# THEORY AND RESEARCH

Edited by Shelly Rodgers & Esther Thorson



# **DIGITAL ADVERTISING**

*Digital Advertising* offers a detailed and current overview of the field that draws on current research and practice by introducing key concepts, models, theories, evaluation practices, conflicts, and issues. With a balance of theory and practice, this book helps provide the tools to evaluate and understand the effects of digital advertising and promotions campaigns. New to this edition is discussion of big data analysis, privacy issues, and social media, as well as thought pieces by leading industry practitioners. This book is ideal for graduate and upper-level undergraduate students, as well as academics and practitioners.

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# **DIGITAL ADVERTISING**

# Theory and Research

Third Edition

Edited by Shelly Rodgers Esther Thorson



Third edition published 2017 by Routledge 711 Third Avenue, New York, NY 10017

and by Routledge 2 Park Square, Milton Park, Abingdon, Oxon, OX14 4RN

Routledge is an imprint of the Taylor & Francis Group, an informa business

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First edition published by Lawrence Erlbaum Associates, Inc. 1999

Second edition published by Lawrence Erlbaum Associates, Inc. 2007

Library of Congress Cataloging-in-Publication Data

Names: Rodgers, Shelly (Shelly Lannette), 1965– editor. | Thorson, Esther, editor.

Title: Digital advertising : theory and research / edited by Shelly Rodgers, Esther Thorson.

Description: Third edition. | New York, NY : Routledge, 2017. | Includes bibliographical references and index.

Identifiers: LCCN 2016043446 | ISBN 9781138654426 (hardback : alk. paper) | ISBN 9781138654457 (pbk. : alk. paper) | ISBN 9781315623252 (ebook)

Subjects: LCSH: Internet advertising.

Classification: LCC HF6146.I58 A38 2017 | DDC 659.14/4-dc23

LC record available at https://lccn.loc.gov/2016043446

ISBN: 978-1-138-65442-6 (hbk) ISBN: 978-1-138-65445-7 (pbk) ISBN: 978-1-315-62325-2 (ebk)

Typeset in Bembo by Apex CoVantage, LLC To my mother- and father-in-law, June and Joe, who always inspire. —Shelly To my grandchildren, Madeline, Dominic, Will, and Liliana Lynn. —Esther



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### FOREWORD

Someone who knew me well once described me as being "an analogue person in a digital world." It may, therefore, be somewhat ironic for me to be writing the foreword for this book. However, having spent a long career studying advertising and mass communication, I can recognize when a seismic change in advertising is occurring and appreciate the need for insight and direction to help guide advertising theory and research through this transition. This is clearly such a time in the development of advertising, and *Digital Advertising* promises to be a book to provide some of the needed guidance.

Although some trace the beginning of mass media back as far as the development of movable type in 1440, it wasn't until the advent of the penny press in the 1830s and 40s that the media could truly be called a mass medium (Rogers, 1986). Since that time we have experienced a major change in the nature of mass media and media advertising at the rate of only once or twice in every lifetime. Radio and radio networks came into prominence in the late 1920s and early 1930s, changing the nature and focus of advertising messages and a blurring the lines between entertainment and advertising (Fox, 1985). Television became the dominant medium in the early 1950s (Dominick, 1983) and brought with it an increased importance on image and visual messages and the realization of the value of achieving brand recall (Samuel, 2001; Sivulka, 2012). In the past 15–20 years, digital media have begun to revolutionize communications and advertising. Beginning in 2016 or 2017, digital advertising is expected to overtake television in terms of advertising spending (Ember, 2015; Kroll, 2016).

With each dynamic shift in media dominance, we have seen a corresponding change in where advertising dollars are allocated, and this was eventually followed by a major change in the focus of advertising and communication research and theory. Typically, with the start of any new medium, researchers re-examine previous questions and issues to see if they still hold for the new medium. It is typically only after this that we begin to develop new questions and theories based on crucial characteristics of the new medium. We are now at this time in developing our understanding of digital advertising, and this book, *Digital Advertising*, is perfectly positioned to begin this effort by identifying what we currently know and suggesting directions for future research and theory.

