ARTIFICIAL INTELLIGENCE IN MARKETING

REVIEW OF MARKETING RESEARCH

Editor-in-Chief: Naresh K. Malhotra

EDITORIAL ADVISORY BOARD

Rick P. Bagozzi University of Michigan, USA

Russell Belk York University, Canada

Ruth Bolton
Arizona State University, USA

George Day University of Pennsylvania, USA

Dhruv Grewal Babson College, USA

Michael Houston University of Minnesota, USA

Shelby Hunt Texas Tech University, USA

Dawn Iacobucci Vanderbilt University, USA

Barbara Kahn University of Pennsylvania, USA

Wagner Kamakura Rice University, USA

V. Kumar St. John's University, USA

Angela Y. Lee Northwestern University, USA

Donald Lehmann Columbia University, USA

Debbie MacInnis University of Southern California, USA Kent B. Monroe University of Illinois, USA

Nelson Ndubisi King Fahd University of Petroleum & Minerals, Saudi Arabia

A. Parasuraman University of Miami, USA

William Perreault University of North Carolina, USA

Robert A. Peterson *University of Texas, USA*

Jagmohan S. Raju University of Pennsylvania, USA

Aric Rindfleisch University of Illinois, USA

Jagdish N. Sheth Emory University, USA

Itamar Simonson
Stanford University, USA

David Stewart

Loyola Marymount University, USA

Rajan Varadarajan Texas A&M University, USA

Stephen L. Vargo University of Hawaii, USA

Michel Wedel University of Maryland, USA

Manjit Yadav Texas A&M University, USA This page intentionally left blank

ARTIFICIAL INTELLIGENCE IN MARKETING

EDITED BY

K. SUDHIR

Yale University, USA

And

OLIVIER TOUBIA

Columbia University, USA



United Kingdom – North America – Japan India – Malaysia – China Emerald Publishing Limited Howard House, Wagon Lane, Bingley BD16 1WA, UK

First edition 2023

Editorial matter and selection © 2023 K. Sudhir and Olivier Toubia. Individual chapters © 2023 The authors.

Published under exclusive licence by Emerald Publishing Limited.

Reprints and permissions service

Contact: permissions@emeraldinsight.com

No part of this book may be reproduced, stored in a retrieval system, transmitted in any form or by any means electronic, mechanical, photocopying, recording or otherwise without either the prior written permission of the publisher or a licence permitting restricted copying issued in the UK by The Copyright Licensing Agency and in the USA by The Copyright Clearance Center. Any opinions expressed in the chapters are those of the authors. Whilst Emerald makes every effort to ensure the quality and accuracy of its content, Emerald makes no representation implied or otherwise, as to the chapters' suitability and application and disclaims any warranties, express or implied, to their use.

British Library Cataloguing in Publication Data

A catalogue record for this book is available from the British Library

ISBN: 978-1-80262-876-0 (Print) ISBN: 978-1-80262-875-3 (Online) ISBN: 978-1-80262-877-7 (Epub)

ISSN: 1548-6435 (Series)



ISOQAR certified Management System, awarded to Emerald for adherence to Environmental standard ISO 14001:2004.

Certificate Number 1985 ISO 14001



CONTENTS

| About the Editor-in-Chief | ix |
|---|------|
| About the Volume Editors | xi |
| About the Contributors | xiii |
| Introduction | xxi |
| The State of AI Research in Marketing: Active, Fertile, and Ready for Explosive Growth K. Sudhir and Olivier Toubia | 1 |
| The Economics of Artificial Intelligence: A Marketing Perspective MengQi (Annie) Ding and Avi Goldfarb | 13 |
| AI and Personalization Omid Rafieian and Hema Yoganarasimhan | 77 |
| Artificial Intelligence and Pricing Diego Aparicio and Kanishka Misra | 103 |
| Leveraging AI for Content Generation: A Customer Equity Perspective David A. Schweidel, Martin Reisenbichler, Thomas Reutterer and Kunpeng Zhang | 125 |
| Artificial Intelligence and User-Generated Data Are Transforming How Firms Come to Understand Customer Needs John R. Hauser, Zelin Li and Chengfeng Mao | 147 |
| Artificial Intelligence Applications to Customer Feedback Research: A Review Peter S. Lee Ishita Chakraborty and Shrabastee Rangiee | 169 |

