

MIS Doctoral Dissertations: 1990

By: **J. Scott Hamilton**
Fourth Shift
Minneapolis, Minnesota

Blake Ives
Southern Methodist University
Dallas, Texas

Gordon B. Davis
University of Minnesota
Minneapolis, Minnesota

Editor's Note

Each year the *MIS Quarterly* publishes a listing of MIS dissertations written during the previous year. This list of titles is updated annually to provide a complete, up-to-date index to the MIS dissertation literature.

The method used for identifying dissertation titles was previously described and validated.¹ Although this method ensures identification of most MIS dissertations, there are occasional oversights. Undoubtedly, there are some we have missed this year and still others from previous years. We encourage additions to the bibliography.

This year's list includes 143 dissertations. Copies of the dissertations may be obtained through University Microfilms. University Microfilms can be reached at:

University Microfilms International
Dissertation Copies
P.O. Box 1764
Ann Arbor, Michigan 48106
(800) 521-3042

Abstracts of the dissertations are found in Dissertation Abstracts International,² which is available in most university libraries. The 500 to 1,000 word

abstracts provide a short description of the research topics, research methodology, and findings.

Dissertation Bibliography

- Abdul-Gader, A.H. *Computer Alienation and Information Technology Assimilation: A Comparative Study Between Saudi and American Decision Makers in Petro-Chemical and Printing Industries*, University of Colorado at Boulder, 1988 (89-02868).
- Agarwal, R. *Knowledge Acquisition for Business Expert Systems—a Decision-Centric Model and Its Empirical Validation*, Syracuse University, 1988 (89-14549).
- Allen, R.A. *Users' Perception of Computer System Response Time*, Clemson University, 1988 (89-15252).
- Al Malaq, S.E. *Implementation of Computerized Management Information Systems in Public Organizations: The Case of the Ministry of Education in Saudi Arabia*, University of Denver, 1988 (89-05914).
- Amadi, A.O. *An Integrated Office Information System*, University of Wales (United Kingdom), 1986 (BRDX84328).
- Aydin, C.E. *Bringing Social Worlds Together: Information Systems as Catalysts for New Interactions in Health Care Organizations*, University of Southern California, 1989.
- Baba, I. *The Role of Auditors in Information Systems Development Applied to the Malaysian Public Sector*, University of East Anglia (United Kingdom), 1988 (BRD-8532).
- Bailey, W.A. *Developing Institutional Decision Support Systems: A System Study, Simulation Analysis, and DSS Design for Taxicab Dispatching*, The Florida State University, 1989 (89-21295).
- Balaguer, N.S. *CIM Information Technology Utilization and Organizational Design: A Field Study on Information Processing*, Rensselaer Polytechnic Institute, 1988 (89-05501).
- Beach, R. *An Investigation into the Application of Computerised Production and Stock Control in Medium Sized Manufacturing Companies*, Council for National Academic Awards (United Kingdom), 1988 (BRDX85344).
- Bellairs, K. *Contextual Relevance in Analogical Reasoning: A Model of Legal Argument*, University of Minnesota, 1989.

¹ Hamilton, S., Ives, B., and Davis, G.B. "MIS Doctoral Dissertations: 1973-1980," *MIS Quarterly* (5:2), June 1981, pp. 61-83.

² Same address as dissertation copies.