The editors of Digital Advertising, Shelly Rodgers and Esther Thorson, are among the leading scholars in advertising and are well qualified to help us identify the changes needed to improve and expand research and theory in these changing times. I have had the pleasure of knowing them both for many years and have seen how highly regarded they are by their peers. Shelly was elected and served as President of the American Academy of Advertising (AAA), and Esther was named as a Fellow of AAA, the organization's most prestigious honor. Both, together and independently, have already produced many important works in driving our understanding of digital advertising and promoting scholarly understanding of advertising in general. Together, they co-edited Advertising Theory, which has played an important role in updating and advancing theory building in advertising (Rodgers & Thorson, 2012). Esther also co-authored one of the first important volumes exploring digital advertising (Schumann & Thorson, 1999), while Shelly has authored or co-authored numerous groundbreaking articles on various aspects of digital advertising. Together they also co-authored "The Interactive Advertising Model: How Users Perceive and Process Online Advertising" (Rodgers & Thorson, 2000). This work has served as an important framework for research on digital advertising, and an updated version of this model serves as a useful starting point for this book.

In *Digital Advertising*, they have once again brought together an excellent group of prominent advertising researchers to explore, expand, and direct the development of advertising research and theory. Contributors to this volume include several current and past editors of the top journals in advertising and mass communication such as Terry Daughtery (*Journal of Interactive Advertising*), Marla Royne (*Journal of Advertising*), Ray Taylor (*International Journal of Advertising*), and Louisa Ha (*Journalism & Mass Communication Quarterly*). Many other chapter authors have been among the leaders of research on digital advertising since its inception, while others represent some of the best up-and-coming minds in the field.

The development and growth of digital advertising will call for many changes in the models, critical concepts, and methods we use to understand the impact of advertising on consumers and society. The growth of Instagram, Twitter, Facebook, Google, YouTube, Snapchat, and numerous other vehicles is highlighting and altering the notion of who creates, distributes, and controls advertising and brand messaging. Donald Trump's 2016 presidential campaign has demonstrated how a new two-step flow from Twitter or Instagram to media outlets and then on to the public can be every bit as effective, or more so, than traditional media advertising. These changes may enhance the importance of concepts such as trust, message/brand salience, and strength of belief. Emerging technologies such as virtual reality and holographic imaging may increase our focus of concepts like presence and emersion. They are also likely to alter our reliance on various methods of analysis, increasing the importance of tools like multi-level modeling and network analysis. The ability of digital media to provide seamless feedback on media use, advertising exposure, and purchase behavior provides huge amounts of information for exploration, enhancing the importance of techniques such as database management, web analytics, and data mining, making information and computer science more integral to advertising.

It is an interesting and exciting time for advertising theory and research. However, we are still in the early stages of this media evolution. Digital advertising is likely to grow in ways still unimagined and with it, our theories and models will also need to change. *Digital Advertising* is a book to help start us on this journey.

> Ronald J. Faber Professor Emeritus University of Minnesota

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## PREFACE

### **Digital Advertising**

With an almost infinite number of digital possibilities, communication fields are in chaos. There's a lot that brands can do, but how do brands decide which avenues to pursue? Our response is to begin with sound theory about targeted, intentional messages combined with the recognition that customers have become extremely active in this process.

Building on this premise, *Digital Advertising*—co-edited by Shelly Rodgers and Esther Thorson—updates two previous editions:

- Schumann, D., & Thorson, E. (2007). Internet advertising: Theory and research (2nd Ed.). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.
- Schumann, D., & Thorson, E. (1999). *Advertising and the World Wide Web*. Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.

Our primary objective was to offer a wide-ranging text that draws on current research and practices in digital advertising by introducing key concepts, models, theories, evaluation practices, conflicts, and issues for individuals interested in this area.

So what prompted this 3rd edition? For starters, the prior editions of the text were written during a time when internet advertising was synonymous with banner ads and pop-ups, and interactivity consisted of connecting with consumers via email, instant message, or blogs. And much of the scholarly research at that time focused on testing traditional concepts online, such as segmenting or using clicks to determine the effectiveness of internet ads.

