

BMGT 808I Doctoral Seminar in Information Systems

Fall 2003

Professor Kate Stewart

Department of Decision and Information Technologies

R. H. Smith School of Business

University of Maryland

Wednesdays, 9 – 11:40am

CONTACT INFORMATION

Dr. Katherine Stewart

4355 Van Munching Hall

301-405-0576

kstewart@umd.edu

Office hours: M, W 2:00 – 2:30pm and by appointment

COURSE OBJECTIVES

This is an introductory seminar in information systems research for doctoral students. Its objective is to introduce participants to some major streams of research in information systems and to help seminar participants understand the role of research in an academic community and the methods of social science research.

TEXT AND ASSIGNED READINGS

Recommended: *Framing the Domains of IT Management: Projecting the Future Through the Past*, R.W. Zmud (Editor), Pinnaflex, 2000 (1-893673-06-5)

See attached list for journal articles and other readings.

COURSE GRADES

Seminar grades will be based on students' performance on the following:

- 1 (10%) Prepare a causal model
- 2 (15%) Article review 1
- 3 (10%) Article review 2
- 4 (30%) Prepare and present a research proposal on an approved topic
- 5 (15%) Exam
- 6 (20%) Weekly “bullets,” discussion leadership, and participation.

IMPORTANT DATES

| | |
|----------|----------------------------------|
| 10/15/03 | Paper topic statement due |
| 10/29/03 | Causal model due |
| 11/26/03 | Exam |
| 12/03/03 | Paper Draft and Presentation Due |
| 12/10/03 | Final Research Paper Due |

Late assignments will be penalized one letter grade.

READINGS

Be prepared to summarize the main points of each reading and discuss the following questions:

What is the research question of this article? What is the main contribution?

What were the most important insights you obtained from the reading?

What do you know now that you didn't know before?

What do you now think about differently?

What are the strengths and weaknesses of the reading (e.g., based on our discussion in weeks 2 and 3)?

What didn't you understand?

How do the articles relate to each other and to others read in previous weeks?

For each day's reading, you should prepare a set of "bullets" (maximum one-page) highlighting interesting, intriguing, or perhaps confusing aspects of the assigned reading. We will use these pages to drive the discussion in each class meeting. This assignment is due each week **by 9pm Tuesday**. It should be submitted by posting to the blackboard site.

CLASS PARTICIPATION AND DISCUSSION LEADERSHIP

It is critical that all students come prepared for every class, and participate actively in every discussion. Each seminar participant will be responsible for leading one class session. You will get at least one week's notice for the session you are assigned to lead.

ARTICLE REVIEWS

The article review process is a critical component of academic research. The ability to critically review a manuscript and provide constructive feedback are important skills for researchers, as is the ability to interpret and respond to criticism of one's own work. There will be two exercises for which students will write and evaluate articles, one focused on reviewing an unpublished manuscript and one focused on a published article.

CAUSAL MODELS AND RESEARCH PAPERS

Each student will review the literature in an area of his or her interest and propose a research project to address a question of interest in that area. Written topic proposals (one page or less) must be submitted for approval by the instructor no later than 10/15/03. After obtaining approval of the topic, students will construct a causal model to be tested in the proposed research (assignment 1) before completing and presenting the paper (assignment 3).

BMGT 808i Course Summary

| Class | Topic | Assignments |
|--------------|--|--|
| 9/2 | Intro and overview | |
| 9/10 | Theory and models | Bullets |
| 9/17 | Intro to Methods | Bullets |
| 9/24 | User Acceptance and Beyond Guest: Prof. Venkatesh | Bullets |
| 10/1 | IS Research Foundations | Bullets |
| 10/8 | Ethics and Reviewing Guest: Prof.Darcy | Bullets Review 1 |
| 10/15 | Systems Development Research | Bullets Topic statements Review response 1 |
| 10/22 | IT and Org Structure | Bullets Review 2 |
| 10/29 | Student Research Topics Intro to Virtual Groups/Organizations | Bullets Causal models Review response 2 |
| 11/5 | Virtual Groups and Organizations | Bullets |
| 11/12 | Open Source Software | Bullets |
| 11/19 | TBA | Bullets |
| 11/26 | Exam | |
| 12/3 | Student Research Presentations | Bullets Paper draft due 12/1/03 |
| 12/10 | Future research, course wrap-up | Bullets Final paper due |

Tentative Reading List for BMGT 808i – Fall 2003

1 Intro & overview of course (9/3/03)

Ives, Hamilton, Davis 1980. "A Framework for Research in Computer-Based Management Information Systems," *Management Science*, 26 (9).

