

Hand-out MSc Seminar on Operations Management

Summer term 2022, version: 24 March 2022

Please note: This document reflects our planning before the term started; it will **not** be updated regularly. For short-term changes regarding rooms or times, see Campus. Changes regarding the content will be discussed in class and, if appropriate, communicated via Ilias ([https://ilias3.uni-stuttgart.de/goto/Uni Stuttgart crs 2828232.html](https://ilias3.uni-stuttgart.de/goto/Uni+Stuttgart+crs+2828232.html)).

Learning objectives

After successfully finishing the course, students can:

- independently understand a scientific paper;
- summarize and criticize a scientific paper;
- link insights of a scientific paper to current streams of research and broader discussions in the field of (operations) management;
- moderately extend the study (e.g., extend the model, formulate additional hypotheses, run more statistical analyses, discuss the insights with practitioners);
- give an academic presentation.

Content

The seminar asks students to independently acquire knowledge based on a scientific paper. This paper has to be understood, summarized, criticized, extended and put into context. Students hold a presentation about their understanding and findings.

Requirements

Course “Supply Chain Dynamics” or “Behavioural Operations Management” successfully passed.

Literature

Students are requested to choose one scientific article from the following list, on which their seminar paper and presentation will be based (nos. 1-10 rather link to “Supply Chain Dynamics”; nos. 11-20 rather link to “Behavioural Operations Management”):

1. Ahmad, S., & Simonovic, S. P. (2000). System dynamics modeling of reservoir operations for flood management. *Journal of computing in civil engineering*, 14(3), 190-198.
2. Đula, I., & Größler, A. (2021). Inequity aversion in dynamically complex supply chains. *European Journal of Operational Research*, 291(1), 309-322.
3. Thompson, B. P., & Bank, L. C. (2010). Use of system dynamics as a decision-making tool in building design and operation. *Building and Environment*, 45(4), 1006-1015.

4. Coyle, R. G., & Gardiner, P. A. (1991). A system dynamics model of submarine operations and maintenance schedules. *Journal of the Operational Research Society*, 42(6), 453-462.
5. Cagliano, A. C., DeMarco, A., Rafele, C., & Volpe, S. (2011). Using system dynamics in warehouse management: a fast-fashion case study. *Journal of Manufacturing Technology Management*.
6. Wolstenholme, E. F. (1988). Defence operational analysis using system dynamics. *European journal of operational research*, 34(1), 10-18.
7. Serman, J. D., & Dogan, G. (2015). "I'm not hoarding, I'm just stocking up before the hoarders get here." Behavioral causes of phantom ordering in supply chains. *Journal of Operations Management*, 39-40, 6-22.
8. Aschauer, G., Gronalt, M., & Mandl, C. (2015). Modelling interrelationships between logistics and transportation operations—a system dynamics approach. *Management Research Review*.
9. Coyle, J. M., Exelby, D., & Holt, J. (1999). System dynamics in defence analysis: some case studies. *Journal of the Operational Research Society*, 50(4), 372-382.
10. Georgiadis, P., & Besiou, M. (2008). Sustainability in electrical and electronic equipment closed-loop supply chains: a system dynamics approach. *Journal of cleaner production*, 16(15), 1665-1678.