A lot has changed since then, starting with the terminology and, to some degree, the metrics used. *Digital Advertising* provides a detailed and current view

of what might be considered digital advertising theory. The book provides readers with a working knowledge of the primary theoretical approaches and will help readers synthesize the vast literature on digital advertising. The book also helps to provide the critical tools necessary to evaluate and understand the effects of digital advertising with emphasis on mobile and social media. Chapters are authored by leading scholars from around the globe, and several leading industry practitioners provide their thoughts about theory, metrics, and a host of other issues related to digital advertising. To put theories into action, practical examples are provided.

Who will benefit from this book? Given our focus is on scholarly research, *Digital Advertising* is intended to address the need for a current scholarly text that spans the digital advertising literature. Thus, the book is an essential reading for graduate and upper-level undergraduate students, as well as academics and practitioners wanting to understand how to carry out effective digital advertising.

### **Theoretical Premise**

To better orient the reader, the theoretical premise of *Digital Advertising* is that the crucial mechanism is a network of message movements across platforms, with frequent message curation, manipulation, and even creation (e.g., user-generated advertising) by participants (formerly known as the audience).

The current media landscape is moving at such a fast pace, fueled by digital technologies and media, one might question whether it is possible to document this dynamic environment in a thorough and detailed manner. We believe it is not only possible, but with the right theoretical premise, such a book may get ahead of the debate by articulating a forward thinking research agenda with staying power, even within a fast-changing digital environment.

Many of the strategies and tactics of advertising are understood in the limited theoretical perspective of message distribution to individuals (e.g., targeted behavioral advertising) or to aggregates (TV primetime audiences).

However, most brand campaigns now employ combinations of paid, earned, social, and owned media tools. Further, advertising agencies and advertising researchers have long considered their main task to be distributing television, print, or digital ads, and then measuring how consumers respond to them. More and more, however, the movement of advertisements through what Henry Jenkins (2008) calls a "spreadable media model" has become the central focus for advertising campaigns.

We call this process "promotional radiating." Indeed, radiation through a network involves many examples of message functionalities significantly different from those intended by message creators. This large and complex movement and development involves participants passing along or endorsing messages, viral phenomena in which reach skyrockets, and what promotion professionals call electronic word-of-mouth (eWOM).

Big data analysis tools have made it possible to track and analyze brandrelated activities in this complex network of message movement. This is critically important to professional persuaders because it is a new view of consumer response, and because that flow and patterning itself can be joined and influenced by persuaders.

Brand "fandom," trans-media branding, image recognition, real-time social media analysis, and content marketing are tools that have become crucial for effective brand campaigns. Many of these concepts are relatively new. *Digital Advertising* aims to fill a void in the literature by bringing together an elite group of "forward thinkers," who lay the groundwork for these and other current issues in digital advertising scholarship. And each chapter provides suggestions for future research.

### How the Book is Organized

Drawing from the book's theoretical premise, *Digital Advertising* is organized into six main parts: 1) Research Foundations, 2) Theory Breakthroughs, 3) New Approaches to Research, 4) Digital Media—RadiatingVoices, 5) Evaluating Digital Advertising, and 6) Future Research Trends and Opportunities.

To add cohesion throughout the text, each section draws from and builds on Chapters 1 and 2, which provide a theoretical premise for the book.

### Part I—Research Foundations

Part I sets the stage for the entire book by providing four chapters that lay a foundation for understanding key theories and concepts presented in the book.

### Chapter 1

To demonstrate the utility of the original IAM and to illustrate uses of the new IAM, Chapter 1, by Rodgers, Ouyang, and Thorson, provides the findings of a content analysis of 385 articles that cite the IAM. The purpose was twofold: 1) show how the original IAM has been used by scholars worldwide, 2) set the stage for an updated version of the IAM that accounts for changes in emerging technology since the introduction of the original IAM.

### Chapter 2

Building on Chapter 1, Chapter 2, by Thorson and Rodgers, presents a new model that encapsulates and extends the IAM. Called the Networking Advertising Model, or NAM, Chapter 2 provides the beginnings of a theory that takes networking and "spreadability" into account, and suggests examples that help to illustrate how the new model may operate with regard to advertising.

