Editorial

Hans-Ulrich Küpper · Günther Zäpfel

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The research in Production Management, Operations Research and Accounting has been very important for the development of management and business administration in science and practice, particularly over the last five decades. Günter Fandel has been actively involved in this development as he occupied various important positions. He was professor and rector (1993–1997) at FernUniversität Hagen, member and president (1981/82) of the German Society of Operations Research and editor (in chief) of OR-Spectrum and is editor-in-chief for Zeitschrift für Betriebswirtschaft (now Journal of Business Economics). It's now his 70th birthday on 31 August. Therefore, this special issue is dedicated to him. The papers relate to major topics in Fandel's own research, for example goal conflicts and multi-criteria optimization (Kurz/Zäpfel and Gössinger/Kaluzny), game theoretic analysis (Trockel), OR models on contract negotiations (Badel/Corsten/Wolff), and the structure of accounting in universities (Küpper).

Kurz and Zäpfel develop a solution concept for distribution logistics when there are goal conflicts between short delivery times and cost-related goals. A generalized periodic vehicle routing problem is introduced which does not need any pre-defined delivery patterns in order to solve the problem. A heuristic solution method for realistic problem sizes is based on a tabu search procedure. The trade-off between costs and delivery service is illustrated by a case study, depicting the impacts of customer flexibility on costs.

H.-U. Küpper (✉)

Munich School of Management, Institute of Production Management and Management Accounting,
University of Munich, Ludwigstr. 28/RG/V, 80539 Munich, Germany
e-mail: kuepper@bwl.lmu.de

G. Zäpfel

Institute for Production and Logistics Management, Johannes Kepler University Linz,
Altenbergerstraße 69, 4040 Linz, Austria
e-mail: guenther.zaepfel@jku.at

The Gössinger/Kaluzny paper presents a coordination approach of production and maintenance operations like repair, replacement, overhaul, servicing, and inspection of machines. This complex coordination task leads to a dynamic stochastic multi-criteria optimization model. A simulation study—especially incorporating specific priority rules—displays the performance of the developed solution approach. The performance of the resulting solution approach is analysed with simulations. The contribution of this paper comprises the parameterisation of condition-based maintenance in cases of incomplete information about deterioration.

Trockel analyses a conflict in materials management. Based on two Fandel/Trockel papers on two- and three-person inspection games he asks whether bonuses change the incentives of employees when the focus is directed towards the control level of top management. The consequences of simultaneous variations of the bonuses are quantified employing a simulation. This way, he can show that the effects of bonuses on the behaviours of the manager and the controller can be mutually offsetting.

Badel, Corsten and Wolff deal with procurement planning in the context of liquid gas trading. The primary goal of their research is to study the contract negotiations between suppliers and traders. For this purpose, they enrich the classical transportation problem with certain aspects that are of particular importance in the context of liquid gas trading. Purchasing and transportations costs are minimized simultaneously. In order to also handle demand uncertainty the initial model is converted into a robust form. Calculations based on real world data show that the proposed approach delivers good results.

The last paper written by Küpper analyses whether commercial accounting can be adopted in public universities too like it has been done in several German-speaking universities. Based on theoretical arguments he justifies why it is necessary to tailor the systems of financial and management accounting to the specific conditions and goals that are of relevance to public universities. The main argument is that public universities don't pursue a monetary profit goal since they normally don't sell their output in education and research on free markets. Therefore, they need a 'change in value statement' instead of a misleading income statement. This change in value statement is a periodical performance statement including non-monetary activity accounting and special instruments of investment accounting. The accounting systems can be summarized in a university balanced scorecard with the purpose of managing public universities efficiently.

All these papers provide insights for interesting problems in production management, operations research and accounting. The results are relevant both to theory but also to practice. One can therefore conclude that they comply with an important objective of JBE in general and Günter Fandel in particular.