- Bordoloi, B. *An Experimental Investigation of Comparative Operating Efficiency of 4GLs in the Context of Report Generating Applications in a Workstation Computing Environment*, Indiana University, 1988 (88-24146).
- Bowman, B. *An Investigation of Application Development Process Controls in an End-User Setting: A Field Study*, University of Houston, 1988 (89-06813).
- Braman, S. *Information Policy and the United States Supreme Court*, University of Minnesota, 1988 (88-23521).
- Brownbridge, G. *Doctor-Patient Communication and the Consulting Room Use of Computers in General Practice*, University of Sheffield (United Kingdom), 1987 (BRDX84057).
- Brumm, E.K. *Exploratory Study of Chief Information Officers in Fortune Service and Industrial Organizations*, University of Illinois at Urbana—Champaign, 1988 (88-23089).
- Byrd, T.A. *Integrating Knowledge and Data in a Task Support System: A Model and an Application*, University of South Carolina, 1988 (89-10232).
- Cass, K.A. *Assessing the Usefulness of Domain and Methodological Tutorials for Novice Users Employing an Expert System as an Advice-Giving Tool*, The University of Arizona, 1988 (89-07952).
- Chang, A.M. *An Environment Theory of Decision Support*, Purdue University, 1988 (89-00642).
- Chen, B.C. *A Field Study of Information Center Success: A Stage Model Approach*, The University of Texas at Austin, 1988 (89-09631).
- Chen, M. *The Integration of Organization and Information System Modeling: A Metasystem Approach to the Generation of Group Decision Support Systems and Computer-Aided Software Engineering*, The University of Arizona, 1988 (88-24264).
- Cheung, J. *An Analysis of Computer Usage and Its Relationships to Marketing Decision-Making in United States Hotels*, United States International University, 1989 (89-18994).
- Ching, C. *A General Theory of Distributed Decision Making*, Purdue University, 1988 (89-00648).
- Christensen, S.R. *Information System Security: General Systems Paradigm and Knowledge Representation*, The University of Texas at Arlington, 1988 (89-14108).
- Clark, S. *An Empirical Study of the Usefulness of Application Prototyping Methodologies for the Development of Management Information Systems in a Commercial Environment*, The University of Texas at Arlington, 1988 (89-01062).
- Cochran, F.S. *Role of Information Technology in Probation Management*, University of Massachusetts, 1988 (88-22646).
- Conger, S.A. *An Exploration of Information Technology Use for Interunit Coordination*, New York University, 1988 (88-27732).
- D'Amico, G.S. *Management's Perceptions of the Effect of End-User Computer Information Systems on Organizational Structure in Commercial Printing Companies*, New York University, 1988 (88-25218).
- Davies, C.G. *An Investigation into Computer Assisted Program and System Design*, University of Manchester (United Kingdom), 1987 (BRDX83980).
- Dawson, M.L. *An Empirical Analysis of the Effects of Decision Type and Control Over Data Access and Model Access on User Preference for Modeling Environments*, Michigan State University, 1988 (89-12567).
- Deans, P.C. *The Transfer and Management of Information Systems Technology in the International Environment: Identification of Key Issues for MIS Managers in U.S.-Based Multinational Corporations*, University of South Carolina, 1989 (89-21465).
- Dorsey, P.R. *An Investigation of the Effectiveness of Communication Between Systems Analysts and End Users in the Design of Large Computer Systems*, The University of Utah, 1988 (88-16831).
- Downs, S.R. *The Strategic Use of Information Systems: Implications for Communication and Internal Control*, The University of Utah, 1988 (88-16632).
- Duben, J.L. *Computers in Health Care: Analysis of Outpatient Attitudes*, University of Houston, 1988 (89-02428).
- Easton, G.K. *Group Decision Support Systems vs. Face-to-Face Communication for Collaborative Group Work: An Experimental Investigation*, The University of Arizona, 1988 (88-22420).
- Ebert, P.K. *Cognitive Ergonomics in Information System Design*, Arizona State University, 1988 (89-07698).
- Ege, G. *Design and Development of a Decision Support System for Funding Type Selection (In-House/Extramural) in Government R&D Organizations*, North Carolina State University, 1988 (88-25638).
- Everett, D.R. *Competencies for Information Systems Workers*, University of Houston, 1988

