Information Technologies, Individuals and Organizations¹

PhD Seminar
Course #9832A
Fall 2021

Professor
Yasser Rahrovani
Office
Ivey 2309; (ext.: 84280)
Email
yrahrovani@ivey.ca

Course schedule
Wednesday: 9:00-12:00
Room
Ivey School of Business

Overview
This seminar is intended to generate an understanding of the topics related to the organizational and individual impacts of Information technologies (IT) in four sections: (1) Ontological, epistemological, and theoretical perspectives in IS research, (2) the impacts of IT on organizations (i.e., IT and organizational performance, intermediate variables, communication), (3) role of IT in innovation and disruption (i.e., disruptive innovation, digital innovation, digital platforms, and digital transformation), (4) impacts of IT on individuals and the work (IT and post-implementation adaptation and creative performance).

Objectives
• Get familiar with the literature in the area of IT impact
• Critically assess different IS research papers
• Develop a roadmap for an IS research
• Get a sense of the elements of a top journal IS research

Evaluation
Contributions to class discussions 20%
Session lead (choose a class from Session 4 to 12) 10%
Five reflection papers (choose from Session 3 to 12) 30%
Final paper 40%
• Extended abstract (5%)
• Completed research paper (30%)
• Paper presentation (5%)

¹ The course syllabus borrows partially from that of Prof. Alain Pinsonneault, McGill University, who has kindly shared his syllabus with me.
If a student is absent for a class, s/he should send the instructor a summary of each paper and also a reflection paper (discussed belw) on the entire papers of that session. More than 3 absences (4 and above) would lead failing the course.

**Pedagogical approach**

Students are required to participate in class discussions actively and to contribute by presenting their thoughts on different topics. As such, they are required to comprehend the content of each paper fully. This means that carefully reading all papers for each class and establishing links across papers is a must. Professor Lee Sproull and Professor Natalia Levina have an excellent short paragraph about how to read a **behavioural research paper** and what type of questions to ask yourself. We will use their guideline as a blueprint for many of the sessions.

**Contribution in class**

Students are expected to engage in class discussions within and across articles. First, we will go through several of the following questions for each empirical paper. Therefore, students need to make sure that have thought about the following questions for each paper before coming to class:

- **Introduction**: What is the structure of the introduction? What is the framing? What is the research question? Why is it important?
- **Literature review**: What is missed in the past literature (gaps)? Is the gap an important one? What is their literature review method? What is concluded from the literature review? How did the authors problematize past research?
- **Conceptual (or theoretical) foundation (or lens or background)**: If borrowed a theory, what is the justification? Is it an IS or a non-IS theory? What are the constructs? What are the conceptualizations and operationalizations of the constructs?
- **Hypothesis**: are they interesting? Are they important? Is there sound logic to support them?
- **Method**: Is the method choice fit the research question? Is it justified? Can you suggest any other method? If yes, would you change the research question?
- **Analysis and Results**: Do they make sense? Is there a conceptual jump? Have the authors presented the analysis details transparently? Is the result tightly coupled with the data collected and analyzed? How did they present the result?
- **Discussion and implication**: what is the structure of the discussion section? How did the authors connect their findings to the extant literature? What is consistent with the past literature? What is different? To what extent are they generalizing their theory? How many contributions do they emphasize in the discussion section?

Second, and after going through each paper, students are expected integrate insights across all articles by synthesizing the main concepts and findings across the assigned articles and identifying contradictions or opportunities for further developments.

**Reflection papers**

Students are expected to choose 5 Sessions from Session 4 to 12 and write a **reflection paper** on assigned readings (maximum 2-pages single space, font-size 12). Reflection papers evaluate and integrate the core concepts across papers assigned in a week and propose avenues for future research in that domain. It is not a summary of the papers, as we have all read the papers. Reflection papers are written concept-centric, not
author-centric. They aim to critically and constructively analyze the assigned papers, for example, by exploring an issue or concept in greater depth, raising further "interesting" and "important" theoretical or empirical questions in the domain, comparing and contrasting approaches or findings across the readings, providing possible explanations for inconsistent findings, etc. Students should submit reaction papers on LEARN.

To write the reflection paper, students need to reflect on the entire reading list, integrate the concepts across papers, provide a thoughtful evaluation of the material read, raise a theoretical or empirical question (by comparing and contrasting conceptualizations, methodologies, approaches or findings across the readings), and finally propose an idea to fill that important gap identified in the framing.

Reflection papers back up their line of reasoning, and more importantly, come up with suggestions. For instance, if you think the conceptualizations are overlapping or confusing in the reading list, provide your justifications, offer your alternative conceptualization, and explain how yours is better in addressing the issues raised. Thus, a reflection paper does not only criticize, but constructively makes suggestions for improvement. Here are some examples, which you may include one or eliminate some parts. It is simply a hypothetical scenario. The following is one among several ways that one can choose to write a reflection paper.

i. Papers A and B looked at the process of the phenomenon X; the other three looked at the antecedents of X (may not include all papers in framing)
ii. All these papers share the assumption of that there is a positive relationship between X and Y
iii. However, I propose a negative relationship between X and Y in the C context for two reasons: Reason A; Reason B
iv. Ignoring the possibility of the negative relationship between X and Y in the C context can have negative consequences: effect 1, effect 2
v. Proposing a model of the phenomenon X in the C context (e.g., its mechanisms and how are they different from the mechanisms discussed in the reading list)

When writing a reflection paper, assume that everyone has read the papers, knows their methods and results of the reading list (i.e., no summary). Feel free to map them schematically, which is always helpful (not be counted in the word count).