viii CONTENTS

| Natural Language Processing in Marketing Jochen Hartmann and Oded Netzer | 191 |
|--|-----|
| Marketing Through the Machine's Eyes: Image Analytics and Interpretability | 217 |
| Xiaohang (Flora) Feng, Shunyuan Zhang and Kannan Srinivasan | |
| Deep Learning in Marketing: A Review and Research Agenda <i>Xiao Liu</i> | 239 |
| Anthropomorphism in Artificial Intelligence: A Review of Empirical Work Across Domains and Insights for Future Research Ertugrul Uysal, Sascha Alavi and Valéry Bezençon | 273 |
| Index | 309 |

ABOUT THE EDITOR-IN-CHIEF

Dr. Naresh K. Malhotra was selected as a *Marketing Legend* in 2010 and his refereed journal articles were published in nine volumes by Sage with tributes by other leading scholars in the field. He is listed in Marquis *Who's Who in America*, and in *Who's Who in the World*. In 2017, he received the Albert Nelson Marquis *Lifetime Achievement Award* from Marquis Who's Who. In 2020, Dr. Malhotra was listed in the published list of the *World's Top 2% Most-cited Researchers* across all disciplines, according to research conducted by the Meta-Research Innovation Center at Stanford University. He has several *top* (number one) research rankings that have been published in the literature.

This page intentionally left blank

ABOUT THE VOLUME EDITORS

K. Sudhir is James Frank 1932 Professor of Marketing and Founder-Director of the China India Insights Program at the Yale School of Management with a secondary appointment in the Yale Economics Department. He leads the academic–industry interface for quantitative marketing at the Yale Center for Customer Insights (YCCI).

As a pioneer in the use of structural empirical methods in marketing, Sudhir developed many fundamental models in customer relationship management, salesforce management and compensation, and organizational buying and marketing channels. His recent research uses Al methods such as NLP and video and audio analytics to address questions on advertising, salesforce hiring, online reviews, bias, and privacy. His research has been honored with multiple best paper awards from all of the field's leading quantitative marketing journals.

Sudhir serves on the Connecticut's Taskforce on Data Privacy. He has been a visiting fellow at Microsoft Research and was Editor-in-Chief of *Marketing Science* from 2016 to 2021.

Olivier Toubia is the Glaubinger Professor of Business at Columbia Business School. His research combines methods from social sciences and data science, in order to study human processes such as motivation, choice, and creativity. He currently serves as the Editor-in-Chief at the journal *Marketing Science*. He teaches a course on Foundations of Innovation and the core marketing course. He received his MS in Operations Research and PhD in Marketing from MIT.

This page intentionally left blank

ABOUT THE CONTRIBUTORS

Sascha Alavi is a Full Professor of Sales Management and holds a chair in the Sales Management Department at the Ruhr University Bochum. He deals with the topics of marketing and sales management, digitization processes in marketing and sales, and digital transformations in organizations with their consequences for management and in companies. He is represented in the field with regular publications in top journals. Before working in Bochum, he was an assistant professor of marketing at the University of Lausanne. At the same time, he has many years of consulting experience for leading companies on sales management, leadership, digitization, and phenomena in customer–sales staff interactions. Alavi is an Associate Editor for Sales Management at the European Journal of Marketing. He is a reviewer for the International Journal of Research in Marketing, Journal of Marketing, Journal of Marketing Research, Journal of the Academy of Marketing Science, Journal of Retailing, Journal of Service Research, and Journal of Product Innovation Management.

Diego Aparicio is an Assistant Professor of Marketing at IESE Business School. Diego's research interests broadly cover topics in pricing, artificial intelligence, economics of digitization, online platforms, and behavioral economics. Diego received his PhD in Economics from the Massachusetts Institute of Technology.