- (88-19523).
- Ezizbalike, I.F. *Land Information Systems Development: Software and Management Considerations*, The University of New Brunswick (Canada), 1988.
- Fan, W.K. *An Investigation into the Impact of Information Technology on Business Performance*, Council for National Academic Awards (United Kingdom) 1980 (BRDX86252).
- Finberg, E.E. *The Federal Government and the History of the U.S. Computer Industry: The Development of an Industrial Policy*, The University of North Carolina at Chapel Hill, 1988 (89-14410).
- Foo, A.C. *An Empirical Investigation into the Evolutionary Behavior of Information Centers*, The University of Texas at Arlington, 1988 (88-19436).
- Frey, W.H. *A Graphic Decision Support System Illustration: The Level of Preference of Deans of Instruction of Community and Junior Colleges*, University of Arkansas, 1988 (88-18269).
- Garrett, M.J. *Using MIS Techniques within Instructional Programs: Data Flow Diagrams to Design Instruction and Expert Systems to Deliver Expertise*, Michigan State University, 1988 (89-12575).
- Gomes, R. *The Influence of Just-In-Time Systems on Physical Distribution Channel Performance: An Experiment Utilizing a Dynamic Simulation Decision Support System*, Virginia Polytechnic Institute and State University, 1988 (89-04990).
- Gosse, D.I. *An Empirical Field Study of the Role of Cost Accounting in a Computer-Integrated Manufacturing Environment*, Michigan State University, 1989 (89-16479).
- Gutmund, S.H. *Tinker Toy: An Environment for Decision Support*, University of Massachusetts, 1988 (89-06287).
- Hagmann, C. *An Object Oriented Design for Local Area Decision Network (LADN) Small Group Decision Support Systems*, Kansas State University, 1988 (89-01144).
- Haney, J.D. *The Majority of Expert Power: Computer Information Systems Within Small Government Organizations*, Northern Arizona University, 1988 (88-25313).
- Hardaway, D.E. *An Assessment of the Effects of a Decision Support Systems Generator on Selected Mental Health and Performance Attributes when Performing a Decision Making Task*, University of Houston, 1988 (88-22228).
- Held, J.P. *Extending the Capabilities of Database Management Systems to Support the Needs of Expert Systems*, University of Minnesota, 1988 (89-09451).
- Helfen, J.G. *Prototypic Financial Decision Support System Applications for Central Office Administrators in Indiana*, Indiana University, 1988 (89-16398).
- Heminger, A.R. *Assessment of a Group Decision Support System in a Field Setting*, The University of Arizona, 1988 (89-07958).
- Hendrickson, J.J. *Natural Language Human-Computer Dialogue: Menubased Natural Language and Visual Performance*, Old Dominion University, 1988 (88-23953).
- Higa, K. *End-User Logical Database Design: The Structured Entity Model Approach*, The University of Arizona, 1988 (89-05791).
- Hoadley, E.D. *The Effects of Color on Performance in an Information Extraction Task Using Varying Forms of Information Presentation*, Indiana University, 1988 (89-02571).
- Hoffman, J.J. *The Effects of Strategic and Operational Decision Making Structure on Organizational Performance: Technology as a Moderator*, The University of Nebraska—Lincoln, 1988 (88-18630).
- Holmes, J.K. *Information Systems Technology Project Selection: A Decision Modeling Approach*, Clemson University, 1988 (88-20159).
- Hong, K.S. *Decision Support for Petroleum Crisis Management: Design and Implementation of a Goal Programming Imbedded System*, The University of Nebraska—Lincoln, 1988 (88-18631).
- Horwitz, J.B. *Learning How to Use Computers: A Case Study*, Columbia University Teachers College, 1988 (88-24377).
- Hufnagel, E.M. *Some Determinants of Perceived Fairness in Chargeback Systems and the Effects of Perceived Fairness on User Decision Making*, University of Pittsburgh, 1988 (89-05561).
- Humble, J.E. *Effect of a Computerized Feedback System on Overconfidence Bias in Decision Making*, Arizona State University, 1988 (89-07709).
- Iyengar, J.V. *Effect of Cognitive Style and Decision Support System Usage on Perception of Risk*, Georgia State University—College of Business Administration, 1989 (89-17203).
- Jang, S.Y. *Influence of Organizational Factors on Information Systems Strategic Planning*, University of Pittsburgh, 1989 (89-21322).
- John, B.E. *Contributions to Engineering Models of Human-Computer Interaction*, Carnegie Mellon University, 1988 (89-04838).

