

Research Frontiers in IT Management (ML3FU02), 7.5 hp

The Research Frontiers in IT Management is a course at the Ph.D. level. The course will run in the spring semester 2021 (February-May) through a number of seminars. The course schedule will be communicated in time before the course will start to the students registered in the course.

Course responsible

Professor Lazar Rusu

Prerequisite of the course

Only PhD students can participate in the course.

Aim of the course

According to Badawy (1998, p.105) management of technology (*which refers also to information technology management*) is defined “*as a field of study and a practice concerned with exploring and understanding technology as a corporate resource that determines both the strategic and operational capabilities of the firm in designing and developing products and services for maximum customer satisfaction, corporate productivity, profitability, and competitiveness*”. In opinion of Brown et al. (2012) Information Technology (IT) Management is concerning with the management of IT resources that are including technology infrastructure, human resources and business/IT relationships. In support of the arguments why IT management is important Lucas (2005, p.2) has mentioned that “*the most significant issues with information technology are managerial in nature, not technological*” and according to Lucas (2005, p.xii) “*acquiring technology is not enough to provide an advantage; the organization must manage IT obtain a return from its technology investments*”. Moreover, in opinion of Luftman et al. (2004, p.2) “*the successful management of IT resource is a prerequisite for the success of Information Technology as a source of competitive advantage for an organization*”.

The contribution of IT management research is considered to be extremely important in analyzing how organizations are generating value and could achieve competitive advantage through the use of information technology. Therefore, IT management research is very important not only for scholars but also for practitioners too.

The aim of the course is to provide an overview of the main trends and challenges in IT management research. In particular, the course will allow students to discuss their papers in light of some of the most important research developments in IT management.

Learning Objectives

After following the course, students should be able to:

- Explain the main trends and challenges in IT management research.
- Analyze the application of IT management concepts to empirical problems.
- Relate the latest research developments to his/her own research work.

Syllabus

- The Conundrum of IT Management (Peppard, 2007)
- Information Systems Strategy: Reconceptualization, Measurement, and Implications (Chen et al., 2010)
- Rethinking Business-IT Alignment (Chan and Reich, 2011)
- CIO Reporting Structure, Strategic Positioning, and Firm Performance (Banker et al., 2011)

- IT-Dependent Strategic Initiatives and Sustained Competitive Advantage (Wade et al., 2011)
- Toward a New Theory of the Contribution of the IT Function in Organizations (Guillemette and Pare, 2012)
- Digital Business Strategy: Toward a Next Generation of Insights (Bharadwaj et al., 2013)
- Aligning Business and IT Strategies in Multi-Business Organizations (Reynolds and Yetton, 2015)
- Enhancing the Measurement of Information Technology (IT) Business Alignment and Its Influence on Company Performance (Luftman et al., 2017)
- Rethinking the Concept of the IS organization (Peppard, 2018)
- Business-Managed IT: A Conceptual Framework and Empirical Illustration (Kopper et al., 2018)
- Digital Transformation: A Literature Review and Guidelines for Future Research (Reis et al., 2018)
- MIS Quarterly Research Curation on Information Systems Alignment (Benbya et al. 2019)
- The 2019 SIM IT Issues and Trends Study (Kappelman et al., 2020)

Teaching methods

The course will include a number of seminars focusing on the presentation and discussion of research in IT management and of PhD students' papers.

Examination

The course requires the submission of a paper that applies IT management concepts to empirical problems in a variety of domains. The length of the paper should be 10-12 pages. Papers must be written in English and submitted to the course responsible according to a deadline that will be communicated at the beginning of the course. To receive a grade of Pass the students are required to develop a research paper that will be evaluated based on the following criteria: clarity of writing, research importance; research problem; research methodology; findings and contribution. Moreover, to receive a grade of Pass the students will need to make a presentation of a number of research papers (that are included in the syllabus) in IT management area and offer feedback to students' research papers. The grading scale used in this PhD course is "Pass" or "Fail".