### Chapter 3

The purpose of Chapter 3, co-authored by Tham, Rodgers, and Thorson, is to map industry trends in digital advertising. The primary question to be addressed

is which areas of industry could provide further advancement by scholars? The chapter involves a close analysis of trends as identified in the last few years of the industry publication *Advertising Age*.

### Chapter 4

Chapter 4, by Daugherty and Djuric, report the results of a systematic analysis of interactive advertising research using the paradigm funnel and based on the *Journal of Interactive Advertising*. The results provide a useful starting point for scholars wanting to understand what research has been conducted—as witnessed through the pages of JIAD—and where their research may fit into this growing body of research.

### Part II—Theory Breakthroughs

To help readers navigate the vast literature on digital advertising and promotion, Part II articulates current breakthroughs in theories. Chapters are written on a broad range of topics ranging from psychological processing of message types (e.g., video ads, native ads, user-generated content), digital channels (e.g., social media, mobile), and advertising clutter.

### Chapter 5

Ha's Chapter 5 reviews the evolution of research on advertising clutter in three different contexts: traditional media, online media, and mobile platforms.

### Chapter 6

Chapter 6, by Sundar, Kim, and Gambino, presents the theory of interactive media effects (TIME) and analyzes seven recent trends in digital advertising via two proposed theoretical routes, i.e., cue route and action route.

### Chapter 7

Using the theory of psychological reactance, Morimoto (Chapter 7) examines the relationship between consumer privacy online and negative responses to digital advertising. This includes perceived intrusiveness, irritation and avoidance, and the role of advertising personalization in easing negative responses to digital advertising.

### Chapter 8

Jung, Min, and Martin, in Chapter 8, draw on reversal theory to offer a compelling approach to explain complex consumer behaviors that fluctuate between meta-motivational states in consumers' cyber journeys. The authors review the

### xxiv Preface

digital advertising literature on reversal theory and conclude by providing possible avenues for future research.

### Chapter 9

Chapter 9, by Duff and Lutchyn, looks at how consumers exert control over their media and ad environment by limiting their exposure to advertising through avoidance, engaging with other content simultaneously, or meta-engaging with ads by being aware that those ads are supporting the media content that the ad is placed in.

### Part III—New Approaches to Research

Part III drills down into the various approaches to digital advertising. Researchers and practitioners have always been concerned with how to get people to pay attention to, and how to keep attention focused on advertising—and digital advertising is no different. YouTube's attempt to get people to watch ads by forcing an ad prior to the viewing of a video is one example. Digital advertising has also influenced the way in which people view advertising environments necessitates research to determine how or what researchers and practitioners can do to enhance attentiveness and persuasion in digital and traditional environments. Thus, this section is devoted to highlighting key factors that can influence digital advertising strategies.

### Chapter 10

Chapter 10, by Lombard and Synder-Duch, introduces the concept of presence (or telepresence) and offers a theoretical framework and research paradigm that is relevant to advertising in the digital age.

### Chapter 11

With the changing nature of the healthcare environment, Chapter 11, by Royne, Pounders, Levy, and Jones, provides an overview of some of the pressing healthcare issues and discusses various digital media that may be used to provide health information, followed by a discussion of how message strategies may be used to more fully engage with consumers who require a deeper knowledge of health issues.

### Chapter 12

De Veirman, Cauberghe, Hudders, and De Pelsmacker (Chapter 12) discuss social networking sites (SNS) brand communities and provide an overview of previous

research and an empirical study on how people interact with brands on SNSs and what motivates them to do so.

### Chapter 13

Yoo and Baek, in Chapter 13, present the event study method and demonstrate how it can be used to explain digital advertising's accountability. The authors then examine the effect of digital advertising on a firm's financial value to demonstrate the method's utility.

### Chapter 14

Kelly, Kerr, and Drennan (Chapter 14) examine advertising avoidance by building on the theoretical premise of promotional radiation and applying an approach/ avoidance framework to define advertising avoidance and identify types of antecedents.