- Kemerer, C.F. *Measurement of Software Development Productivity*, Carnegie Mellon University, 1987 (89-05252).
- Kim, H.J. *Issues in Object-Oriented Database Schemas*, The University of Texas at Austin, 1988 (88-16492).
- Kim, J.W. *An Examination of a Perceived System Quality Measure and Its Association with System Usage: A Study of Banking Information Systems in Large United States Domestic Banks*, Mississippi State University, 1988 (89-02514).
- Kim, S.E. *Viewpoint: Toward a Computer for Visual Thinkers*, Stanford University, 1988 (88-26166).
- King, J.R., Jr. *An Empirical Investigation into the Effects of a Computer Based Decision Support Process*, The University of Texas at Arlington, 1988 (89-01069).
- Kugelmass, S.P. *Computer Integration in New York City Municipal Government as of Fiscal Year 1986*, New York University, 1989 (89-16097).
- Lakhanpal, B. *Determinants of Technological Innovation-Middle Managers and Microcomputers*, University of California, Irvine, 1988 (88-27993).
- Lee, J.S. *State of Development of Experimental Research on the Mode of Presentation in Management Information Systems*, Mississippi State University, 1988 (89-05967).
- Lind, M.L.R. *The Influence of Rich Communication Channel Usage on IT Innovativeness*, The University of North Carolina at Chapel Hill, 1988 (89-05663).
- Linnegar, G.J. *An Investigation into the Management of Change in Cost Accounting Information System Requirements During the Transition from Traditional Manufacturing to Just In Time Concepts*, Mississippi State University, 1988 (89-05945).
- Lirov, Y.V. *Artificial Intelligence Methods in Decision and Control Systems*, Washington University, 1987 (89-01450).
- Liu, L.C. *An Integrated Systems Approach for Software Project Management*, University of Southern California, 1988.
- Lloyd, I.J. *Data Processing and Individual Freedom: Data Protection and Beyond*, University of Strathclyde (United Kingdom), 1988, (BRD85714).
- Lloyd, J.W. *Decision Support for Livestock Production: Integration of Information Management, Systems Modeling, and Computer Simulation Techniques*, Michigan State University, 1989 (89-16505).
- Loch, K.D. *An Empirical Analysis of the Relationship Between Information Systems and Organizational Performance in the Commercial Banking Industry*, The University of Nebraska—Lincoln, 1988 (88-18638).
- Lomo-David, E. *A Comparison of Spreadsheets Usage in Management Information Systems (MIS) Departments of Selected U.S. Top 1,000 Companies and Spreadsheets Courses Taught in MIS Departments of Member Institutions of the American Assembly of Collegiate Schools of Business*, Memphis State University, 1988 (89-04620).
- Marr, K.L. *Error Correction in Data Entry: A Cognitive Based Model of a Routine, Highly Practiced Computer Mediated Task*, New York University, 1988 (88-27739).
- Martz, W.B. *Information Systems Infrastructure for Manufacturing Planning Systems*, The University of Arizona, 1989 (89-19043).
- Miller, M.L. *A Comparison of Fourth-Generation Language Usage in Fortune 500 Companies and Collegiate Information Systems Curricula*, Oklahoma State University, 1988 (89-00419).
- Mills, P. *A Knowledge Based Computer System for Engineering Design Quotations*, Council for National Academic Awards (United Kingdom), 1989 (BRDX86260).
- Miyasato, G.H. *A Decision Support System in Seismic Risk Evaluation Using a Fuzzy Approach*, Stanford University, 1988 (89-06714).
- Morgan, R.R. *The Role of the Office Systems Analyst*, University of Georgia, 1989 (89-19300).
- Morieux, Y.V.H. *Strategic Analysis of Organisational Decision-Making as the Interface Between Corporate Idiosyncracies and the Adoption of Technological Innovations: The Case of Business Information Systems*, University of Strathclyde (United Kingdom), 1986 (BRD82718).
- Morris, A.H. *Supporting Environmental Scanning and Organizational Communication With the Processing of Text: The Use of Computer-Generated Abstracts*, Texas Tech University, 1988 (88-19418).
- Morris, R.J. *The Impact of Environmental Turbulence on the Design of Effective Strategic Information Systems*, The University of Nebraska—Lincoln, 1988 (89-14085).
- Munro, D.L. *An Architecture for Distributed Decision Support Systems*, The University of Wisconsin—Milwaukee, 1988 (89-13282).
- Myers, M.E. *A Knowledge-Based System for Man-*

