MARKETING DECISIONS & OPERATIONS RESEARCH METHODOLOGY

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Against the background that interconnections between “marketing – market research – data analysis – statistics” seem to be better established than those between “marketing – operations research – optimization” we start with discussing reasons and giving examples with respect to this phenomenon.

Within a framework in which computer-assisted decision support (for marketing and market research) is in the centre of interest we explain why mutual fructification – especially between marketing and operations research – is asymmetric and give hints how within the well-known decision calculus discussion one has tried to make marketing managers use models already years ago. We take MARK²MAN (MARKet research & MARKeting MANagement), a software tool developed at our institute (see, e.g., Gaul, Baier (1993)), to demonstrate how typical situations for decision support in marketing can be tackled without going back to the mathematical modeling level.

After this introductory part, a list of applications is presented where operations research methodology has been used to formulate and solve marketing problems. As examples sales force management and product line optimization are selected for a more thorough mathematical description, a demonstration of arising difficulties, and a discussion of solution possibilities.

Sales force management is a typical field where marketing and OR can overlap. Determination of sales force size, time-effort allocation, and sales territory assignment are important problems in this field, for which decision support has to be made available.

In product line optimization one has to deal with the situation, that new products of a special product category should be introduced into a market, where already established products (own ones and, normally, such of competitors) are available and successful.

Finally, we report on recent (own) research from the area of new-product-introduction and give an outlook with respect to marketing problems for which application of OR methodology should be of interest.

References

Gaul, W.; Baier, D.: MARKtforschung und MARKeting MANagement (Buch mit Diskette): München, Oldenbourg Verlag, 1993.