Title: Multilevel Operations Management in Social and Health Care Industry

Credits: 3 ECTS

Target Group: Master's level students and advanced Bachelor's level students

Grading: 1-5

Format: Three lectures, accompanied by three pre-assignments and three case exercises

Timing: Weekly lectures on June, deadline for case exercises two weeks after each lecture

Language: English

Faculty: M.Sc. (Tech.) Olli Halminen, doctoral student, project manager, DIEM

Background

In working life, graduates with Industrial Engineering and Management background are often presented with fuzzily defined, open-ended problems for which there are no clear solution strategies. Often, due to the limited time resources, the analysis methods have to be simplistic and focus on overall description of the situation rather than, say, explain intricate causal relations between objects. For the descriptive analysis project to be successful, one must choose a suitable combination of units of analysis, level of analysis, and available data.

Social and health care industry is sometimes viewed through the lens of micro, meso and macro system levels. Micro-level consists of processes within one organization, macro-level concerns the national health system as a whole, and the meso-level falls between the two, pertaining to the interactions between groups of organizations. The goal of the course is to demonstrate how the proper choice of the level of analysis can help in creating actionable information with relatively simple descriptive analysis methods.

Learning methods

This exercise course is formed around three quantitative analysis cases, which focus on micro, meso and macro levels of the social and healthcare system. All cases include a more theoretically focused short pre-lecture assignment, one lecture, and a more practically focused post-lecture case assignment.

The lectures are held remotely via Zoom on June 2022. Lecture attendance is mandatory.

The pre-lecture assignments will typically include a brief summarization of ca. 2 scientific articles related to the topic of the case assignment (micro, meso, and macro systems of care), and a short reflection of the managerial issues related to the topic. As the course schedule is relatively tight, the deadline for pre-assignments is strictly the beginning of each lecture.

The case assignments will include a managerial problem, relevant for the system level of analysis, and a data set suitable for the level. For micro level, synthesized individual-level data will be used. For meso and macro levels, publicly available aggregate statistics will be employed. After the lectures, the students have two weeks to return each case assignment. The data sets are designed to be similar to ones previously employed by IEM master's students in their special studies.

Both pre-lecture assignment and post-lecture case assignments are returned on pdf format, and are written on a structured Microsoft Word question sheet.

The assignments are designed to be performed on Microsoft Excel. However, any other analysis software may be used.

Learning outcomes

Upon completion of the course, students will:

-Understand the characteristics of common data types used in the performance measurement of social and healthcare operations on different system levels, and the strengths and weaknesses associated with these data types in relation to their practical applicability

-Understand the central concepts of micro, meso and macro level systems, and analytical challenges related to each level of analysis.

-Understand the basic principles of crafting arguments for managerial decision-making based on descriptive data analysis

-Have the capacity to plan the appropriate level of analysis and initial analysis strategy for specific managerial problems in social and health care field

Assessment criteria

The course is graded on scale of 0-5, based on the amount of points collected by student from exercises. Total points possible to earn is 100. Missing a delivery of a pre-lecture assignment by deadline will result in zero points from that assignment. Missing a delivery of the case assignments will result in point reductions. Return of case assignments is mandatory to pass the course. The exact grading criteria will be published before or at the opening lecture.

Course Schedule

Course lectures are designed to be held at:

Thursday 9th June 2022, 1600 PM – 1730 PM

Tuesday 21st June 2022, 1600 PM – 1730 PM

Thursday 30th June 2022, 1600 PM – 1730 PM

Course communication

Course communication mainly via MyCourses platform, e-mail, or during lectures. Due to the holiday season, course staff may be unavailable to answer on certain periods, which will be disclosed on the opening lecture. If there are fundamental difficulties in passing the course assignments, course staff can give comments by email during June.

Contact Information

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