- aging Software Requirements Volatility, George Mason University, 1988 (88-25493).
- Nabali, H.M. *Factors Affecting the Adoption of Computer-Based Hospital Information Systems in the Arabian Gulf*, Case Western Reserve University, 1988 (88-19858).
- Newhart, D.M.N. *An Analysis of the Effects of Computer Usage and Computer Training on White-Collar Performance Evaluations in the Insurance Industry*, Georgia State University—College of Education, 1988 (89-10189).
- Nuno de la Parra, J.P. *A Strategic Manufacturing Planning Decision Support System*, Oklahoma State University, 1988 (89-00423).
- Orlikowski, W.J. *Information Technology in Post-Industrial Organizations*, New York University, 1988 (89-11166).
- Palmer, D.R. *Senior Managers and Microcomputers: A Study of Use and Behavior*, Claremont Graduate School, 1988 (88-20114).
- Paulat-Adams, K.A. *Organizational Policy, Organizational Support Systems, Computer Education, and Attitudes Toward the Computer as they Relate to Computer Usage in Private Industry*, University of Pennsylvania, 1988 (89-08376).
- Peterson, T.O. *The Acquisition of Managerial Performance Feedback Skills Through the Use of a Knowledge-Based Expert System: An Empirical Evaluation*, Texas A&M University, 1988 (88-15911).
- Price, D.E. *History of the Development of a Collegiate Computer Information Systems Model Curriculum to Support the Business Community*, University of San Francisco, 1988 (88-20726).
- Pu, H.C. *A Knowledge-Based Approach to Logical Database Design: From Business Forms to Fully Normalized Relations*, University of Pittsburgh, 1988 (89-11422).
- Pullinger, D.J. *The Feasibility of Electronic Journals: Some Studies in Human Computer Interaction*, University of Technology, Loughborough (United Kingdom), 1987 (BRD83282).
- Rickman, L.L. *A Delphi Study to Identify the Emerging Competencies Needed by the Information Processing Employee for the Automated Office in the Year 2000*, University of Missouri—Columbia, 1987 (88-18965).
- Roberts, M.J. *Corporate Decision-Making: A Case Study of Decision Support Systems and Financial Performance in Health Care Organizations*, The University of Texas H.S.C. at Houston School of Public Health, 1988 (89-14301).
- Sambamurthy, V. *Supporting Group Performance During Stakeholder Analysis: The Effects of Alternative Computer-Based Designs*, University of Minnesota, 1989.
- Sargent, M.J. *Sources of Influence Among Data Processing Professionals*, Washington University, 1988 (88-12769).
- Schocken, S. *On the Underlying Rationality of Non-Deterministic Rule-Based Inference*, University of Pennsylvania, 1987 (87-14121).
- Schueler, D.V.L. *The Relationship of Computer Activities and Computer Time to Keyboarding Skill with Implications for Productivity*, University of Houston, 1989 (89-21605).
- Sept, R.E. *Bureaucracy and System Design: Communication Barriers in the Development and Implementation of Organizational Information Systems*, Simon Fraser University (Canada), 1989.
- Sepulveda, J.M. *A Knowledge-Based System for Real-Time Production Planning and Control in a Computer Integrated Manufacturing System*, The University of Tennessee, 1988 (89-11758).
- Serpen, A.E. *A Proposed Methodology for the Design of Decision Support Systems in Operations Management*, Brunel University (United Kingdom), 1987 (BRDX83518).
- Sethi, V. *The Development of Measures to Assess the Extent to Which an Information Technology Application Provides Competitive Advantage*, University of Pittsburgh, 1988 (89-11425).
- Shafie, H.B. *The Relationship Between Organizational Information Processing and Effectiveness: A Study of Research and Development Organizations in Malaysia*, Syracuse University, 1988 (89-07890).
- Shupe, J.A. *Decision-Based Design: Taxonomy and Implementation*, University of Houston, 1988 (88-19492).
- Siefferman, P.E. *The Synthesis of a Hazardous-Materials-Inventory Management-Information System for the University of Alabama*, The University of Alabama, 1988 (88-26960).
- Siegel, J.A.L. *Managers' Communication and Telecommunications Technology Use*, Carnegie Mellon University, 1988 (88-14729).
- Sipior, J.C. *Information Technology Assessment and Adoption: An Empirical Evaluation for a Specific DSS*, State University of New York at Buffalo, 1988 (89-05477).
- Smith, F.K. *Determinants of Success in the Design & Institutionalization of Management Information Systems for Development*