Reflection papers need to be submitted to the professor no later than 12pm on Tuesday, and will not be marked if submitted after the deadline.

Final paper: a research proposal
Students need to write and submit a ten-page research proposal (times new roman, single-space, 12 font size, references excluded) on a topic related to the course content. The topic needs to be discussed with the professor for approval no later than Session 7. You need to send me an extended abstract (description of an IS topic, an interesting and important research gap, and potential contribution) 48 hours before the start of session 7. After approval, the deadline for the first draft of the paper is anytime before Session 12. The papers will be presented on Session 13 to receive feedback from peers as well as the professor. The final paper is due December 25th. After the course, the paper is supposed to be submitted to one of the known Management or IS conferences, particularly ICIS (deadline in May), AMCIS (deadline in March), AoM (deadline in Jan), or ECIS (deadline in Nov).
The final paper chooses a domain within IS research and formulates an interesting and important research question. The paper needs a concept-centric literature review section that summarizes past research, problematizes it, and connects the research question to the problematization. Before developing a research model and hypotheses, the paper needs to lay down the conceptual foundation necessary for hypothesis development either from IS research or other disciplines. After deductively developing hypotheses based on the past literature and creative theorization with sound logic, the paper presents a short method section with possible data collection venues to address research questions. Finally, the paper should discuss the potential implications of the research.

**Plagiarism and Academic Integrity**
Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at [grad.uwo.ca/administration/regulations/13.html](http://grad.uwo.ca/administration/regulations/13.html).

All required papers may be subject to submission for textual similarity review to the commercial plagiarism-detection software under license to the University for the detection of plagiarism. All papers submitted for such checking will be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system. Use of the service is subject to the licensing agreement, currently between The University of Western Ontario and Turnitin.com ([http://www.turnitin.com](http://www.turnitin.com)).

**Health and Wellness**
Students who are in emotional/mental distress should refer to Health and Wellness at Western University [https://www.uwo.ca/health/psych/index.html](https://www.uwo.ca/health/psych/index.html) for a complete list of options about how to obtain help. Additionally, students seeking help regarding mental health concerns are advised to speak to someone they feel comfortable confiding in, such as their faculty supervisor, their program director (graduate chair), program coordinator or other relevant administrators in their unit.

As part of a successful graduate student experience at Western, we encourage students to make their health and wellness a priority. Western provides several on campus health-related services to help you achieve optimum health and engage in healthy living while pursuing your graduate degree. See [https://www.uwo.ca/health](https://www.uwo.ca/health).

**Accessible Education Western (AEW)**
Western is committed to achieving barrier-free accessibility for all its members, including graduate students. As part of this commitment, Western provides a variety of services devoted to promoting, advocating, and accommodating persons with disabilities in their respective graduate program.

Graduate students with disabilities (for example, chronic illnesses, mental health conditions, mobility impairments) are strongly encouraged to register with Accessible Education Western (AEW), a confidential service designed to support graduate and undergraduate students through their academic program. With the appropriate documentation, the student will work with both AEW and their graduate programs (normally their Graduate Chair and/or Course instructor) to ensure that appropriate academic accommodations to program requirements are arranged. These accommodations include individual counselling, alternative formatted literature, accessible campus transportation, learning strategy instruction, writing exams and assistive technology instruction.
A final welcome and request of students
I equally welcome individuals of all visible and nonvisible differences. I consider this classroom to be a place where you will be treated with respect. All members of this class are expected to contribute to a respectful, welcoming and inclusive environment for every other member of the class.
Ontological, Epistemological, and Theoretical Perspectives

Session 1: Theory and IS Research


Further useful links
- How to theorize: http://www.analytictech.com/mb313/howto.htm
- Theories used in IS research: https://is.theorizeit.org/wiki/Main_Page
- Construct measures: https://inn.theorizeit.org/

Further readings:

Session 2: Epistemological Foundations of IT Research


Further reading


Further reading on IT Features, Affordances, and Spirit


The Impacts of IT on Organizations

Session 3: IT and Organizational Performance


Further reading


Session 4: IT and Intermediate Performance Measures

Agility, Alignment, Capabilities

Innovation

Further reading


Session 5: IT and Organizational Communication


Further reading


IT, Control, and Governance
Session 6: IS control


Further readings


Session 7: Digital platform governance

Further readings


**IT, Innovation, and Disruption**

**Session 8: Technology and Disruptive Innovation**


Further reading

Session 9: Digital innovation


Further readings


IT, Individuals and Work
Session 10: IT, Post-Implementation Adaptation


Further reading


Session 11: IT, Innovation, and Creative Performance


Further reading

Digital Transformation

Session 12: Digital transformation


Further readings


**Session 13: Synthesis and presentations**