

## Hand-out Behavioural Operations Management

WS 2018/2019, version: 9 October 2018

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 Đula 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 11.82.

Date	Topic	Reading assignment
18/10/2018	Introduction to department and to the course; course logistics; definition of behavioural operations management	
25/10/2018	Foundations of behavioural operations	Bendoly et al., ch. 1

08/11/2018	Experiments as the primary way of investigation in behavioural operations	Bendoly et al., ch. 2
15/11/2018	Constraints and variability	Gupta&Boyd, 2008
22/11/2018	Behavioural aspects in process analysis	Boudreau et al., 2003
29/11/2018	Process control and improvement	Langer, 1975
06/12/2018	Human behaviour in scheduling	Jackson et al., 2004
13/12/2018	<i>Mid-term assessment</i> Motivation and performance in work design	Zuffo, 2011
20/12/2018	Endogenous effects of behaviour on performance	Baines et al., 2004
10/01/2019	Pull-to-centre effects in supply lines	Schweitzer&Cachon, 2000
17/01/2019	<i>Guest lecture: Prof Florian Kapmeier (ESB Reutlingen)—Price forecasting in a commodity market</i>	
24/01/2019	Design of social supply chains	Battacharya&Sen, 2004
31/01/2019	Implications for Operations Management education	Pasin&Giroux, 2011
07/02/2019	Relevance of behavioural operations in practice and future research	Bendoly et al., ch. 19

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 12/11/2018.

Date	Topic	Laptop needed?
12/11/2018	Jewellery restoration	No
19/11/2018	Kristen's Cookie Company	Yes
26/11/2018	Statapult competition	No
03/12/2018	Furniture manufacturing case	No
10/12/2018	Roles and processes in retailing	No
17/12/2018	Stickle Bricks production line	No
07/01/2019	Humanitarian logistics: "Kicking the mean habit"	Yes
14/01/2019	Salt seller game	Yes
21/01/2019	Coffee value chain	No
28/01/2019	Sharing the risk	Yes
04/02/2019	Q&A	No

#### 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 time table). 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

Baines, T., S. Mason, P.O. Siebers, J. Ladbrook (2004): Humans: the missing link in manufacturing simulation? *Simulation Modelling Practice and Theory* **12**(7), 515–526.

Bendoly, E., W. van Wezel, D.G. Bachrach (eds.)(2015): *Handbook of Behavioral Operations Management*, Oxford University [chs. 1, 2, 19].

Bhattacharya, C.B., S. Sen (2004): Doing Better at Doing Good: When, why, and how consumers respond to corporate social initiatives. *California Management Review* **47**(1), 9–24.

Boudreau, J., W. Hopp, J.O. McClain, L.J. Thomas (2003): On the Interface between Operations and Human Resources Management. *Manufacturing & Service Operations Management* **5**(3), 179–202.

Gupta, M.C., L.H. Boyd (2008): Theory of Constraints: a theory for operations management. *International Journal of Operations & Production Management* **28**(10), 991–1012.

Jackson, S., J.R. Wilson, B.L. MacCarthy (2004): A New Model of Scheduling in Manufacturing: Tasks, roles, and monitoring. *Human factors* **46**(3), 533–550.

Langer, E.J. (1975): The Illusion of Control. *Journal of Personality and Social Psychology* **32**(2), 311–328.

Pasin, F., H. Giroux (2011): The Impact of a Simulation Game on Operations Management Education. *Computers & Education* **57**(1), 1240–1254.

Schweitzer, M.E., G.P. Cachon (2000): Decision Bias in the Newsvendor Problem with a Known Demand Distribution: Experimental evidence. *Management Science* **46**(3), 404–420.

Zuffo, R.G. (2011): Taylor is Dead, Hurray Taylor! The "Human Factor" in Scientific Management: Between ethics, scientific psychology and common sense. *Journal of Business and Management* **17**(1), 23–41.