- Administration: Lessons from the Philippine "Masagana 99" Experience*, George Mason University, 1988 (88-20233).
- Smith, O.R. *Sources and Uses of Information and their Implication for the Acceptance of Knowledge-Based Decision Support Systems in Agriculture*, Purdue University, 1988 (88-25580).
- Smyth, P. *The Application of Information Theory to Problems in Decision Tree Design and Rule-Based Expert Systems*, California Institute of Technology, 1988 (88-20993).
- Sung, T.K. *Impact of Information Technology on Organizational Structure: A Control Perspective*, The University of Texas at Austin, 1988 (89-01402).
- Talley, S.A. *A Study of Resistance to Technological Change: Principals and the Use of Microcomputers as a Management Tool*, University of La Verne, 1988 (89-04696).
- Tam, K.Y. *Knowledge Acquisition and Refinement in Expert Systems*, Purdue University, 1988 (88-25586).
- Todd, P.A. *An Experimental Investigation of the Impact of Computer Based Decision Aids on the Process of Preferential Choice*, The University of British Columbia (Canada), 1988.
- Toraskar, K.V. *The Effects of Forecasting Evaluation Frameworks on Managerial Decision-Making*, University of Pennsylvania, 1985 (86-03712).
- Trumbly, J.E. *An Investigation of User Performance Enhancement for Computer Based Management Information Systems Using an Adaptive User Interface*, Mississippi State University, 1988 (89-02519).
- Tseng, V.P. *Inferring Data Base Requirements from Examples in Forms*, The University of Texas at Austin, 1988 (88-16592).
- Turner, J.H. *A Survey of Superintendents and Designated Contact Persons Concerning the Implementation of the State Computer Information Network (SDENET)*, The University of Alabama in Birmingham, 1988 (88-23598).
- Ugalde Arias, L.A. *Effective Information Management in Forestry: An Application to Fuelwood and Multi-Purpose Tree Species Research in Central America*, University of Minnesota, 1988 (88-15305).
- Vale, M.E. *Information Structure and the Information-Seeking Behavior of Lawyers*, Stanford University, 1988 (89-06765).
- Veech, A.M. *Use of Management Information Systems in Vocational Education: A Case Study*, University of Illinois at Urbana—Champaign, 1988 (89-08878).
- Veerakool, V. *An Analytical Hierarchy Process Approach to Establish the Systems Analyst's Knowledge Base for Selecting an Information Requirements Determination Strategy*, University of Missouri—Rolla, 1988 (89-09817).
- Vickery, K.V. *Enabling Four United Methodist Churches' Finance Committees to Implement the United Methodist Information System Plus' Accounting Program*, Drew University, 1988 (88-19558).
- Wang, M. *Generic Functions and Their Information Characteristics in the Domain of the Discrete Engineering Manufacturing Industry*, Brunel University (United Kingdom), 1988 (BRDX85742).
- Wapner, R.H. *The Impact of the Introduction of a Computerized Management Information System upon an Employee Assistance Program*, California School of Professional Psychology at Berkeley/Alameda, 1989 (89-04397).
- Weaver, R. *The Diffusion of Decision Support Technology in Medicine*, The University of Connecticut, 1988 (89-05989).
- Webster, E.J. *Playfulness and Computers at Work*, New York University, Graduate School of Business Administration, 1989 (89-11170).
- Weill, P.D. *The Relationship Between Investment in Information Technology and Firm Performance in the Manufacturing Sector*, New York University, Graduate School of Business Administration, 1989 (89-11171).
- Weimer, J. *Machiavellianism and Computer-Mediated Communications: An Experiment in the Software Psychology of Terminal to Terminal Communication*, Texas Tech University, 1988 (89-08527).
- Williams, G.B. *Qualitative Decision Support*, Northwestern University, 1988 (88-23056).
- Worrall, L. *Information Systems Development and the Analysis of Urban Change*, University of Liverpool (United Kingdom), 1987 (BRDX86210).
- Wu, R.C. *Expertise in the Audit of Information System Controls*, University of California, Los Angeles, 1988 (88-22196).
- Yao, C.C.A. *The Design of an Intelligent Decision Support System for Decision Analysis*, University of Southern California, 1988.