Markus, L. and Robey, D., 1988. "Information Technology and Organizational Change: Causal Structure in Theory and Research," *Management Science*, 34(5), 583-598.

2 Intro to theory and models (9/10/03)

Discussion Question: How are Whetten's points addressed in the McKnight article?

Whetten, D. 1989. "What Constitutes a Theoretical Contribution?" *Academy of Management Review*, 14, 490-495.

Bacharach, 1989, "Organizational Theories: Some Criteria for Evaluation," *Academy of Management Review*.

Sutton and Staw, 1995, "What Theory is Not," *Administrative Science Quarterly*, 40, 371-384.

Weick 1995. "What Theory is Not, Theorizing Is," *Administrative Science Quarterly*, 40, 385-390.

DeMaggio 1995. "Comments on 'What Theory is Not'" *Administrative Science Quarterly*, 40, 391-397.

McKnight, Cummings, and Chervany, 1998. "Initial Trust Formation in New Organizational Relationships," *Academy of Management Review*, 23, 3, 473-490.

3 Intro to Methods (9/17/03)

Cook & Campbell ch. 1 & 2: Reading on causation and validity

Eisenhardt, 1989. "Building Theories from Case Study Research," *Academy of Management Review*, 14 (4), 532-550.

McKnight, Choudhury, and Kacmar, 2002. "Developing and Validating Trust Measures for e-Commerce: An Integrative Typology," *ISR*, 13:3, p. 334-59.

RECOMMENDED:

Klien, Dansereau, and Hall, 1994. "Levels issues in theory development, data collection, and analysis," *Academy of Management Review*, 19(2), 195-229.

4 User acceptance and Beyond (9/24/03)

Reading TBA

5 Intro to IS Research (10/01/03)

Zmud ch 4

Leavitt and Whisler, 1958. "Management in the 1980's" *Harvard Business Review*.

Ackoff, R. 1967. "Management Misinformation Systems," *Management Science*, 14 (4).

Huber, G. 1984. "The Nature and Design of Post-Industrial Organizations," *Management Science*, 30(8).

DeLone, W. and Mclean, E., "Information Systems Success: The Quest for the Dependent Variable", *Information Systems Research* (3:1), 1992, 60-95.

RECOMMENDED:

Brynjolfsson, E. 1993 "The Productivity Paradox of Information Technology," *Communications of the ACM*, 36, 12, 66-77.

6 Ethics and Reviewing (10/8/03)

GUEST: Prof. Dave Darcy (9:00am)

VIDEO: Obedience videorecording (Milgram)

VIDEO: Quiet rage: the Stanford Prison Study (Zimbardo)

Critique exercise manuscript: "Trust Transfer on the World Wide Web"

Lee, 1995. "Reviewing a manuscript for publication," *Journal of Operations Management*, 13, <http://www.people.vcu.edu/~aslee/referee.htm>

7 Systems Development (10/15/03)

Zmud 14, 15

Sabherwal, R., and Robey, D., 1995. "Reconciling Variance and Process Strategies for Studying Information System Development," *Information Systems Research*, 6(4), 303-327.

Byrd, T., Cossick, K., and Zmud, R.W., 1992. "A Synthesis of Research on Requirements Analysis and Knowledge Acquisition Techniques," *MIS Quarterly*, 16(1), 117-138.

Faraj and Sproull, 2000. "Coordinating expertise in software development teams," *Management Science*, 46, 12.

RECOMMENDED:

Guinan, Coopriker, and Faraj, 1998. "Enabling software development team performance during requirements definition: a behavioral versus technical approach," *Information Systems Research*, 9, 2.

8 IT and structuring (10/22/03)

Barley, S. 1986. "Technology as an Occasion for Structuring: Evidence from Observations of CT Scanners and the Social Order of Radiology Departments," *Administrative Science Quarterly*, 78-108.

Orlikowski and Robey, 1991. "Information Technology and the Structuring of Organizations," *Information Systems Research*, 2(2), 143-169.

DeSanctis and Poole, 1994. "Capturing the Complexity in Advanced Technology Use: Adaptive Structuration Theory," *Organization Science*, 5(2): 121-147.

Fulk and DeSanctis, 1995. "Electronic Communication and Changing Organizational Forms," *Organization Science*, 6, 4.

