Coexistence of Humans and Technologies in Organizations (22090-V)

Department of Management and Organisation Period 4 Advanced level, 5 ECTS 6.4.2022 - 5.5.2022

Examiner	Violetta Khoreva	
Office hours	Upon agreement	
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Course participation

The course will be held virtually in Teams according to the schedule. The course schedule can be found at the end of this syllabus and in SISU. The lectures will not be recorded. Please follow the below link for every scheduled session:

https://teams.microsoft.com/l/meetup-

join/19%3ameeting_M2U2ZmNlMTYtNWMxZC00YjYzLThhNWYtNTRlYjcxMzI0NTc3%40thread.v2/0?context=%7b%22Tid%22%3a%226f304f3d-06b9-443c-802a-0606f683d043%22%2c%22Oid%22%3a%2223469095-6093-450c-a879-89cc2b09ead7%22%7d

Course purpose

Exploitation of big data and artificial intelligence (AI) are predicted to trigger a large-scale management revolution leading to radically improved organizational performance. Consultants and researchers alike rush companies to change their cultures to succeed in adopting a data-centric view, and even to abandon old practices, such as reliance on human experience and intuition. However, this management revolution is unlikely to succeed without thinking through the role people have in turning this change into the transformational force it is predicted to become.

This course provides an overview of how technological changes unfold in organizations. It aims at depicting a colorful, nuanced version of reality, fluctuating around the varied ways different organizational members encounter different emerging technologies. This course also provides practical advice and builds on the experiences of leaders and organizations as well as most updated academic research. It aims at creating a conversation around an unconditional technology enthusiasm, managerial ignorance of the work employees do, and a neglect towards time and effort required to successfully implement transformational technological changes.

Learning goals

You have a broad knowledge of the best practices of peaceful coexistence of humans and technologies in organizations. You have the capacity to design and implement both

management and human resource management practices that support this coexistence. You are an aspiring management innovator and have confidence in arguing for your point of view in technological initiatives.

After completing the course, you will be able to:

- communicate a point of view on the coexistence of people and technologies in organizations
- develop and evaluate management practices needed for successful implementation of various technological initiatives
- take co-responsibility for developing technological changes within an organization
- communicate to senior executives the importance of peaceful coexistence of people and technologies in organizations
- justify insights and actions of leadership and HR professionals when managing technological initiatives in organizations

Previous knowledge required

Lectures and course materials will be in English, so a good command of English is required.

Course description

The course consists of lectures, guest lectures and group presentations.

I. Lectures

Lectures will be given by Assistant Professor Violetta Khoreva.

II. Guest lectures

The course also involves 4 guest lectures provided by Associate Professor Rebecah Rousi, Assistant Professor Robert Ciuchita, Assistant Professor Sebastian Krakowski and Associate Professor Mikko Vesa.

III. Group presentations.

The course also involves 2 presentation sessions. The preliminary results of group assignments will be presented during the following presentation sessions:

- 1) 4.5 8.30-10.00 Groups 1-4
- 2) 5.5 12.30-14.00 Groups 5-8

Every group is required to make a presentation (maximum 15 minutes).

Assignments

The assignments include reading diaries and group assignments.

I. Reading diaries

Students working individually are required to write 5 reading diaries for 5 lectures (no reading diaries for the introductory session and for the guest lectures). In the reading diaries, students are required to respond to the questions asked. The questions to be addressed in each diary can be found on the course homepage in Moodle.

Each diary should be 2 pages long, including references. Diaries must be written in compliance with the course instructions, which can be found on the course homepage in Moodle.

The deadline for submitting your reading diaries is 48 hours after the end of the lecture in question. For example, if the lecture ends on the 6^{th} of April at 11.45, the deadline for the reading diary based on this lecture is 8^{th} of April 11.45. Reading diaries must be submitted electronically via Moodle.

Once handed in the diary cannot be upgraded. If handed in too late you will lose 20% of the total amount of points for the essay every 24 hours.

In case, a student intends to improve his/her grade for the reading diaries, s/he can submit an additional reading diary. In this case, a sum of 5 best diaries out of 6 submitted ones will be chosen for evaluation. The deadline for the additional reading diary is 25.5 14.00.

II. Group assignment

Students working in teams of 2 are required to write a group assignment. In the group assignment, students are required to provide an example of a company which implements a particular AI-solution (or a similar technology artifact), describe how the company implements the solution, and how organizational members of the company react towards the implementation (i.e., how they co-exist next to the artificially intelligent colleague); and provide recommendations on how the company can encourage (peaceful) co-existence of people and the selected AI-solution to a further extent. The instructions can be found on the course homepage in Moodle. The groups will be formed by the examiner during the introductory lecture (6.4 8.30-10.00) based on the topic preferences of students. Note that diversity parameters will be important when forming the groups.

