Management of information Systems

ECTS : 3

Description du contenu de l'enseignement :

An Information Systems (IS) represents a strategic but often overlooked organizational asset. Moreover, IS often lie at the basis of a large spectrum of phenomena that affect organizations' performance and survival. They are also a core resources for business and organizational transformation.

Given IS omniscience in organizational life, a specific scholarship area has been developing on the Management of Information Systems (MIS). However, this discipline remains poorly misunderstood in its diversity.

This course aims at presenting the major IS phenomena that impact organizations. It also targets the understanding from students of the diversity of theoretical lenses that can help organizations better manage their IS.

The course is structured around 4 major (but non extensive) controversies that have been attracting IS scholars' attention so far. In addition, the course trains on basic methods that help mapping and question IS theory in professional practice.

The course targets two main pedagogical objectives:

1. Understand the basic notions, theories and controversies in Information Systems (IS) as an academic field
    1. Map the main theories, topics and concepts, as well as the boundaries of the discipline;
    2. Establish a glossary of the notions that relate to IS;
    3. Explore methodological diversity in the IS field;
2. Evaluate and discuss the relevance or applicability of IS theories;
    1. Check theoretical advances from the IS literature on a regular basis;
    2. Articulate the theory with empirical reality throughout a "reality check" project;

Compétence à acquérir :

After the course the students will be capable of:

- confronting theory to empirical reality by relying on a specific example;

- mapping major theories from the IS field and evaluate their relevance to professional practice;

- using tools and techniques to map concepts and theories to better evaluate how theory can help practice.

Mode de contrôle des connaissances :

Through the course, each student will work on a reality check project that will focus on a specific theory/concept and a specific case.

Reality check consists of critically confronting a theoretical content with empirical reality. It aims at highlighting the insights provided by a theory, as well as its shortcomings and challenges. It can also help refine the theory.

Practically, this means the student should identify a controversy presented and detailed into the course. The student can focus on a specific theory or concept that was documented and find a way to present the theory to an IS professional or stakeholder (could be a user, manager, IS designer, technician, etc..). The student should argue one's choice (in particular the empirical reality considered). In the same vein, the students have to argue their rationale for interviewing a specific person (working in specific settings). Before interviewing, the student can already draft the limitations of the theory or concept (and review the major sources of criticism against it). For instance, the student can find the theory can be relatively generic and choose to challenge its applicability to a specific setting. When interviewing, the student needs to represent the theory in some way to the professional and ask questions to check whether the reality aligns with the predictions' that can be induced from the model.

The controversies presented in the course can help the students identify a limitation or ongoing discussion about a specific theory. In addition, the students can also rely on the papers to read before the course to identify some ongoing criticism against IS theory in general (or against a specific theory).

The final report from this experience should take into consideration the feedback provided from the class, including: i) peergrade feedback at every step of the elaboration of the project, ii) feedback during the last course session; focused on

exploratory discussion of the outputs from the interview.

Bibliographie, lectures recommandées :

Samek, M. J. 1986. “Integrating Systems into the Organization,” *Information & Management* (11:1), pp. 9-12.

Ciborra, C., and Hanseth, O. 1998. “From Tool to Gestell: Agendas for Managing Information Infrastructure,” *Information, Technology & People* (11:4), pp. 305-327.

Jeyaraj, A., and Zadeh, A. H. 2020. “Evolution of Information Systems Research: Insights from Topic Modeling,” *Information & Management* (57:4), p. 103207.