11. Moritz, B. B., Hill, A. V., & Donohue, K. L. (2013). Individual differences in the newsvendor problem: Behavior and cognitive reflection. *Journal of Operations Management*, 31(1-2), 72-85.
12. AlKhars, M., Evangelopoulos, N., Pavur, R., & Kulkarni, S. (2019). Cognitive biases resulting from the representativeness heuristic in operations management: an experimental investigation. *Psychology research and behavior management*, 12, 263.
13. Moritz, B., Siemsen, E., & Kremer, M. (2014). Judgmental forecasting: Cognitive reflection and decision speed. *Production and Operations Management*, 23(7), 1146-1160.
14. Narayanan, A., & Moritz, B.B. (2015). Decision Making and Cognition in Multi-Echelon Supply Chains: An Experimental Study. *Production and Operations Management*, 24(8), 1216-1234.
15. Weinhardt, J. M., Hendijani, R., Harman, J. L., Steel, P., & Gonzalez, C. (2015). How analytic reasoning style and global thinking relate to understanding stocks and flows. *Journal of Operations Management*, 39-40, 23-30.
16. Ball, G. P., Shah, R., & Donohue, K. (2018). The decision to recall: A behavioral investigation in the medical device industry. *Journal of Operations Management*, 62, 1-15.
17. Stangl, T., & Thonemann, U. W. (2017). Equivalent inventory metrics: A behavioral perspective. *Manufacturing & Service Operations Management*, 19(3), 472-488.
18. Boffelli, A., Golini, R., Orzes, G., & Dotti, S. (2020). Open the box: A behavioural perspective on the reshoring decision-making and implementation process. *Journal of Purchasing and Supply Management*, 26(3), 100623.
19. Evans, J. H., Hannan, R. L., Krishnan, R., & Moser, D. V. (2001). Honesty in managerial reporting. *Accounting Review*, 76(4), 537-559.
20. Anderson, A., Kleinberg, J., & Mullainathan, S. (2017). Assessing human error against a benchmark of perfection. *ACM Transactions on Knowledge Discovery from Data (TKDD)*, 11(4), 1-25.

Timetable

Date, time	Topic	Where?	Who?
25/04/2022, 14:00–15:30	Kick-off: explanation of procedures and topics	M17.11	Größler
02/05/2022, 14:00–15:30	Issues of experimental research in Behavioural operations management	M17.11	Größler
09/05/2022 14:00–15:30	Organized peer-review of table of contents	M17.11	Horn & Wiesner
	Please register on C@mpus for examination	C@mpus-System	
16/05/2022 14:00–15:30	Current methodological debates in system dynamics	M17.11	Größler
23/05/2022 14:00–15:30	How to write a seminar paper	Video lecture (see Ilias)	Größler
30/05/2022, 14:00–15:30	Intermediate oral presentation & discussion: outline, progress, questions	M17.11	Horn & Wiesner
13/06/2022, 14:00–15:30	How to give a seminar presentation	Video lecture (see Ilias)	Größler
20/06/2022, 14:00–15:30	Open-question session	M17.11	Horn & Wiesner
27/06/2022, 14:00–15:30	Organized peer-reviews of papers	M17.11	Horn & Wiesner
04.07.2022 14:00–15:30	Organized peer-review of presentations	M17.11	Horn & Wiesner
10.07.2022 12:00	Deadline for submitting papers and presentation material on ILIAS	Ilias	
11.07.2022 11:30–17:15	Presentation of seminar papers	Tba	all

Intermediate supervision

During the period of writing the seminar paper and preparing the presentation, advice can be sought with the research associates of the department, Ms. Horn & Mr. Wiesner after making an appointment. It is advised that students use this opportunity two or three times but not more than five times.

Examination

Student assessment is based on a written and an oral examination: seminar paper and seminar presentation. Weight: seminar paper 60%, seminar presentation 40%.

The seminar paper should not be longer than 12 pages (or 15 pages including cover sheet, table of contents, and literature list), font size 12 points, font type Times New Roman, line spacing 1.5, margins 2.5 cm (top and bottom) and 2 cm (left and right). Please provide page numbers. The cover page should include the title of the paper, the student's name, and the matriculation number. Please provide an electronic version (on Ilias) before the presentations (**i.e., deadline: 10 July 2022, 12:00 noon**). About the criteria for a good paper, please check the learning objectives and watch the video lecture "How to

write a seminar paper". More information on formal requirements can also be found at <https://www.bwi.uni-stuttgart.de/studium/pdfs/Zitierrichtlinien.pdf>.

The seminar presentation should not be longer than 45 minutes, including time for discussion. Thus, it must focus on the importance and relevance of the topic being discussed, the simulation model employed, the most important findings within the paper, and a criticism and extension of these findings. PowerPoint slides are a possible way to support the talk but other forms (e.g., speech with hand-outs, Prezis, posters, model walk-throughs) are also encouraged but must be organized by the students. Presentation material must be made available to the teachers for assessment. Students must be prepared to answer questions regarding their presentation and paper. For more information, also watch the video lecture "How to give a seminar presentation".