Shrabastee Banerjee is an Assistant Professor of Marketing at the Tilburg School of Economics and Management. She is broadly interested in online marketplaces and e-commerce, particularly in how consumers make use of various cues in an e-commerce setting, and how these cues might have an impact on decision-making. Examples include user-generated content such as reviews/ratings, nonfocal prices advertised by a platform on their product page, and recommender systems. The primary methodologies she uses are causal inference, experiments/quasi experiments, and applied machine learning. In a separate stream of projects, she is also interested in applications of digitization for equity and development. She received her PhD in Marketing from Boston University in 2021, where she was also a Rafik Hariri Graduate Fellow. Prior to that, she did her BSc (Calcutta University) and MSc (Warwick University, as a Commonwealth scholar) in Economics.

Valéry Bezençon is a Full Professor of Marketing at the Faculty of Economics and Business at the University of Neuchâtel. He holds a PhD in Management from the University of Neuchâtel and a Master of Science from the Ecole Polytechnique Fédérale de Lausanne. His interests revolve around social marketing and behavior change approaches, such as nudging, in social, environmental and

health domains, as well as consumer behavior in relation to digital technologies. He occupies or has occupied diverse functions at the University, such as dean and vice-dean of the faculty, director of the Institute of Management, director of the Master of Science in International Business Development, codirector of the Bachelor of Science in Economics and Business, and a member of various commissions. He was also an invited, visiting, or affiliated professor at various universities (University of Lausanne, Florida State University, Ruhr-Universität Bochum, Pontificia Universidad Católica del Perú).

Ishita Chakraborty is an Assistant Professor in Marketing and the first Thomas and Charlene Landsberg Smith Faculty Fellow at Wisconsin Business School. Her research interests are in digital marketing, online platforms, text and video analytics, and mobile apps. Her research aims at developing algorithmic market research tools to derive richer, accurate, and real-time insights from unstructured data. She uses natural language processing, machine learning, deep learning, and econometric modeling to study substantive marketing problems in the area of user-generated content, sales negotiations, and brand communication. Ishita received her MA, MPhil and PhD degrees in Quant Marketing from Yale University, School of Management, and an MBA from Indian Institute of Management. Her PhD dissertation received a honorable mention at the AMA John A. Howard Dissertation competition and first and second place at the AMS Mary Kay Dissertation Awards and EMAC-AiMark Dissertation Awards, respectively.

MengQi (Annie) Ding is a fourth-year PhD candidate in Marketing at the Ivey Business School, Western University, Canada. She is broadly interested in platform strategy and online word-of-mouth. Her methodological tool kit includes machine learning techniques and econometric causal inference. One stream of her research focuses on unstructured data, for example, mining new information from image, text, and audio data and applying theory to bring structure into the analysis. Another stream of her research aims to develop new metrics and methodological tools for managers to employ. Currently, she has a publication at Journal of Marketing. Additionally, two of her papers are in the advanced stage of the refereeing process at top journals. Prior to joining the PhD program, Annie received a bachelor's degree in Business Administration (Honors) from Ivey.

Xiaohang (Flora) Feng is a third-year PhD candidate in the Marketing group at CMU Tepper. Following guidance of Prof. Kannan Srinivasan, she is interested in applying computer vision techniques and machine learning methods on marketing problems. She is also interested in explainable AI and has validated the results from machine learning models with human experiments. Her paper on celebrity visual potential is in the advanced stage of the refereeing process at the *Journal of Marketing Research*. Prior to joining the PhD program, Flora received her BS from Peking University.

