

**City University of Hong Kong
Course Syllabus**

**offered by Department of Information Systems
with effect from Semester A 2022 / 2023**

Part I Course Overview

Course Title: Theory Development and Qualitative Methods in Information Systems Research

Course Code: IS8014

Course Duration: One semester (13 weeks)

Credit Units: 3

Level: R8

Medium of Instruction: English

Medium of Assessment: English

Prerequisites:
(Course Code and Title) IS8002 Foundations of Information Systems Research

Precursors:
(Course Code and Title) Nil

Equivalent Courses:
(Course Code and Title) Nil

Exclusive Courses:
(Course Code and Title) Nil

Part II Course Details

1. Abstract

This course has two components: theory development and qualitative research methods. PhD students will first be equipped with the necessary foundations and skills to engage in both deductive and inductive theory building. Deductive theory building involves drawing on the relevant literature to identify opportunities for new theory. Inductive theory building involves drawing on data/phenomena, often informed by the literature, to identify opportunities for new theory. Theory building incorporates several stages, notably: identifying a theoretical space and focus; searching for appropriate literature; defining concepts; theorizing relationships between concepts; formalising concepts as constructs with proposals; testing the proposed theoretical relationships empirically. Second, students will acquire the appropriate skills to identify opportunities where they can apply qualitative research methods such as case studies and action research. The contribution of qualitative data to inductive theory building, for instance following the principles of data coding and grounded theory, will also be considered.

2. Course Intended Learning Outcomes (CILOs)

No.	CILOs	Weighting	Discovery-enriched curriculum related learning outcomes (please tick where appropriate)		
			A1	A2	A3
1.	Develop a strong sense of intellectual curiosity, challenge assumptions and positions, and engage in a shared process of enquiry.		✓		
2.	Develop critical thinking skills associated with knowledge creation that can be applied to real-world problem solving.			✓	
3.	Develop the ability to reflect on their own discovery and innovation process.				✓
4	Understand the challenges and strategies associated with theorizing and building a new theory.		✓		
5	Appreciate the relative merits of deductive and inductive approaches to theory building.		✓		
6	Apply appropriate qualitative methodologies to solve behavioural IS research problems			✓	
7	Propose the foundations of a new theory (inductive or deductive) with a holistic description of the entire theory development process, including how the same theory should be validated.			✓	✓
8	Develop a research proposal in which a qualitative research method is applied to a specific problem situation, paying due regard to theoretical considerations.			✓	✓

A1: *Attitude*

Develop an attitude of discovery/innovation/creativity, as demonstrated by students possessing a strong sense of curiosity, asking questions actively, challenging assumptions or engaging in inquiry together with teachers.

A2: *Ability*

Develop the ability/skill needed to discover/innovate/create, as demonstrated by students possessing critical thinking skills to assess ideas, acquiring research skills, synthesizing knowledge across disciplines or applying academic knowledge to self-life problems.

A3: *Accomplishments*

Demonstrate accomplishment of discovery/innovation/creativity through producing /constructing creative works/new artefacts, effective solutions to real-life problems or new processes.

3. Teaching and Learning Activities (TLAs)

TLA		CILO No.								Hours/week(if app.)
		1	2	3	4	5	6	7	8	
TLA1: Seminar	<p>The following items form the content of the seminar:</p> <ol style="list-style-type: none"> 1. Introduction to and overview of the role of theory in IS research, including a focus on deductive and inductive theory building 2. Examination of the theorizing process, including the identification of a theoretical space, the use of literature, the development of concepts and their transformation into theoretical constructs, the formalization of theoretical proposals that link constructs, and the various techniques used for empirical theory validation. 3. Introduction to qualitative data, data collection and analytical techniques. 4. Introduction to research methods often associated with qualitative data, in particular case studies, ethnography and action research, and the application of these methods to specific research situations. 5. Detailed examination and critique of selected research papers from the perspective of theory and qualitative methodology. 	✓	✓	✓	✓	✓	✓	✓	✓	