Course literature

- Banker, R.D., Hu, N., Pavlou, P.A., and Luftman, J. (2011) CIO Reporting Structure, Strategic Positioning, and Firm Performance, *MIS Quarterly*, 35(2), 487-504
- Benbya, H., Leidner, D.E., and Preston, D. (2019) MIS Quarterly Research Curation on Information Systems Alignment, *MIS Quarterly*, 1-19. Retrieved on January 18, 2020 from <https://static1.squarespace.com/static/5887a660b3db2b05bd09cf36/t/5deffae53d673974a3921cde/1576008422409/MISQ+curation+on+IS+Alignment--FINAL.pdf>
- Bharadwaj, A., O. A. El Sawy, P. A. Pavlou and N. Venkatraman (2013) Digital Business Strategy: Toward a Next Generation of Insights, *MIS Quarterly*, 37(2), 471-482
- Chan, Y.E. and Reich, B.H. (2011) Rethinking Business-IT Alignment. In Galliers, R.D. and Currie, W. L. (Editors) *The Oxford Handbook of Management Information Systems: Critical Perspectives and New Directions*, Oxford University Press, US: New York, 346-372
- Chen, D.Q., Mocker, M., and Preston, D.S. (2010) Information Systems Strategy: Reconceptualization, Measurement, and Implications, *MIS Quarterly*, 34(2), 233-259

- Guillemette, M. G. and Pare, G. (2012) Toward a New Theory of the Contribution of the IT Function in Organizations, *MIS Quarterly*, 36(2), 529-551
- Kappelman, L., McLean, E., Johnson, V., Torres, R., Maurer, C., Johnson, V., Snyder, M., Guerra, K., and Kim, K. (2020) The 2019 SIM IT Issues and Trends Study, *MIS Quarterly Executive*, 19(1), 69-104
- Kopper, A., Fuerstenau, D., Zimmermann, S., Rentrop, C., Rothe, H., Strahringer, S., and Westner, M. (2018) Business-Managed IT: A Conceptual Framework and Empirical Illustration, *Proceedings of European Conference on Information Systems (ECIS 2018)*, Association for Information Systems
- Luftman, J., Lyytinen, K., and Zvi, T. B. (2017) Enhancing the measurement of information technology (IT) business alignment and its influence on company performance, *Journal of Information Technology*, 32(1), 26-46.
- Peppard, J. (2007) The Conundrum of IT Management, *European Journal of Information Systems*, 16(4), 336-345
- Peppard, J. (2018) Rethinking the concept of the IS organization, *Information Systems Journal*, 28(1), 76-103
- Reis., J., Amorim, M., Melão, N., and Matos, P. (2018) Digital Transformation: A Literature Review and Guidelines for Future Research. In *Á. Rocha et al. (Eds.): WorldCIST'18 2018, AISC 745*, pp. 411-421, Springer
- Reynolds, P. and Yetton, P. (2015) Aligning Business and IT Strategies in Multi-Business Organizations, *Journal of Information Technology*, 30(2), 101-118
- Wade, M., Piccoli, G., and Ives, B. (2011) IT-Dependent Strategic Initiatives and Sustained Competitive Advantage. In Galliers, R.D. and Currie, W. L. (Editors) *The Oxford Handbook of Management Information Systems: Critical Perspectives and New Directions*, Oxford University Press, US: New York, 373-393

Recommended literature

- Badawy, M.K. (1998) Technology Management Education: Alternative Models. *California Management Review*, 40(4), 94-115
- Brown, C. V., DeHayes, D. W., Hoffer, J.A., Wainright, M.E. and Perkins, W.C. (2012) *Managing Information Technology*, 7th edition, Pearson Education
- Galliers, R.D., and Currie, W. L. (2011) *The Oxford Handbook of Management Information Systems: Critical Perspectives and New Directions*, Oxford University Press
- Lucas, H.C. Jr. (2005) *Information Technology: Strategic Decision Making for Managers*, John Wiley & Sons
- Luftman, J.N., Bullen, C.V., Liao, D., Nash, E., and Neumann, C. (2004) *Managing the Information Technology Resource: Leadership in the Information Age*, Pearson Education
- Pearlson, K.E., Saunders, C.S., and Galletta, D.F. (2019) *Managing & Using Information Systems: A Strategic Approach*, 7th ed., John Wiley & Sons
- Peppard, J., and Ward, J. (2016) *The Strategic Management of Information Systems: Building a Digital Strategy*, 4th. ed., John Wiley & Sons

Enrolment in the course

To apply for this course please contact the course responsible (lrusu@dsv.su.se).