Avi Goldfarb is the Rotman Chair in Artificial Intelligence and Healthcare, and Professor of Marketing, at the Rotman School of Management, University of

Toronto. Avi is also Chief Data Scientist at the Creative Destruction Lab and a Research Associate at the National Bureau of Economic Research. A former Senior Editor at *Marketing Science*, his research focuses on the opportunities and challenges of the digital economy. He has published academic articles in marketing, computing, law, management, medicine, physics, political science, public health, statistics, and economics. He coauthored two bestselling books on the economics of AI: *Prediction Machines* and *Power and Prediction*. His work on online advertising won the INFORMS Society of Marketing Science Long Term Impact Award, and he testified before the US Senate Judiciary Committee on competition and privacy in digital advertising. Avi received his PhD in Economics from Northwestern University.

Jochen Hartmann is a Professor of Digital Marketing at TUM School of Management. Before that, he was an Assistant Professor at the Faculty of Economics and Business at the University of Groningen. He received his PhD from the University of Hamburg. Jochen's research is located at the junction of digital marketing and machine learning, with a focus on unstructured data analytics (computer vision, natural language processing) and generative artificial intelligence. Broadly, his substantive research interests include social media, multimodal digital advertising, algorithmic fairness, diversity in advertising, and human–machine interactions. His large language models for textual analysis have been downloaded millions of times. For his interdisciplinary research, Jochen has won numerous national and international awards, e.g., the EMAC-Sheth Foundation Sustainability Award and the Best Dissertation Award by EHI Foundation. Before his doctoral studies, Jochen worked as a management consultant at McKinsey & Company.

John R. Hauser is the Kirin Professor of Marketing at the MIT Management School. He has coauthored textbooks on product development, is a former editor of *Marketing Science*, a founder of Applied Marketing Science, Inc., a former trustee of the Marketing Science Institute, a fellow of INFORMS and ISMS, and a past President of ISMS. He has won the Converse, Parlin, Buck Weaver, and Churchill Awards. He teaches listening to the customer and research methods and enjoys research on a variety of practical and sometimes less practical topics.

Chengfeng Mao is a third-year PhD student in the Marketing group at MIT Sloan. He is interested in applying natural language processing and machine learning methods on market research and product innovation. He received his BS in Computer Engineering from University of Illinois at Urbana-Champaign and MS in Computer Science from Carnegie Mellon University.

Kanishka Misra is a Professor of Marketing and Analytics, and Jerome Katzin Faculty Fellowship at the Rady School of Management, University of California, San Diego. Misra's research considers the area of pricing and public policy. His research has been published in leading journals in Marketing, Management, Economics, and Psychology and he has been recognized as an MSI scholar.

Misra earned a BA in Mathematics from the University of Cambridge and a PhD from Northwestern University.

Oded Netzer is the Arthur J. Samberg Professor of Business at Columbia Business School, an affiliate of the Columbia Data Science Institute, and an Amazon Scholar. He is a coauthor of the book *Decisions over Decimals: Striking the Balance between Intuition and Information*. Oded is a world-renowned expert in data-driven decision-making and extracting meaningful insights from data. He wrote dozens of papers published in the top tier academic journals. His research won multiple awards including, *ISMS Long-term Contribution Award*, the *John Little Best Paper Award*, the *Frank Bass Outstanding Dissertation Award* and the *George S. Eccles Research Fund Award*. He serves on the editorial board of several leading journals.

His award-winning research is broadly read and highly cited.

Peter S. Lee is a PhD student in the Marketing group at Yale School of Management. He is interested in applying econometric and machine learning methods to solve problems related to digital marketing. He received his BS in Operations Research from Columbia University. Before his doctoral studies, he worked as a private equity investor in New York.

Zelin Li is a second-year PhD student in the Department of Marketing at MIT Sloan School of Management. He is broadly interested in the application of machine learning methods and economics principles with unstructured data to solve marketing problems and facilitate marketing decisions with behavioral insights. He received his BA in Applied Mathematics and Statistics from University of California, Berkeley and MS in Statistics from Stanford University.

