Universität zu Köln

Seminar für Supply Chain Management und Management Science



Behavioral Operations in Supply Chain Management

(Lecture and Discussion, Summer Semester, 2024)

Course Description

Behavioral Management Science (BMS) complies with theoretical research in Management Science and behavioral research in Management Science. While the theoretical research aims to maximize management decisions' output from an economic perspective, the behavioral research aims to maximize the utility output considering a decision maker's limitation and preference bias. With behavioral studies, we can better understand the deviations of managers' decisions from theoretical predictions and provide more practical management support for practice.

Supply chain management focuses on management optimization in a supply chain system. When a supply chain is composed of multiple echelons and various interactions among echelons happen within the system, many decisions are required. Traditional research has tried to figure out optimal methods of optimizing economic output in different scenarios. Recently, starting from Schweitzer and Cachon (2000), researchers have realized that human decisions in practice are subject to bounded rationality and behavioral biases, which are factors that directly influence final choices in addition to economic pursuit.

This course highlights the behavioral management science research in supply chain management. We will investigate specific SCM topics from the perspective of BMS by designing behavioral experiments. Moreover, this course includes exercise to summarize a scientific paper and present critical insights.

Course Administration

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Grading The grading of the lecture is based on a selected research project, which

requires group work. The project involves a mid-term presentation, supplemented by written slides, and a concluding research report. The

breakdown of the final grade is as follows:

¬ Mid-term presentation: 30%

¬ Research report: 70%

To foster active learning, an additional 10 bonus points are available. These comprise 5 points allocated for in-lecture tests on selected literature

reading and another 5 points for a final presentation.

Language The lecture is taught in English.

Prerequisites Interest in the fields of behavioral research and supply chain management;

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Knowledge of fundamental models in supply chain management

Literature Required readings will be announced during the lectures

Registration Application to this course is possible via KLIPS only. The number of

participants is restricted.