MIS 381N.2 Research in Information Systems: Organizational and Behavioral Perspectives

Spring 2012

Instructor
Professor Sirkka L. Jarvenpaa
Dept. of Information, Risk, and Operations Management (IROM)

Class Times and Location
Thursdays 12:00 p.m. – 3:00 p.m., GSB 5.154

Office
CBA 6.480

Office Hours
By appointment

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Teaching Assistant
Rachel Lim (esther.rachy@gmail.com)

Course Overview

The new generation of information and communication technologies including social media and mobile devices has led to new forms of virtual work and digitization in business processes, products and services, to new avenues of intellectual and social capital creation, to new organizational, network, and community structures, to a new cadre of business models and competitive platforms, and raised a variety of other behavioral, social, and economic challenges.

This course is designed to provide doctoral students across different disciplines a broad introduction to key management, organizational, and behavioral research issues, theoretical perspectives, and challenges in contemporary topics of virtual environments, digitization, digital systems, and information technology (IT). The course is designed for both information systems (IS) and non-IS Ph.D. students (e.g., fields of business, information science, communications, computer science, social work, education, psychology). The course is appropriate for newly entered as well as advanced doctoral students. The course requirements will be tailored to fit the students’ needs depending on the stage of their doctoral program.

In this course, the students learn to:

- appreciate the breadth, diversity, and significance of the phenomena related to research in information systems
- understand the key theories and classic writings used in behavioral and organizational information systems research
- enhance their ability to theorize about IT related phenomena to their own various research themes
- understand the strengths and weaknesses of the commonly used research methodologies in information systems
- plan a research project dealing with IT enabled and impacted contemporary societal, business, organizational, and behavioral phenomenon of their choice
- be well versed in the process of publishing IT related research in IS and non-IS journals

The course covers topic areas such as adoption of digital media and systems, IT-mediated communication and collaboration, social networks and IT, corporate strategy and IT, business value of IT, knowledge management and organizational learning, organizational change and IT, and IT-supported market, community, and interorganizational relationships, and open innovation. We examine topics at varying levels of analysis (societal, market, organization, group, individual).
We will achieve the course objectives through the following means

- Final research paper: Outline (using matrix) due at week of 8; 6 pages write-up (+ revised outline) due at week 12; 12-15 pg. write-up (with revised outline) due at final exam time
- Short homework assignments in developing theory building skills and getting started on your final research paper.
- Leading one discussion in first half and one discussion in second half. Discussion should identify 5 questions that should be discussed based on an analysis of the multiple articles
- Reading the required readings for each session, complete matrix columns for two of the required articles, and be prepared to share your thoughts on all required articles, as well as your thoughts on a novel hypothesis and future directions. Completing a Matrix for the required articles; turning it at WEEK 4, 7, 14
- For each week, read one additional article beyond the required readings from the partial list provided. Be prepared to show your thoughts on that article as it pertains to the topic. You may choose to prepare a matrix on your chosen article for distribution to the class (you can upload to Blackboard or bring a matrix to class). You may choose to show how the article conflicts with or embellishes upon, or provides an alternative way of thinking from the assigned required articles.
- We have guest speakers for some the sessions. Please sure to read (minimum to skim) their papers for the particular session and prepare two questions in advance. We have underlined these papers if they are not part of required reading.
- Being prepared in class to discuss your progress toward your final research paper EACH WEEK

Readings

All the required readings can be retrieved from the Blackboard.


Grading

The final letter grade for this course will be based on the following:
Class participation: 30%
Homework: 30%
Discussion leader: 10%
Final paper: 30%

Discussion of Assigned Readings (all assigned readings will be posted on Blackboard)

CLASS PARTICIPATION (30%)

Students will be graded based on their contribution to the discussion of the readings. All students are expected to be ready to discuss ALL required articles on the assigned day. They are also expected to be able to discuss one additional article of their choice. The class discussion grade will be based on the relative contribution of each student to the class as a whole. In determining the class discussion grade we will consider the following: comprehension of the assigned readings, the ability to integrate material from a diverse set of readings, the ability to develop new ideas based on the readings, the ability to provide real-world examples to support or refute the readings, and the ability to ask and/or answer relevant questions.