Xiao Liu is an Associate Professor of Marketing at the Stern School of Business, New York University. Professor Liu's research focuses on quantitative marketing, empirical industrial organization, causal inference, and machine learning, with a particular interest in pricing and product management in new marketing contexts, such as social media, e-commerce, voice shopping, live streaming, online-to-offline, and influencer marketing. Professor Liu has published in leading marketing journals, such as *Marketing Science* and *Journal of Marketing Research*, as well as machine learning conference proceedings, such as AAAI and SIGIR. Professor Liu is the recipient of the V. "Seenu" Srinivasan Young Scholar Award in Quantitative Marketing, Frank Bass Award, Marketing Science Institute (MSI) Young Scholars Award, MSI Alden G. Clayton Award, and the INFORMS Society for Marketing Science (ISMS) Competition Award. She received her BS from Tsinghua University and her PhD from Carnegie Mellon University.

Omid Rafieian is an Assistant Professor of Marketing and Demir Sabanci Faculty Fellow of Marketing and Management at the Johnson College of Business and Cornell Tech at Cornell University. Omid's research interests broadly encompass topics related to digital marketing, advertising, personalization, and privacy.

Omid's work brings together methods from machine learning, structural econometrics, and causal inference to design mechanisms that create value in digital marketplaces and study the social and economic implications of such mechanisms in terms of privacy, fairness, etc. Omid serves as a member of the Editorial Review Board of *Marketing Science*. Omid's research won multiple awards such as the Frank M. Bass Outstanding Dissertation Award, MSI Alden G. Clayton Doctoral Dissertation Proposal Award, ISMS Doctoral Dissertation Award, and American Statistical Association Doctoral Research Award. Omid earned his PhD in Marketing from the Foster School of Business at the University of Washington in 2020.

Martin Reisenbichler is a Post Doc at the Chair of Marketing & Customer Insight at the University of Hamburg. Before that, he worked as a "Research and Teaching Associate" at Vienna University of Economics and Business (WU) as part of a PhD in Quantitative Marketing. He owns several years of experience in leading positions in marketing and practice-oriented research in various companies, as well as experience as the founder of an AI-oriented start-up for (semi-) automated writing of search engine-optimized texts. In his research, Reisenbichler applies quantitative AI-based methods for image analysis & image generation, NLP (Natural Language Processing) and NLG (Natural Language Generation) in digital marketing and examines possible applications, options to automate and optimize processes and their impact on businesses and customers. Reisenbichler regularly presents his research at international conferences and has published in internationally renowned journals like in *Marketing Science*.

Thomas Reutterer is Professor of Marketing at the Vienna University of Economics and Business (WU Vienna). He is Head of WU's Institute for Marketing and Customer Analytics and served as founding Academic Director of WU's Master's Program (MSc) in Marketing.

His expertise focuses on analyzing, modeling, and forecasting customer behavior in data-rich environments. His primary research, teaching, and business consulting interests are focused in areas of retail and service marketing, customer value and relationship management, and marketing models for customer-base analysis and decision support. In his research projects, Thomas works in interdisciplinary teams and employs advanced statistical or machine learning methods to provide decision support for issues of managerial relevance. Ongoing projects include applying natural language generation models for content marketing, dynamics in evolving customer–firm relationships, and models for customer valuation and targeted promotions. Thomas' prior research has appeared in various marketing and operations research journals.

David A. Schweidel is Rebecca Cheney McGreevy Endowed Chair and Professor of Marketing at Emory University's Goizueta Business School. Schweidel received his BA in Mathematics, MA in Statistics, and PhD in Marketing from the University of Pennsylvania. He was previously on the faculty of the Wisconsin School of Business at the University of Wisconsin-Madison and

Georgetown University's McDonough School of Business. Schweidel is an expert in the areas of customer relationship management and social media analytics. His research has appeared in leading business journals including *Journal of Marketing, Journal of Marketing Research, Marketing Science* and *Management Science*. Schweidel is the author of *Social Media Intelligence* (Cambridge University Press) in which he and his coauthor discuss how organizations can leverage social media data to inform their marketing strategies. He is also the author of *Profiting from the Data Economy* (Pearson FT Press), in which he details the value of businesses tapping into consumer data for both individuals and companies.

