Hand-out Behavioural Operations Management

WS 2017/2018

Version: 5 October 2017

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.

Technicalities

One semester course, taught every second semester in the winter term.

Six credit points; on average, four contact hours per week. Taught in English.

Course coordinator and lecturer: Prof Dr Andreas Größler; tutorials: Ivan Dula and Manuel Brauch

Part of the MSc study programme in (technically oriented) business administration.

Learning objectives

After successfully finishing the course, students can:

- name and identify managerial decision-making biases;
- discuss relevant experiments in the behavioural operations management literature;
- understand and evaluate improvement guidelines for operations' decision-making;
- design simple experiments in the realm of dynamic decision making.

Content

The course discusses managerial decision-making, cognition, and biases from an operations point of view, i.e. not only decision-making in high-level management teams are considered but also decision-making on the shop floor. The effects of behavioural factors on organisational value creation processes is in the centre of interest. Experiments on the topic are presented and, partially, repeated in class. Students learn about simple experiments to investigate dynamic decision making.

Timetable

Lectures will be held on Thursdays, 09:45-11:15 in M 2.03.

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Reading assignment</th>
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</thead>
<tbody>
<tr>
<td>19/10/2017</td>
<td>Introduction to department and to the course; course logistics; definition of behavioural operations management</td>
<td></td>
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<tr>
<td>26/10/2017</td>
<td>Foundations of behavioural operations</td>
<td>Bendoly et al., ch. 1</td>
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</tbody>
</table>
Experiments as the primary way of investigation in behavioural operations

Constraints and variability

Behavioural aspects in process analysis

Process control and improvement

Human behaviour in scheduling

Site visit: Trumpf Maschinenbau, Ditzingen, 09:00–14:00

Mid-term assessment

Endogenous effects of behaviour on performance

Pull-to-centre effects in supply lines

Guest lecture: Prof Florian Kapmeier (ESB Reutlingen)—Price forecasting in a commodity market

Design of social supply chains

Implications for Operations Management education

Relevance of behavioural operations in practice and future research

Please read the chapter/article indicated before the lecture. Together with the tutorial in that week, this prepares part of the content that is covered in the lecture.

Plan of tutorials

Tutorials will take place on Mondays, 08:00-09:30, in M 17.81, starting on 06/11/2017.

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<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Laptop needed?</th>
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<tbody>
<tr>
<td>06/11/17</td>
<td>Jewellery restoration</td>
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<tr>
<td>13/11/17</td>
<td>Kristen’s Cookie Company</td>
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<tr>
<td>20/11/17</td>
<td>Statapult competition</td>
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<tr>
<td>27/11/17</td>
<td>Furniture manufacturing case</td>
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<td>04/12/17</td>
<td>Roles and processes in retailing</td>
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<tr>
<td>11/12/17</td>
<td>Roofing slates manufacturing plant</td>
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<td>18/12/17</td>
<td>Video assignment: Stanford Prison Experiment*</td>
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<tr>
<td>08/01/18</td>
<td>Humanitarian logistics</td>
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<td>15/01/18</td>
<td>Salt seller game</td>
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<tr>
<td>22/01/18</td>
<td>Coffee value chain</td>
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<tr>
<td>29/01/18</td>
<td>Sharing the risk</td>
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<tr>
<td>05/02/18</td>
<td>Q&amp;A</td>
<td></td>
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* Watch the BBC documentation at https://www.youtube.com/watch?v=gb4Q20z0T1Q. Interpret the film regarding (i) the structure/agency debate, (ii) the validity of experiments, and (iii) the ethics of empirical research.

Examination
Assessment will be carried out by means of a written exam (90%) and a short multiple-choice mid-term assessment during a regular class (10%; for date see timetable). The mid-term assessment cannot be retaken or be written at another date. In total, 50% of all points are necessary to pass the course with 6 credit points. The content of the exam comprises all topics discussed in either the lectures or tutorials plus all required reading assignments (see timetable). Participating in the tutorials is expected from all students.

Literature