4. Assessment Tasks/Activities (ATs)

Assessment Tasks/Activities	CILO No.								Weighting	Remarks
	1	2	3	4	5	6	7	8		
Continuous Assessment: 100%										
<p><u>AT1. In-class participation, including discussion:</u></p> <p>The seminar will be designed to include opportunities for students to explore and discuss a variety of issues associated with the development of theory and the application of qualitative IS research. Students will be expected to act like engaged researchers and scientists.</p>	✓	✓	✓	✓	✓	✓	✓	✓	30%	
<p><u>AT2.Critical Analysis:</u></p> <p>Each student is required to present a critical analysis of one theory paper and one qualitative research paper.</p>	✓	✓	✓	✓	✓	✓	✓	✓	30%	
<p><u>AT3.Research Proposal:</u></p> <p>Each student is required to develop two research proposals: one related to theory building and one to qualitative research.</p> <p>For (a), the student must develop a proposal for a new theory (drawing on deductive or inductive techniques) in order to demonstrate how theories are developed from different source materials and then validated, thereby contributing to knowledge.</p> <p>For (b) the student is required to develop a research proposal founded on a qualitative methodology in order to demonstrate their ability to solve research problems and thereby contribute to the discovery of new knowledge.</p>	✓	✓	✓	✓	✓	✓	✓	✓	40%	
									100%	

5. Assessment Rubrics

Applicable to students admitted in Semester A 2022/23 and thereafter

Assessment Task	Criterion	Excellent (A+, A, A-)	Good (B+, B)	Marginal (B-, C+, C)	Failure (F)
AT1. In-class participation, including discussion	Ability to explore and discuss different empirical and methodological issues associated with theory and qualitative IS research.	High	Significant	Moderate	Not even reaching marginal levels
AT2. Critical Analysis	Capability to critique research papers constructively and effectively.	High	Significant	Moderate	Not even reaching marginal levels
AT3 Research Proposal	Ability to propose (a) the development of a new theory that includes all the major stages of theory building and validation and (b) the design of a research investigation that is founded on a qualitative methodology.	High	Significant	Moderate	Not even reaching marginal levels

Applicable to students admitted before Semester A 2022/23

Assessment Task	Criterion	Excellent (A+, A, A-)	Good (B+, B, B-)	Fair (C+, C, C-)	Marginal (D)	Failure (F)
AT1. In-class participation, including discussion	Ability to explore and discuss different empirical and methodological issues associated with theory and qualitative IS research.	High	Significant	Moderate	Marginal	Not even reaching marginal levels
AT2. Critical Analysis	Capability to critique research papers constructively and effectively.	High	Significant	Moderate	Marginal	Not even reaching marginal levels
AT3 Research Proposal	Ability to propose (a) the development of a new theory that includes all the major stages of theory building and validation and (b) the design of a research investigation that is founded on a qualitative methodology.	High	Significant	Moderate	Marginal	Not even reaching marginal levels

Part III Other Information

1. Keyword Syllabus

- 1.1 Introduction to how to make a theoretical contribution in IS research; formulate a research problem from a theoretical perspective, including specifying research objectives/questions, and motivating their importance; draw on both the literature and practical contexts to identify an opportunity to develop a novel theoretical contribution; distinguish inductive and deductive approaches to theory building; recognise the importance of assumptions and context in theory; undertake the formulation of theoretical propositions and/or hypotheses; validate theories; understand the principles of theoretical critiques.
- 1.2 Introduction to qualitative IS research: types of qualitative data, collection and analysis of qualitative data; the value of qualitative methods for research; the nature and characteristics of qualitative IS research, with a focus on specific methods: case study, ethnography, action research; trends in current qualitative IS research; principles of excellence for qualitative research

2. Reading List

2.1 Compulsory Readings

Recent Issues of the AIS Basket of 8 Journals and equivalent journals in Management and Organization Studies