### Part IV—Digital Media—Radiating Voices

Now, more than ever, consumers in a digital environment actively participate in the message creation/dissemination process. The world is changing, and the continued growth of global commerce and the advertising industry in emerging markets will increasingly change the ways that global marketers do business (Taylor, 2013). Part IV examines digital promotional techniques and channel selection with a focus on current research and literature on social media, the role of search, segmenting and targeting, mobile, in-game advertising, and emerging markets, to name a few.

### Chapter 15

Chapter 15, by Muntinga, Moorman, Verlegh, and Smit, demonstrates why brandrelated content creation is the consequence of various factors working in concert. Different consumers are shown to have different motivations to create brandrelated content, and the influence of consumer characteristics on brand content creation is mediated by intrinsic motivations.

### Chapter 16

With the proliferation and prevalence of social media and social networking sites, Chapter 16, by Alhabash, Mundel, and Hussain, provides the landscape of social media usage patterns in advertising, marketing, and public relations. The chapter draws on classical advertising/persuasion theories to better understand social media's fit in the chain of processes leading to persuasion.

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### Chapter 17

In Chapter 17, Shoenberger reviews the concept of privacy in the digital context and outlines the privacy paradox.

### Chapter 18

Herrewijn and Poels (Chapter 18) discuss in-game advertising, provide a definition of the practice, and give an overview of its benefits and drawbacks. They present the results of a case study that examines how players respond to different types of ads in digital games.

### Chapter 19

McDuff's chapter (Chapter 19) illustrates how measurement of emotion, in addition to cognitive responses to advertising, are not only possible with digital technology but necessary, and shows how these practices have been applied to evaluating digital advertising effectiveness.

### Part V—Evaluating Digital Advertising

Measuring the impact of advertising efforts has been the focus of advertising researchers and practitioners for decades. New approaches in social media enable advertisers to target consumers with highly personalized content, product placements are used to enhance gaming experiences, and the integration of traditional with digital advertising has changed the way that people interact with and use traditional media. Advertisers are challenged to create new and novel ways to compose a seamless brand experience, changing the way that people engage with brands. But do these novel approaches work? As our authors demonstrate in this section, more studies are needed that examine the effectiveness of various evaluation approaches, including the use of new metrics designed to capture meaningful brand experiences and advertising value.

### Chapter 20

Chapter 20, by Taylor and Costello, discusses factors that have led to the rise of digital advertising internationally. The authors examine digital advertising research from three perspectives, propose general principles related to digital advertising internationally, and conclude by summarizing major findings and outlining future areas to guide international digital advertising research.

### Chapter 21

In Chapter 21, Rejón-Guardia and Martínez-López provide an extensive literature review on online advertising, emphasizing traditional forms of internet ads and social network ads. The chapter concludes with recommendations for managers and academics for improving the efficacy of online advertising.

### Chapter 22

Pergelova and Angulo-Ruiz (Chapter 22) synthesize the digital advertising effectiveness literature and propose a model that incorporates a broader set of metrics, including consumer empowerment, and outlines an efficiency methodological measurement approach that captures a diversity of input and outputs.

### Chapter 23

Mackey and Liang (Chapter 23) review the health advertising literature as it relates to digital advertising and identify trends and challenges, such as health and pharmaceutical advertising, direct-to-consumer advertising, the growing role of social networking in health, and the need for reliable data on health marketing expenditures.

### Part VI—Future Research Trends and Opportunities

The majority of the book is devoted to updating what has changed in the digital realm since the first and second editions of this text. Our final section, PartVI, is devoted to projecting ahead about what else may change or what we might expect to see coming down the proverbial pipeline. Thus, the final section draws on the collective wisdom of veteran and beginning scholars, who provided "think pieces" about where research on digital advertising and promotion has been and where it might be headed. Our purpose in this final section is to leave readers with tangible ideas for their own studies and research on digital advertising.

### Chapter 24

Chu, in Chapter 24, examines the role of culture in electronic word-of-mouth (eWOM), noting that the majority of studies on eWOM have been conducted in the U.S. and Western contexts, leaving a lot of questions regarding the role of eWOM in cross-cultural settings.

### Chapter 25

Schmierbach (Chapter 25) presents and defines the concept of immersion, arguing that the term is vague, and findings do not yet account for how this relationship may be nonlinear or moderated by the content of the ad.