Some days we will discuss research papers or articles in a debate format. For each article a student will be assigned to be an “advocate” of the paper/topic and another student will be assigned to be a “critic.” In class, each side will make a short presentation outlining the view of the paper/topic, followed by a brief period in which rebuttals can be made. A general debate will then ensue, in which other members of the class can ask questions of either side, or bring up other issues.
STUDENTS ACTING AS DISCUSSION LEADERS (10%)

Each student will take on a role of a discussion leader twice during the semester. This entails coming up with thought provoking discussion questions and leading the discussion for 40-50 minutes. The discussion should integrate the insights from different readings and place them in the context of research in the field. Discussion questions should help integrate across the readings, not discuss them one by one. The discussion leader needs to submit discussion questions a night before the class.

HOMEWORK

Homework comprises of two types:

Short homework exercises: Early in the semester, there will be short homework assignments on (1) formulating a research question, (2) developing a research model, (3) developing hypotheses. These assignments build theory building skills and will help you to begin to formulate the core components of the research paper.

Matrix: For each week when requested in the syllabus, come to class prepared with your matrix for required readings. Also consider using the matrix for an additional read (maybe upload to Blackboard and/or bring matrix to class).

The matrix consists of the following columns: a) practical problem addressed by the article, b) theoretical motivation for the article, c) research questions, d) theory logic, e) causal model and hypotheses for the article, f) research design, g) findings, h) plausible alternative interpretations of the findings, i) theoretical contribution, j) what I learned re research design that I might reuse, k) What I learned re theory that I might reuse, l) key refs I should pursue, m) an interesting new hypothesis and interesting & opportunities for future research.

Final Research Paper

On May 10 (5 p.m. or before), students will submit a final research paper. PLEASE SEND VIA EMAIL as an attachment.

The research paper should include the following at minimum: research question, motivation, the relevant literature review (not limited to the literature that is covered in the course), theoretical underpinnings, hypotheses, research method, potential alternative results/findings; develop at least three different scenarios of results/findings, limitations, and contributions to theory and practice.

To ensure that everyone is making good progress in selecting a topic for their research proposal, an outline is due before Spring Break. A partial draft of the paper is due on Week 12 along with an updated outline. The Final paper is due on the scheduled final exam day. There is no final exam in this course.

Key Due Dates

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<thead>
<tr>
<th>Session</th>
<th>Date</th>
<th>Due</th>
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<tr>
<td>S1</td>
<td>Jan 19</td>
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<td>S2</td>
<td>Jan 26</td>
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<td>S3</td>
<td>Feb 2</td>
<td>Short homework assignment 1/ MATRIX DUE</td>
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<td>S4</td>
<td>Feb 9</td>
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<td>S5</td>
<td>Feb 16</td>
<td>Short homework assignment 2</td>
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<td>S6</td>
<td>Feb 23</td>
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<td>S7</td>
<td>Mar 1</td>
<td>Short homework assignment 3</td>
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<td>S8</td>
<td>Mar 8</td>
<td>Outline for Research Paper/ MATRIX DUE</td>
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<td>Spring break</td>
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<td>S9</td>
<td>Mar 22</td>
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<td>S10</td>
<td>Mar 29</td>
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<td>S11</td>
<td>Apr 5</td>
<td>MATRIX DUE</td>
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<tr>
<td>S12</td>
<td>Apr 12</td>
<td>Draft of final research paper</td>
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<td>S13</td>
<td>Apr 19</td>
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<td>S14</td>
<td>Apr 26</td>
<td>MATRIX DUE</td>
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<td>S15</td>
<td>May 3</td>
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<td>May 10: Final research proposal</td>
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CHECKLIST BEFORE COMING TO CLASS
- Read required readings
- Fill matrix for two of the required readings (for some sessions, fill matrix for one article only)
- Thoughts learned from the additional read (use matrix to structure your thoughts)
- If you are leading discussion, send discussion questions to instructor a night before
- Be prepared to share progress on your final paper with class

Course Schedule and Readings

**Session 1: Jan 19  Introduction to the field of Information Systems**

Required Readings:  


*Learning Objective:* What is the field of information systems? What is it not? What is the difference between “IS” and “IT”? Why did Orlikowski and Iacono write the article on the IT Artifact? Is the message of the article still relevant? Why or why not? How do you expect the rich ubiquitous virtual environments to change the field of information systems?

**Session 2: Jan 26  Basics in Theory Building**

Assignment:  
**Fill out Matrix for ONE ARTICLE: Wasko and Faraj (2005)**

Required Readings:  


**Learning objective:** What is a theory? What is a theoretical contribution? Evaluate the relative theoretical contribution of (1) Wasko and Faraj; and (2) Olivera et al. Which paper provides a stronger theoretical contribution? Why?

