

Doctoral seminars by Schöller senior fellow Prof. Richard Watson

We are delighted to announce that this year's Schöller senior fellow Professor Richard Watson will give a series of three doctoral seminars at FAU WiSo on June 20-22, 2023. The seminar (5 ECTS) consists of three (widely independent) in-person seminar sessions delivered by Prof. Watson on June 20-22 (3 mornings) and home assignments for preparation and reflection. Please refer to the document enclosed for details.

The seminar is limited to 20 participants (first-come first served) from FAU and other Bavarian universities. In order to register, please send a message with your name, group/chair and University by June 16 to julia.neukam@fau.de

About the Presenter

Richard Watson is a very prominent scholar in the Information Systems discipline. He has served for more than 20 years as the J. Rex Fuqua Distinguished Chair for Internet Strategy in the Terry College of Business at the University of Georgia. Richard Watson is now honorary visiting professor at the Queensland University of Technology, Regents Professor Emeritus at the University of Georgia, the Research Director for Digital Frontier Partners, an Australian consulting firm.

Professor Watson is a former President of the Association for Information Systems and was awarded its highest honor, a LEO, for his achievements in information systems. He has published over 200 journal articles and written books on electronic commerce, data management, and energy informatics. His most recent book is *Capital, Systems, and Objects*. Dr. Watson is on the editorial board of *Energy Informatics* and the Sustainability SE for MISQ Executive. He was educated at the University of Western Australia (BSc, Dip. Comp), Monash University (MBA), and the University of Minnesota (PhD).

Part 1: Capital, Systems, and Objects (June 20, 9:00-12:00)

Organizations face a continuing barrage of new ideas and technologies. In recent years you have likely heard multiple times of digitization, blockchain, sharing economy, and various other managerial and technological innovations. These are means and not goals. It is too easy to become enchanted with a means that seems to solve multiple problems, but the long-term concern must be the enduring goals that a means can help achieve.

Capital creation is the enduring goal for all organizations. All are concerned with creating a mix of one or more types of capital: economic, human, organizational, natural, social, and symbolic. All must focus on raising their capital productivity, C' (C prime), to a level greater than their industry competitors.

There are five fundamental systems for creating capital: systems of engagement, framing, inquiry, production, and record. An organization, a capital creation system, has to continually modify,

effectively manage, and efficiently integrate each of its multiple variations of these systems to enhance its C'.

Breakthrough leaps in C' recent years can be understood in object-oriented organizational design. Uber, for example, is based on the premise that drivers and riders are objects that can receive and respond to digital messages through their smart devices. In a connected world, nearly every person and asset is an object that can be assembled electronically in innovative ways to create new organizations with higher levels of C'.

The seminar will discuss an integrated framework – capital, systems, and objects – that transcend managerial or technology hype by focusing on the long-term fundamentals that sustain organizational success.

References

- Watson, R. T. (2020). *Capital, Systems, and Objects: The Foundation and Future of Organizations*. Springer.
- Watson, R. T., & Pitt, L. F. (2022). Transcendent Service Management. *Journal of Service Management*, 33(1), 1-8.
- Watson, R. T., & Safadi, H. (2032). *Capital asymmetry*. The University of Georgia.

Part 2: The efficient knowledge market (June 21 11:30-14:30)

Understanding how an efficient knowledge market works can help us identify research problems that can generate results of practical utility. In a fast-changing digital economy, memes about technologies and methods that are of competitive value spread quickly, and IS research is often relegated to explaining what practice already knows.

Attendees should review the following papers in advance of the session.

- Dawson, G. S., & Watson, R. T. (2011). Uncovering and testing archetypes of effective public sector CIOs. *ACM Transactions on Management Information Systems (TMIS)*, 2(1), Article 5.
- Dawson, G. S., Watson, R. T., Boudreau, M.-C., & Pitt, L. F. (2016). A knowledge-centric process examination of signaling and screening activities in the negotiation of information systems consulting services. *Journal of AIS*, 17(2), 77-106.
- Watson, R. T., Dawson, G. S., Boudreau, M.-C., Li, Y., Zhang, H., Huang, W. W., & Al-Jabri, I. (2019). Constraining Opportunism in Information Systems Consulting: A Three Nation Examination. *Journal of the Association for Information Systems*, 20(7), 986-1022.
- Watson, R. T., Ketter, W., Recker, J., & Seidel, S. (2022). Sustainable energy transition: Intermittency policy based on digital mirror actions. *Journal of the Association for Information Systems*, 23(3), 631-638.
- Watson, R. T., Plangger, K., Pitt, L. F., & Tiwana, A. (Forthcoming). A theory of Information Compression: When judgments are costly. *Information Systems Research*.
- Bogert, E., Schecter, A., & Watson, R. T. (2021). Humans rely more on algorithms than social influence as a task becomes more difficult. *Scientific Reports*, 11(8028).

Part 3: Theory Research exchange (T-Rex) project and causal knowledge analytics (June 22, 8:30 - 11:00)

Scientific progress requires building upon many exponentially expanding foundations, and this massive combinatorial problem of synthesizing ideas across manifold publications needs a more efficient and effective methodology and supporting technologies. While citation indices and Google Scholar provide researchers with a wisdom of the crowd perspective and accelerate the discovery of possibly pertinent research, these approaches do not encode knowledge. Scholars must read the results of their search and extract the core knowledge. The failure to encode knowledge digitally inhibits the growth of many fields, including IS.

Casual models are the core of knowledge and the foundation of scientific reasoning. In Information Systems research, causal models are depicted in more than half of the more influential published articles in *MIS Quarterly*. The T-Rex project is developing a new approach and supporting technologies that enable researchers to code causal and process models as graphs and extract and synthesize ideas from the extant literature exhaustively and speedily using causal knowledge analytics.

This research is financed by the Alfred P. Sloan Foundation.

Attendees should bring three papers in their domain of interest to the seminar. The papers must have causal models (boxes and arrows).

Pre-reading

Song, Y., Watson, R. T. & Zhao, X. Literature Reviewing: Addressing the Jingle and Jangle Fallacies and Jungle Conundrum Using Graph Theory and NLP. International Conference on Information Systems, 2021 Austin, TX.

Song, Y., Watson, R. T., & Zhao, X. (forthcoming). Digitized knowledge-based literature reviewing: A tutorial on coding causal and process models as graphs. *Journal of Decision Systems*.
<https://doi.org/https://doi.org/10.1080/12460125.2023.2197705>

Assignment

Attendees will write an essay reporting the insights gained from the seminar and how these will influence their research.