Kannan Srinivasan is the H.J. Heinz II Professor of Management, Marketing, and Business Technologies at the Tepper School of Business, Carnegie Mellon University, Pittsburgh, PA. His core research interests are at the intersection of business and technology and he has published several articles in this area. The topics range from two-sided platforms, freemium pricing, sharing economy, open source software, algorithm bias, blockchain, explainable AI, and influencer marketing. He has published nearly 50 papers in the two leading Informs journals Marketing Science and Management Science. His work has also appeared in other top-tier journals such as Journal of Marketing Research, Journal of Marketing, Quantitative Marketing and Economics, Journal of the American Statistical Association, Harvard Business Review, and The Accounting Review. He has been a Past President of ISMS.

Ertugrul Uysal is a fifth-year PhD student at the Institute of Management at the University of Neuchâtel in Switzerland. His research focuses on how consumers interact with and relate to digital technologies. He is also interested in social media, artificial intelligence, and consumer data privacy. His paper on AI-assistants has been published in the *Journal of the Academy of Marketing Science* in 2022. Prior to his doctoral studies, he received his MS in Cognitive Neuroscience from the University of Trento in Italy and his BS in Biology from Fatih University in Turkey.

Hema Yoganarasimhan is a Professor at the Foster School of Business, University of Washington. She also holds affiliate appointments in Computer Science and Engineering, the Department of Economics, and the Center for Statistics in the Social Sciences. Hema serves as a coeditor at *Quantitative Marketing and Economics* and as an Associate Editor at *Marketing Science and Management Science*. Hema's research brings together large-scale marketing data, economic theory, and econometric and machine learning tools to help firms optimize and automate their marketing decisions. Hema's research has won many awards, including the MSI Alden G. Clayton Doctoral Dissertation Proposal Award, Frank M. Bass Outstanding Dissertation Award, and John D.C. Little Best Paper Award. She has also been recognized as an MSI Scholar and won the Erin Anderson Emerging Female Marketing Scholar and Mentor. Hema received her PhD from Yale School of Management.

Kunpeng Zhang is an Assistant Professor at Robert H. Smith School of Business, University of Maryland, College Park. He also holds affiliate appointments in Applied Math and Scientific Computing (AMSC) and Maryland Transportation Institute (MTI). He serves as an Associate Editor at *INFORMS Journal on Computing*. He is interested in large-scale data analysis, with a particular focus on developing and applying machine/deep learning algorithms to analyze unstructured data for better firm decisions in online social media platforms, specifically, text/network/multimedia representation learning. He has received fundings from various agencies and firms. For more details, please refer to his website: https://kpzhang.github.io. He received his PhD in Computer Science from Northwestern University.

Shunyuan Zhang is an Assistant Professor in the Marketing unit at Harvard Business School. She teaches the first-year Marketing course in the MBA required curriculum. Shunyuan studies the sharing economy and the marketing problems that the dynamics of this new economy present. She deploys machine learning methods including deep learning to extract useful information from unstructured data. Combining this information with structured data, Professor Zhang conducts thorough analysis and policy simulations to examine important issues emerging in the sharing economy arena. Shunyuan earned a PhD in Marketing/Business Technology from Carnegie Mellon University, Tepper School of Business. She has a BS in Physics from the University of Science and Technology of China.

This page intentionally left blank

INTRODUCTION

OVERVIEW

Review of Marketing Research, now in its 20th volume, is a publication covering the important areas of marketing research with a more comprehensive state-of-the-art orientation. The chapters in this publication review the literature in a particular area, offer a critical commentary, develop an innovative framework, and discuss future developments, as well as present specific empirical studies. The first 19 volumes have featured some of the top researchers and scholars in our discipline who have reviewed an array of important topics. The response to the first 19 volumes has been truly gratifying and we look forward to the impact of the 20th volume with great anticipation.