2.2 Additional Readings

General

- Barley, S.R. (2006) When I Write My Masterpiece: Thoughts On What Makes A Paper Interesting. *Academy of Management Journal*, 49, 1, 16-20
- Benbasat, I., & Zmud, R.W. (1999) Empirical Research In Information Systems: The Practice of Relevance. *MIS Quarterly*, 23, 1, 3-16.
- Chughtai, H. and Myers, M.D. (2017) Entering the field in qualitative field research: A rite of passage into a complex practice world, *Information Systems Journal* 27, 6, 795-817.
- Iivari, J., Hirschhem, R. and Heinz, K. (2001) A Dynamic Framework for Classifying Information Systems Development Methodologies and Approaches, *Journal of Management Information Systems*, 17, 3, 179-218.
- Klein, H.K. and Myers, M.D. (1999) A Set of Principles for Conducting and Evaluating Interpretive Field Studies in Information Systems, *MIS Quarterly*, 23, 1, 67-93.
- Lee, A. (1999) Strategizing for Compelling and Significant Research. *MIS Quarterly*, 23, 2, 145-145.
- Myers, M.D. (1997) Qualitative Research in Information Systems, *MIS Quarterly*, 21, 2, 241-242. *MISQ Discovery*, archival version, June 1997, http://www.misq.org/discovery/MISQD_isworld/. *MISQ Discovery*, updated version, last modified: May 13, 2010 www.qual.auckland.ac.nz
- Van De Ven, A.H. (2007) *Engaged Scholarship: A Guide for Organizational and Social Research*, Oxford University Press.
- Walsham, G. (1995) The Emergence of Interpretivism in IS Research, *Information Systems Research* 6, 4, 376-394
- Zmud, B. (1996). On rigor and relevancy. *MIS Quarterly*, 20(3), xxxvii-xi.

Theory

- Alavi, M., & Leidner, D.E. (2001) Review: Knowledge Management and Knowledge Management Systems: Conceptual Foundations and Research Issues. *MIS Quarterly* 25, 1, 107-136.
- Alvesson, M., & Kärreman, D.A.N. (2007) Constructing Mystery: Empirical Matters in Theory Development. *Academy of Management Review* 32, 4, 1265-1281.
- Bacharach, S.B. (1989) Organizational Theories: Some Criteria for Evaluation. *Academy of Management Review* 14, 4, 496-515.
- Berthon, P., Pitt, L., Ewing, M. and Carr, C.L. (2002) Potential Research Space in MIS: A Framework for Envisioning and Evaluating Research Replication, Extension and Generation. *Information Systems Research* 13, 4, 416-427.
- Burton-Jones, A., & Gallivan, M.J. (2007) Toward a Deeper Understanding of System Usage in Organizations: A Multilevel Perspective. *MIS Quarterly* 31, 4, 657-679.
- Colquitt, J.A. and Zapata-Phelan, C.P. (2007) Trends in Theory Building and Theory Testing: A Five-Decade Study of The Academy of Management Journal, *Academy of Management Journal* 50, 6, 1281-1303.
- Feldman, D.C. (2004) What are We Talking About When We Talk About Theory? *Journal of Management* 30, 565-567.
- Gersick, C.J.G. (1991) Revolutionary Change Theories: A Multilevel Exploration of the Punctuated Equilibrium Paradigm, *Academy of Management Review* 16, 1, 10-36.
- Gregor, S. (2006) The Nature of Theory in Information Systems, *MIS Quarterly* 30, 3, 611-642.
- Grover, V. and Lyytinen, K. (2015) New State of Play in Information Systems Research: The Push to the Edges, *MIS Quarterly* 39, 2, 271-296.
- Grover, V., Lyytinen, K., Srinivasan, A. and Tan, B.C.Y. (2008) Contributing to Rigorous and Forward Thinking Explanatory Theory, *Journal of the AIS* 9, 2, 40-47.
- Lee, A.S. and Baskerville, R.L. (2003) Generalizing Generalizability in Information Systems Research, *Information Systems Research* 14, 3, 221-243.
- Lee, A.S. and Baskerville, R.L. (2012) Conceptualizing Generalizability: New Contributions and a Reply, *MIS Quarterly* 36, 3, 749-761.
- Locke, E.A. (2007) The Case for Inductive Theory Building, *Journal of Management* 33, 6, 867-890.
- Mitchell, T.R., & James, L.R. (2001) Building Better Theory: Time and the Specification of When Things Happen, *Academy of Management Review* 26, 4, 530-547.
- Petter, S., Straub, D., & Rai, A. (2007) Specifying Formative Constructs in Information Systems Research, *MIS Quarterly* 31, 4, 623-656.
- Poole, M.S., & van de Ven, A.H. (1989) Using Paradox to Build Management and Organization Theories, *Academy of Management Review* 14, 4, 562-578.
- Rivard, S. (2014) The Ions of Theory Construction, *MIS Quarterly* 38, 2, iii-xiii.
- Romanelli, E. and M.L. Tushman. (1994) Organizational Transformation as Punctuated Equilibrium: An Empirical Test, *Academy of Management Journal* 37, 5, 1141-1666.
- Straub, D.W. (2012). Editor's Comments: Does MIS Have Native Theories? *MIS Quarterly* 36, 2, iii-xii.
- Straub, D.W. (2009) Editor's Comments: Why Top Journals Accept Your Paper. *MIS Quarterly* 33, 3, iii-x.
- Sutton, R.I., & Staw, B.M. (1995) What Theory is Not, *Administrative Science Quarterly* 40, 3, 371-384.