Zack and McKenney, 1995. "Social Context and Interaction in Ongoing Computer-Supported Management Groups," *Organization Science*, 6, 4.

9 Student Research Topics and Intro to Virtual Organizing (10/29/03)

Student Papers

Zmud, ch. 3

10 Virtual groups and organizations (11/05/03)

Barker, 1993. "Tightening the iron cage: concertive control in self-managing teams," *Administrative Science Quarterly*, 38(3), 408-437.

Constant, Sproull, Kiesler, 1996. "The kindness of strangers: the usefulness of electronic weak ties for technical advice," *Organization Science*, 7, 119-135.

Jarvenpaa and Liedner, 1999. "Communication and Trust in Global Virtual Teams," *Organization Science*, 10(6), 794-815.

Staples, D. S., Hulland, J. S., and Higgins, C. A. 1999. "A Self-Efficacy Theory Explanation for the Management of Remote Workers in Virtual Organizations," *Organization Science* (10:6), pp. 758-776.

Griffith, Sawyer, and Neale, 2003. "Virtualness and Knowledge in Teams: Managing the Love Triangle of Organizations, Individuals, and Information Technology," *MIS Quarterly*, 27:2, p. 265-287.

11 Open Source Software Research (11/12/03)

TBA

12 TBA (11/19/03)

TBA

13 Exam (11/26/03)

No reading.

14 Student paper presentations (12/3/03)

Student Papers

Daft, "Why I recommend that your manuscript be rejected and what you can do about it," in Cummings and Frost (eds) *Publishing in the Organizational Sciences*, pp. 210-219.

15 Future Research, Course Wrap-up (12/10/03)

Daft, 1984. "Antecedents of Significant and Not-So-Significant Organizational Research"

Benbasat, I., and Weber, R., 1996. "Rethinking "Diversity" in Information Systems Research", *Information Systems Research* (7:4), 389-399.

Robey, D., 1996. "Diversity in Information Systems Research: Threat, Promise, and Responsibility", *Information Systems Research* (7:4), 400-408.

Lee, A. S. 2001. "Research in Information Systems: What we haven't learned," *MIS Quarterly*, 25, 4, v-xv.

OPTIONAL:

Gray & Drew's list of tips for an academic career

BMGT 808i ASSIGNMENT #1: BUILD A CAUSAL MODEL

Build a causal model representing some aspect of the core elements or forces associated with the phenomenon that is serving as the basis for your research paper.

This report should be between 6 and 8 pages in length, including diagrams, tables, etc. In the report you should:

- Define all entities and constructs
- Describe the nature of relationships among the system entities
- Provide diagrams of these relationships
- Be sensitive to the trade-off between simplicity and completeness

The structure of this report should be as follows:

- Introduction
 - statement of the aspect of your phenomenon to be modeled
 - explanation as to why this is a significant topic
 - a 'road map' of the remainder of the paper
- Model
 - definitions of elements
 - discussion of relationships
 - diagram
- Conclusion
 - summary of key issues raised in the paper
 - statement of key idea(s) you wish readers to take away after reading this essay
- References

BMGT 808i ASSIGNMENT #3: PREPARE A RESEARCH PROPOSAL

The research proposal involves choosing a research question, summarizing the literature pertaining to that question, noting the gaps in the literature that will be addressed in your proposed study, proposing hypotheses, describing methods for testing those hypotheses, outlining procedures for analyzing the data, and discussing possible findings and implications. The research proposal thus resembles an empirical paper published in one of the major journals (e.g., ISR, MISQ) without the data.

You must get approval from the instructor for your topic. Prepare a brief (1 page or less) description of your topic and submit it no later than 10/15/03.

The completed paper can be no more than 25 double-spaced pages, including figures and tables, but not including the title page, abstract, or reference list. The structure of the paper should be as follows:

- Title page and abstract
- Introduction – state the research question and why it is important. Tell the reader how you will study it. Provide a roadmap for the rest of the paper.
- Theory development
 - Literature review focusing on what has already been done regarding your topic and what gap(s) this study will fill.
 - Present your hypotheses and describe the rationale behind your predictions. Present the causal model.
- Methods - Description of proposed test of the model. What data will be required and how will it be obtained? How will the data be analyzed?
- Discussion – Consider the possible findings and discuss their implications. What will it mean if the hypotheses are not supported? Note any methodological weakness and limitations. Consider future research directions. Provide a brief summary and conclusion.
- References – provide full references for all citations used in the paper. Follow the format used in ISR.