PUBLICATION MISSION

The purpose of this series is to provide current, comprehensive, state-of-the-art articles in review of marketing research. Wide-ranging paradigmatic or theoretical, or substantive agendas are appropriate for this publication. This includes a wide range of theoretical perspectives, paradigms, data (qualitative, survey, experimental, ethnographic, secondary, etc.), and topics related to the study and explanation of marketing-related phenomenon. We reflect an eclectic mixture of theory, data, and research methods that is indicative of a publication driven by important theoretical and substantive problems. We seek studies that make important theoretical, substantive, empirical, methodological, measurement, and modeling contributions. Any topic that fits under the broad area of "marketing research" is relevant. In short, our mission is to publish the best reviews in the discipline.

Thus, this publication bridges the gap left by current marketing research publications. Current marketing research publications such as the *Journal of Marketing Research* (USA), *International Journal of Market Research* (UK), and *International Journal of Research in Marketing* (Europe) publish academic articles with a major constraint on the length. In contrast, *Review of Marketing Research* can publish much longer articles that are not only theoretically rigorous but also more expository, with a focus on implementing new marketing research concepts and procedures.

xxii INTRODUCTION

Articles in Review of Marketing Research should address the following issues.

- Critically review the existing literature
- Summarize what we know about the subject key findings
- Present the main theories and frameworks
- Review and give an exposition of key methodologies
- Identify the gaps in literature
- Present empirical studies (for empirical papers only)
- Discuss emerging trends and issues
- Focus on international developments
- Suggest directions for future theory development and testing
- Recommend guidelines for implementing new procedures and concepts

A FOCUS ON SPECIAL ISSUES

Since volume 8 published in 2011, *Review of Marketing Research* has a focus on special issues realizing that this is one of best ways to impact marketing scholarship in a specific area. The volume editors of all of the special issues have been top scholars. These special issues have focused on the following topics.

| Volume, Year | Topic | Volume Editors |
|-----------------|---|--|
| 8, 2011 | Marketing Legends | Naresh K. Malhotra |
| 9, 2012 | Toward a Better Understanding of the Role of Value in Markets and Marketing | Stephen L. Vargo and Robert F. Lusch |
| 10, 2013 | Regular Volume | Naresh K. Malhotra |
| 11, 2014 | Shopper Marketing and the Role of In-Store Marketing | Dhruv Grewal, Anne L. Roggeveen, and Jens NordfÄlt |
| 12, 2015 | Brand Meaning Management | Deborah J. Macinnis and C. Whan Park |
| 13, 2016 | Marketing in and for a Sustainable Society | Naresh K. Malhotra |
| 14, 2017 | Qualitative Consumer Research | Russell W. Belk |
| 15, 2018 | Innovation and Strategy | Rajan Varadarajan and Satish Jayachandran |
| 16, 2019 | Marketing in a Digital World | Aric Rindfleisch and Alan J. Malter |

INTRODUCTION xxiii

(Continued)

| Volume, Year | Topic | Volume Editors |
|-----------------|--|---------------------------------------|
| 17, 2020 | Continuing to Broaden the Marketing Concept: Making the World a Better Place | Dawn Iacobucci |
| 18, 2021 | Marketing Accountability for Marketing and Non-marketing Outcomes | V. Kumar and David W. Stewart |
| 19, 2022 | Measurement in Marketing | Hans Baumgartner and Bert Weijters |

THIS VOLUME

This special issue focuses on the current state of the art of the literature on Artificial Intelligence (AI) that is relevant to marketing, and thus provides a roadmap and agenda for future research in the field. Together the chapters in this volume lead to new insights, approaches, and directions for research on various aspects of AI. It is hoped that collectively these chapters will substantially aid our efforts to theoretically conceptualize the constructs, collect data to empirically examine the measures, and formulate appropriate models to provide a broader arsenal of research methods as well as fertile areas for future research. I thank K. Sudhir and Olivier Toubia for such an outstanding volume. The *Review of Marketing Research* continues its mission of systematically analyzing and presenting accumulated knowledge in the field of marketing as well as influencing future research by identifying areas that merit the attention of researchers.

Naresh K. Malhotra, Editor-in-Chief