PPLICATIONS
OF
MANAGEMENT
SCIENCE
IN
MARKETING

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Applications of Management Sciences in Marketing



edited by DAVID B. MONTGOMERY

and

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of the

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To our new daughters . . . Pamela and Jennifer—unexpected, but delightful outcomes

C. KAN AND

Preface

This book is a companion volume to *Management Science in Marketing* by David B. Montgomery and Glen L. Urban (Prentice-Hall, Inc., 1969).

It contains a set of readings which represent applications of models to each of the major marketing problem areas, grouped according to the chapter titles of the companion volume, so that the transfer of information from one book to the other will be facilitated. Nearly all the models are interpreted in terms of the state of the art of quantitative modeling in marketing, as it is described in *Management Science in Marketing*; this material, therefore, will not be repeated in the readings book.

The papers included in this collection have been selected on the basis of their newness and their value in application, and are being published on the assumption that a complete study of management science in marketing requires an *in-depth* consideration of a number of good models. Each reading, therefore, in order to be included, could not be widely reproduced in other readings books and at the same time had to reflect a model either meaningful in terms of actual application or worthwhile for its own sake. In light of this effort to present the newest and most promising models and their applications, the collection as a whole reflects, in the editors' opinions, some of the best and most recent examples of management science in marketing. Hopefully, this readings book and its companion volume will encourage still newer applications in this field, so that future revisions will be needed quickly and often.

The editors of this book are of course indebted to the authors and publishers of the individual papers. In addition, we would like to express once again our acknowledgment to our colleagues at M.I.T. and to our secretaries, Judy Mason and Leyla Uran.

Cambridge, Massachusetts

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MODELS OF MARKET RESPONSE



Management, Computers, and Market Simulation

ARNOLD E. AMSTUTZ

Sloan School of Management Massachusetts Institute of Technology



A talk presented at "Marketing and the Computer," a Conference presented by the American Marketing Association, New York Chapter, May 18, 1967. From the Sloan School of Management, Working Paper, 273–67.