- Truex, D., Holmstrom, J. and Keil, M. (2006) Theorizing in Information Systems Research: A Reflexive Analysis of the Adaptation of Theory in Information Systems Research. *Journal of the AIS* 7, 12, 797-821.
- Van de Ven, A.H. and M.S. Poole (1995) Explaining Development and Change in Organizations, *Academy of Management Review* 20, 3, 510-540.
- Watson, R.T. (2001) Research in Information Systems: What We Haven't Learned - A Good Theory, *MIS Quarterly* 25, 4, vii-viii.
- Weber, R. (2003) Editor's Comments: Theoretically Speaking, *MIS Quarterly* 27, 3, iii-xii.
- Weber, R. (2003) Editor's Comments: The Problem of the Problem, *MIS Quarterly* 27, 1, iii-ix.
- Weber, R. (2003) Theoretically Speaking, *MIS Quarterly* 27, 3, iii-xii.
- Weber, R. (2012) Evaluating and Developing Theories in the Information Systems Discipline, *Journal of the AIS* 13, 1, 1-30.
- Webster, J. and Watson, R. (2002) Analyzing the Past to Prepare for the Future: Writing a Literature Review, *MIS Quarterly* 26, 2, xiii-xxiii.
- Weick, K.E. (1995) What Theory Is Not, Theorizing Is, *Administrative Science Quarterly* 40, 3, 385-390.
- Whetten, D.A. (1989) What Constitutes a Theoretical Contribution? *Academy of Management Review* 14, 4, 490-495.
- Zmud, R.W. (1998) Editor's Comments, *MIS Quarterly* 22, 2, xxix-xxxii.