Group assignment should be 5 pages long, including references. The assignment must be written in compliance with the course instructions, which can be found on the course homepage in Moodle.

The deadline for submitting your group assignment is 10 days after the course (15.5 14.00). Group assignment must be submitted by one of the group members electronically via Moodle.

Once handed in the assignment cannot be upgraded. If handed in too late you will lose 20% of the total amount of points for the essay every 24 hours.

Students are suggested to start working on the assignment early on to avoid any last-minute catastrophes.

Plagiarism

Please note that <u>plagiarism</u> - the theft or use of someone else's work without proper acknowledgement, presenting the material as if it were one's own - is a serious offence. Detailed information on citations and referencing is provided in Hanken's "Guidelines for Writing Theses and Term Papers". Please read this information carefully; references in all your assignments must be included in accordance with these instructions.

Evaluation and examination

The maximum number of points is 100, broken down as follows:

Task	Points
*Reading diaries (5 diaries)	max. 50 points (max. 10 points per diary)
*Virtual attendance of guest lectures (4 lectures)	max. 15 points (max. 5 points per session)**
*Written group assignment (1 assignment)	max. 30 points
*Presentation of group assignment (1 presentation)	max. 5 points

^{*}In order to pass the course, you need to get at least 50% of the points in each of the sub-parts marked *

The points are transferred into the grades. In particular:

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90-100 points = Excellent grade (E)
80-89 points = Very Good grade (VG)
70-79 points = Good grade (G)
60-69 points = Satisfactory grade (S)
50-59 points = Sufficient grade (SU)
0-49 points = Fail (F)
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Please note that the points you receive for the sub-parts are valid only during this academic year.

^{**}You are allowed to miss one guest lecture without losing any attendance points.

Course literature

Session 1:

Daugherty, P. & Wilson, H. J. (2018). *Human* + *machine: Reimagining work in the age of AI*. Boston, MA: Harvard Business Review Press.

Glikson, E., & Woolley, A. (2020). Human trust in artificial intelligence: Review of empirical research. *Academy of Management Annals*, 4(2): 627-660.

Haenlein, M. & Kaplan, A. (2019). A brief history of artificial intelligence: On the past, present, and future of artificial intelligence. *California Management Review*, 61(4): 5-14.

Session 2:

Cascio, W. F., & Montealegre, R. (2016). How technology is changing work and organizations. *Annual Review of Organizational Psychology and Organizational Behavior*, 3, 349–375.

Charlier, S.D., Guay, R.P. & Zimmerman, R.D. (2016) Plugged in or disconnected? A model of the effects of technological factors on employee job embeddedness. Human Resource Management, 55(1): 109-126.

Kim, S., Wang, Y. and Boon, C. (2021). Sixty years of research on technology and human resource management: Looking back and looking forward. *Human resource Management*, 60: 229-247.

Leonardi, P. M. (2012). Materiality, sociomateriality, and socio-technical systems: What do these terms mean? How are they different? Do we need them. Materiality and organizing: Social interaction in a technological world. pp. 25–48.

Leonardi, P.M. & Barley S.R. (2010). What's under construction here? Social action, materiality, and power in constructivist studies of technology and organizing. *Academy of Management Annals*, 4(1): 1-51.

Marler, J. H. & Fisher, S. L. (2013). An evidence-based review of e-HRM and strategic human resource management. *Human Resource Management Review*, 23(1): 18-36.

Orlikowski, W. J. & Iacono, C. S. (2001). Research commentary: Desperately seeking the "IT" in IT research—A call to theorizing the IT artifact. *Information Systems Research*, 12(2): 121-134.

Sage, D., Vitry, C., & Dainty, A. (2020). Exploring the organizational proliferation of new technologies: An affective actor-network theory. *Organization Studies*, 41(3), 345–363.

Strohmeier, S. (2019). Smart HRM – a Delphi study on the application and consequences of the Internet of Things in Human Resource Management. *International Journal of Human Resource Management*, 1-30.

Susskind, R. & Susskind, D. (2015). The Future of The Professions: How technology will transform the work of human experts. Oxford, UK, Oxford University Press.

Woodward, J. (1965) *Industrial organization: Theory and practice*. London, England: Oxford University Press.

Session 3 (Assoc. Pr. Rebekah Rousi):

To be announced later

Session 4:

Davenport, T. & Ronanki, R. (2018). Artificial Intelligence for the Real Work, *Harvard Business Review*, January-February.

Huang, M.-H., Rust, R., & Maksimovic, V. (2019). The feeling economy: Managing in the next generation of Artificial Intelligence. *California Management Review*, 61(4): 43-65.