### Session 3: Feb 2

**Online Communities**

**WHO WILL LEAD?**

Assignment: **Short Assignment 1 Due**

**Fill out Matrix for TWO of the required readings (You can decide which two)**

**MATRIX DUE (Session 2,3)**

Required Readings:


**Partial List of Articles to Select From for Additional Reading**


**Guest Professor (2-2:50p.m.): Professor Bin Gu, UT-Austin**

**Learning Objectives:** What have been the key IS research questions on online communities? What are the main theories that have been used to explain participation and behavior in online communities? What have been the theoretical strengths in this research to date? What have been the theoretical weaknesses in this research to date? Describe a hypothesis that could be used to overcome the weakness you identify.

**Session 4: Feb 9 Beyond Technology Acceptance Models**

**WHO WILL LEAD?**

Assignment: Fill out Matrix for TWO of the required readings (You can decide which two)


Partial List of Articles to Select From for Additional Reading


**Guest Professor (12:30-1:30 p.m.): Professor Suzanne Rivard, HEC Montreal (Senior Editor of MISQ)**

Learning Objective: What explains the popularity of TAM in IS research? What are the key limitations of TAM? What alternative theories could be used to explain adoption that overcomes these limitations? What new opportunities/challenges do new social network and rich interactive media environments present to adoption research? Formulate a hypothesis that would advance adoption/acceptance research in information systems?

Session 5: Feb 16

PART 1. Empirical Research Methodologies I

PART 2. Research on Social Networks in Information Systems

Assignment: Short Assignment 2 Due

Fill Matrix for one article: Ransbotham and Kane (2011)

PART 1. Empirical Research Methodologies I

Required Readings: Quantitative, Positivist Research Methods in Information Systems:

http://dstraub.cis.gsu.edu:88/quant/


SKIM: Application for Approval of a Research Project Involving Human Subjects


Learning objective: what did you learn from the above readings that will help to improve the design of your research study?

PART 2. Research on Social Networks in Information Systems


Partial List of Articles to Select From for Additional Reading
Select one of the articles reviewed in Oinas-Kukkonen et al. or one of the following:


**Guest Professor (2-2:50p.m.): Professor Gerald (Jerry) Kane, Boston College**

*Learning objective:* What new has the social network perspective brought to the information systems research theoretically and practically? What are the weaknesses in the social network research in information systems? How would the articles discussed so far been able to leverage the social network perspective? Discuss at least one article?

**Session 6: Feb 23**

**Ubiquitous computer-based communications and Multitasking**

**WHO WILL LEAD?**

**Assignment:** Fill out Matrix for TWO of the required readings (You can choose which two)

**Required Readings:**


**Partial List of Articles to Select From for Additional Reading**


Guest Professor (2-2:50p.m.): Professor Keri Stephens, UT-Austin

| Learning Objectives: Explain what is a media richness theory – how has it been used and abused? What are its strengths and limitations? What are the alternative theories that can be used to explain how people communicate in rich and ubiquitous electronically mediated environments? Propose a new research question and one new hypothesis? |

Session 7: Mar 1  
PART 1. Sociomateriality  
PART 2. Qualitative Research Methodologies  
Assignment: Fill Matrix for one required Sociomateriality article (your choice which one)  
Short Assignment 3 Due  

PART 1. Sociomateriality  
Required Readings:  

SELECT ONE ARTICLE FROM THIS LIST:  


**Guest Professor (12-12:50p.m.): Professor Lynne Markus, Bentley College**

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<th>Learning Objectives:</th>
<th>You are assigned to one of the two teams on sociomateriality: PRO vs. CON.</th>
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As part of the PRO team, you will take an advocate position for this perspective. What are the specific predications from information systems research from sociomateriality.

As part of the CON team, you take a critical position for this perspective by pointing out the weaknesses and arguing why this perspective can be easily misinterpreted. Develop 3 to 4 separate well-crafted arguments that reflect your position.

**PART 2. Qualitative Research Methodologies**

**Required Readings:**
Myers, M., “Qualitative Research in Information Systems,” IS World: http://www.qual.auckland.ac.nz/

**Partial List of Articles to Select From for Additional Reading**


- Pratt, M. “For the lack of a boilerplate: Tips on writing up (and reviewing) qualitative research,” *Academy of Management Journal*, 2009, 52, 856-862.


