Michigan Technological University), Joey George (Iowa State University), Roya Gholami (University of Illinois Springfield), Yi "Maggie" Guo (University of Michigan, Dearborn), Bryan Hosack (Equity Trust Company), Jakob Iverson (University of Wisconsin Oshkosh), Rob Johnson (State Farm), Barbara Klein (University of Michigan, Dearborn), Roger Pick (University of Missouri – Kansas City), Anne Powell (Southern Illinois University – Edwardsville), and Shu Schiller (Wright State University).

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Author Biographies



Daniel J. Power is a Professor of Information Systems and Management in the College of Business Administration at the University of Northern Iowa. Power serves as the editor of the Journal of the Midwest Association for Information Systems (JMWAIS), DSSResources.com, PlanningSkills.com, and Decision Support News. His research interests include the design and development of decision support systems and how these systems impact individual and organizational decision behavior.



Rassule Hadidi is Professor and Head of the Management Information Systems Department at the College of Business and Management, University of Illinois Springfield. His current research areas of interest include online and blended teaching and learning pedagogy and its comparison with face-to-face teaching; MIS curriculum development and quality assessment; cloud computing and its applications for small and medium-sized enterprise; and quality of online information. He is the First Hanson Professional Services Faculty Scholar; served as the President as well as the At-Large Director of the Midwest Association for Information Systems and is the founding Managing Editor of the Journal of the Midwest Association for Information Systems.



Kevin P. Scheibe is an Associate Professor of Management Information Systems in the College of Business at Iowa State University. His research interests include business analytics, IT privacy and security, supply chain risk, spatial decision support systems, wireless telecommunications, and IT outsourcing. His teaching interests include machine learning and business analytics, computer-based decision support systems, and supply chain information systems. He is a member of the Association for Information Systems and the Decision Sciences Institute. He received a PhD from Virginia Polytechnic Institute and State University. He is currently serving as the President of the Midwest Association for Information Systems.

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