Vrontis, D., Christofi, M., Pereira, V., Tarba, S., Makrides, A. & Trichina, E. (2022): Artificial intelligence, robotics, advanced technologies and human resource management: a systematic review, *The International Journal of Human Resource Management*.

Session 5 (Asst. Pr. Robert Ciuchita):

Verhoef, P., Broekhuizen, T., Bart, Y., Bhattacharya, A., Qi Donga, J., Fabian, N. & Haenlein, M. (2021). Digital transformation: A multidisciplinary reflection and research agenda, *Journal of Business Research*, 122: 889-901.

Session 6:

Fuller, j., Wallenstein, J., Raman, M., & de Chalendar, A. (2019). Your Workforce Is More Adaptable Than You Think, *Harvard Business Review*, May-June.

Kriesberg, L. (1998b). Coexistence and the reconciliation of communal conflicts. In E. Weiner (Ed.), *The handbook of interethnic existence* (pp. 182-198). New York: Continuum.

Schad, J., Lewis, M. W., Raisch, S., & Smith, W. K. (2017). Paradox research in management science: Looking back to move forward. *Academy of Management Annals*, 10: 5-64.

Smith, W. K., & Lewis, M. W. (2011). Toward a theory of paradox: A dynamic equilibrium model of organizing. *Academy of Management Review*, 36: 381-403.

Session 7:

Bartneck, C., Suzuki, T., Kanda, T., & Nomura, T. (2007b). The influence of people's culture and prior experiences with Aibo on their attitude towards robots. *AI & Society*, 21(1-2), 217-230.

Chun, B., & Knight, H. (2020). The Robot Makers: An Ethnography of Anthropomorphism at a Robotics Company. *ACM Transactions on Human-Robot Interaction* (THRI), 9(3), 1-36.

Latour, B. (1992). Where are the missing masses? The sociology of a few mundane artifacts. Shaping technology/building society: *Studies in sociotechnical change*, 1, 225-258.

Mori (1970). The Uncanny Valley, Energy, 7: 33-35.

Watson, D. (2019). The rhetoric and reality of anthropomorphism in artificial intelligence. *Minds and Machines*, 29(3), 417-440.

Session 8 (Asst. Pr. Sebastian Krakowski):

Krakowski, S., Luger, J. & Raisch, S. (2022). Artificial intelligence and the changing sources of competitive advantage. Strategic Management Journal, forthcoming.

Raisch, S., & Krakowski, S. (2021). Artificial Intelligence and Management: The automation-augmentation Paradox. Academy of Management Review, 46(1): 192-210.

Session 10 (Assoc. Pr. Mikko Vesa):

To be announced later

Course programme

Date	Time	Event	Speaker	Topic
6.4	8.30-10.00	Introducti	Violetta	Introduction
		on	Khoreva	
6.4	10.15-11.45	Session 1	Violetta	Towards (peaceful) co-existence of people
			Khoreva	and Artificial Intelligence in organizations
7.4	12.30-14.00	Session 2	Rebecah	Artificial Intelligence – What it is and what
			Rousi	it is not
13.4	8.30-10.00	Session 3	Violetta	Overview of theoretical perspectives on
			Khoreva	Artificial Intelligence
13.4	10.15-11.45	Session 4	Violetta	What is left for people: Managing in the
			Khoreva	next generation of Artificial Intelligence
21.4	12.30-14.00	Session 5	Robert	Marketing perspective on Artificial
			Ciuchita	Intelligence
27.4	8.30-10.00	Session 6	Violetta	Best friend or a broken tool? Exploring the
			Khoreva	co-existence of people and artificial
				intelligence in organizations
27.4	10.15-11.45	Session 7	Violetta	A colleague named Max: A critical inquiry
			Khoreva	into anthropomorphized robots entering
				organizations
28.4	12.30-14.00	Session 8	Sebastian	Lecture: Artificial Intelligence and
			Krakowski	Management: The Automation—
				Augmentation Paradox
4.5	8.30-10.00	Session 9	Students	Presentations (Groups 1-4)
4.5	10.15-11.45	Session 10	Mikko	Lecture: Critical Eye on Artificial
			Vesa	Intelligence
5.5	12.30-14.00	Session 11	Students	Presentations (Groups 5-8)

Course deadlines

Date	Time	Assignment
8.4	11.45 am	Reading diary 1
19.4 (due to Easter)	10.00 am	Reading diary 2
19.4 (due to Easter)	11.45 am	Reading diary 3
29.4	10.00 am	Reading diary 4
29.4	11.45 am	Reading diary 5
15.5	14.00	Group assignment
25.5	14.00	Optional reading diary