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<thead>
<tr>
<th>Learning Objectives:</th>
<th>what did you learn from the above readings that will help to improve the design of your research study?</th>
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**Session 8: Mar 8**

**ETHICS AND BEHAVIORALS NORMS/WORK ON RESEARCH PAPERS**

**Announcement:** NO CLASS MEETING

**Assignment:** Outline for Research Paper

**MATRIX DUE (Session 4, 5, 6, 7)**


http://deanofstudents.utexas.edu/sjs/scholdis_plagiarism.php

http://www.lib.utexas.edu/services/instruction/learningmodules/plagiarism/


**SPRING BREAK [MAR 12 - 18]**

**Session 9: Mar 22** Organizational Forms, Competitiveness Theories, and Information Technology

**WHO WILL LEAD?**

Assignment: Fill out Matrix for TWO of the required readings (You can decide which two)


Partial List of Articles to Select From for Additional Reading


**Guest Professor (12:45-1:30p.m.): Professor Ashish Agarwal, UT-Austin**

**Learning Objectives:** What is the role of IT in this research and how is it different than other research read in this class? What are the key research questions in this theme? What are the key claims that information technology changes the way organizations organize and structure? What are the key theories on which the claims are based on? What are the limitations in this line of research? What is the next step of research that should be studied on this topic?

**Session 10: Mar 29  Resource-based View and IT**

**WHO WILL LEAD?**

**Assignment:** Fill out Matrix for TWO of the required readings (You can decide which two)

**Required Readings:**


**Partial List of Articles to Select From for Additional Reading**


**Learning Objectives:** What is the relevance of resource-based theory to IS research? What are the theoretical mechanisms underlying IT and firm performance in the studies? How can practitioners use these findings for their organization’s benefits? How do you decide on the level of analysis if doing research on this topic? What is the research question that should be studied on this topic?

**Session 11: Apr 5  Design Science Research in Information Systems**

**WHO WILL LEAD?**

**Assignment:** Fill out Matrix for ONE of the required readings. Fill it for Markus, Majchrzak, Gasser. Please read all the required readings

**MATRIX DUE (Session 9, 10, 11)**


**Partial List of Articles to Select From for Additional Reading**


Guest Professor (12:00 - 1:00 p.m.): Richard Baskerville, Georgia State University (Jan Pries-Heje will likely join as well)

Learning Objectives: How should design science be evaluated? When does design science become engineering and is no longer “IS”? Does it matter? What are the key research questions in this topic? Identify at least 2 future research questions that should be addressed.

Session 12: Apr 12 Virtual Teams and Collaboration

WHO WILL LEAD?

Assignment: Fill out Matrix for TWO of the required readings (You can decide which two)

PARTIAL DRAFT OF A FINAL RESEARCH PAPER


Partial List of Articles to Select From for Additional Reading


**Guest Professor (12:15-1:00 p.m.): Professor Jonathon Cummings, Duke University**

| Learning Objectives: |  |
|----------------------|  |
| What are the key questions in this topic? What are the theories that explain how virtual teams work differently than collocated team? What makes this research information systems-based research and not just organizational behavior? Does it matter? What other theories you suggest could be suggested? Propose a new novel research question? |

**Session 13: Apr 19 Knowledge Management**

**WHO WILL LEAD?**

**Assignment:** Fill out Matrix for TWO of the required readings (You can decide which two)

**Required Readings:**


**Partial List of Articles to Select From for Additional Reading**


**Guest Professor (2:50 -2:50 pm): Professor Huseyin Tanriverdi, The University of Texas at Austin**

| Learning Objectives: What are the main theoretical perspectives that have been brought to bear to understand KMS and knowledge in information rich environments? What are the main findings in the field? What issues remain underexplored? Formulate an hypothesis on this underexplored issue. |

**Session 14: Apr 26 IT-enabled Innovation**

**WHO WILL LEAD?**

**Assignment:** Fill out Matrix for TWO of the required readings (You can decide which two)

**MATRIX DUE (Session 12, 13, 14)**


**Partial List of Articles to Select From for Additional Reading**


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**Learning Objectives:** How are theories of IT for creativity and innovation different from theories of IT for knowledge coordination and IT for firm performance? Are there theories from other reference disciplines that could be considered? What would these other theories provide that existing theories don’t provide? Formulate a hypothesis that addresses this underserved issue.

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**Session 15: May 3Wrap-Up and Presentations**

15 Minute Presentations on Your Research Study

**Required Readings:***


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May 10 (Thursday): RESEARCH PAPERS ARE DUE ON DAY OF FINAL