Action Research

- Baskerville, R.L. (1999) Investigating Information Systems with Action Research, *Communications of the AIS*, 2, 19: online.
- Davison, R.M., Martinsons, M.G. and Kock, N. (2004) Principles of Canonical Action Research, *Information Systems Journal* 14, 1, 65-86.
- Davison, R.M., Martinsons, M.G., & Ou, C.X. (2012). The Roles of Theory in Canonical Action Research. *MIS Quarterly*, 36, 3, 763-786.
- Davison, R.M., Martinsons, M.G. and Malaurent, J. (2021) Improving Action Research by Integrating Methods, *Journal of the AIS* 22, 3, 851-873.
- Davison, R.M. and Vogel, D.R. (2000) Group Support Systems in Hong Kong: An Action Research Project, *Information Systems Journal* 10, 1, 3-20.
- Henfridsson, O. and Lindgren, R. (2005) Multi-Contextuality in Ubiquitous Computing: Investigating the Car Case through Action Research, *Information and Organization* 15, 2, 95-124.
- Iversen, J.H., Mathiassen, L. and Nielsen, P.A. (2004) Managing Risk In Software Process Improvement: An Action Research Approach, *MIS Quarterly* 28, 3, 395-433.
- Kohli, R. and Kettinger, W.J. (2004) Informing The Clan: Controlling Physicians' Costs And Outcomes, *MIS Quarterly* 28, 3, 363-394.
- Malaurent, J., & Avison, D. (2015). Reconciling global and local needs: A canonical action research project to deal with workarounds. *Information Systems Journal* 26, 3, 227-257.
- Mathiassen, L. (2002) Collaborative Practice Research, *Information Technology & People* 14, 4, 321-345.
- McKay, J., & Marshall, P. (2001). The dual imperatives of action research. *Information Technology & People* 14(1), 46-59.
- Simonsen, J. (2009). A Concern for Engaged Scholarship: The challenges for action research projects.

Scandinavian Journal of Information Systems 21, 2, 1.

Susman, G.I. and Evered, R.D. (1978) An Assessment of the Scientific Merits of Action Research, *Administrative Science Quarterly* 23, 4, 582-603.

Ethnography

Avison, D.E. and Myers, M.D. (1995) Information Systems and Anthropology: An Anthropological Perspective on IT and Organizational Culture, *Information Technology & People* 8, 3, 43-56.

Bentley, R., Rodden, T., Sawyer, P., Sommerville, I., Hughes, J., Randall, R. and Shapiro, D. (1992) Ethnographically-Informed Systems Design for Air Traffic Control, *ACM Conference on Computer-Supported Cooperative Work: Sharing Perspectives*. New York, ACM Press, 123-129.

Harvey, L. and Myers, M.D. (1995) Scholarship and Practice: The Contribution of Ethnographic Research Methods to Bridging the Gap, *Information Technology & People* 8, 3, 13-27.

Myers, M.D. (1999) Investigating Information Systems with Ethnographic Research, *Communications of the AIS* 2, 23, 1-20.

Case Studies

Benbasat, I., Goldstein, D.K. and Mead, M. (1987) The Case Research Strategy in Studies of Information Systems, *MIS Quarterly* 11, 3, 369-386.

Dubé, L. and Paré, G. (2003) Rigor in Information Systems Positivist Case Research: Current Practices, Trends, and Recommendations, *MIS Quarterly* 27, 4, 597-636.

Eisenhardt, K.M. (1991) Better Stories and Better Constructs: The Case for Rigor and Comparative Logic, *Academy of Management Review* 16, 3, 620-627.

Lee, A.S. (1989) A Scientific Methodology for MIS Case Studies, *MIS Quarterly* 13, 1, 33-52.

Lee, A.S. (1994) Electronic Mail as a Medium for Rich Communication: An Empirical Investigation Using Hermeneutic Interpretation, *MIS Quarterly* 18, 2, 143-157.

Markus, M.L. (1983) Power, Politics and MIS Implementation, *Communications of the ACM* 26, 430-444.

Myers, M.D. (1994) A Disaster for Everyone to See: An Interpretive Analysis of a Failed IS Project, *Accounting, Management and Information Technologies* 4, 4, 185-201.

Orlikowski, W.J. (1996) Improvising Organizational Transformation Over Time: A Situated Change Perspective, *Information Systems Research* 7, 1, 63-92.

Pan, S.L. and Tan B. (2011) Demystifying case research: A structured---pragmatic-situational (SPS) approach to conducting case studies, *Information & Organization* 21, 3, 161-176.

Shanks, G. (1997) The Challenges of Strategic Data Planning: An Interpretive Case Study, *Journal of Strategic Information Systems* 6, 69-90.

Walsham, G. (1995) Interpretive Case Studies in IS Research: Nature and Method, *European Journal of Information Systems* 4, 74-81.

Yin, R.K. (2002) *Case Study Research, Design and Methods*, 3rd ed. Newbury Park, Sage Publications.

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