### Chapter 26

Dardis (Chapter 26) discusses in-game advertising and argues there are many under-examined variables that can affect brand-related outcomes, specifically related to virtual direct experience (VDE).

### Chapter 27

Limperos (Chapter 27) also examines advertising in video games but with a focus on understanding key factors that may affect how people process and recall ads that appear in video games, followed by suggestions about how researchers might continue to study the effectiveness and overall value of this form of digital advertising.

### Chapter 28

Chapter 28, by Pohlmann and Chen, explores how social media has disrupted traditional measurement of affect. They discuss challenges with the traditional hierarchy of effects models and propose a new interactive response model to better understand and manage consumers' interactions with social media advertising.

### Chapter 29

Chapter 29, by Huh, argues that computational social science research that uses big data has great potential for examining consumers' interactions with and responses to digital advertising, and for contributing to advertising theory building. She presents important considerations for multidisciplinary computational advertising research and provides several new directions for future research in this area.

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### ACKNOWLEDGMENTS

We are so deeply indebted to all our contributors, without whom this book would not be possible. Your creative and forward-thinking chapters have inspired us, and we feel lucky to have the privilege to edit your works!

A huge thanks goes out to our two detailed and highly organized editorial assistants—Frances Gordon and Dani Myers. Thank you!

We also thank our publisher friends, Christina Chronister and Julie Toich, for their organization and assistance—you were a sheer delight to work with throughout the entire process.

There were many, many colleagues who were kind enough to discuss the book with us in preparing the proposal, identifying potential contributors, and finalizing chapters—you know who you are—thank you for your great ideas and generosity!

Shelly is glad to have another chance to work with her long-time friend and colleague, Esther.

Esther thinks that Shelly is the most organized human she knows, and as always, learns so much working with Shelly!



# PART I Research Foundations



# 1 REVISITING THE INTERACTIVE ADVERTISING MODEL (IAM) AFTER 15 YEARS

### An Analysis of Impact and Implications

Shelly Rodgers, Sifan Ouyang, and Esther Thorson

### Introduction

The Interactive Advertising Model (IAM), developed by Rodgers and Thorson (2000), was one of the first models that theorized about the interactions between internet users and online advertisements. In the 15+ years since its inception and initial publication, the model has been widely referenced by scholars from various academic disciplines (advertising, marketing, IT, etc.), and is recognized as an effective model for understanding how interactive advertising "works" (Kim, Hayes, Avant, & Reid, 2014).

Despite the growing number of scholarly publications and articles citing the IAM, it is both necessary and beneficial to evaluate the IAM's impact and influence on scholarship by examining how scholars have used and critiqued the IAM over the past 15 years. This examination allows quantification of the impact of the IAM and enhances further understanding of the explanatory power of the model in digital advertising, as well as other contexts. This analysis also sheds insights on how the IAM may be revised and adapted to the fast-changing landscape of digital advertising.

The objectives of the present chapter are two-fold: First, we quantitatively assess the impact of the IAM by analyzing all peer-reviewed articles citing the IAM over a 15-year period (2000 to 2015). Second, we use the content analysis findings to identify themes, trends, and potential challenges associated with the IAM. Chapter 2 then builds on the results of this chapter by presenting an extended version of the IAM that attempts to fill gaps identified by research reported in Chapter 1.

The remainder of this chapter is organized as follows. First, we briefly review the IAM and its various components. Next, we provide an explanation of the methodology used to analyze articles that cite the IAM.Then, results of our analysis are provided, followed by a discussion of theoretical implications going forward. Based on our results, we conclude that the IAM remains useful for understanding how people perceive and process advertising in a Web 1.0 environment; however, the model may need to be revised and updated to reflect the current and dynamic Web 2.0 and even Web 3.0 technologies.

### **Overview of the IAM**

Rodgers and Thorson (2000) conceptualized the Interactive Advertising Model, or IAM, as an integrative process, based on three dominant paradigms or schools of thought: functional, structural, and information processing (see Figure 1 from Rodgers & Thorson, 2000). The authors argued that a theoretical integration of multiple paradigms could serve to better understand and interpret the complex nature of the interactive environment, as the internet itself was an "integrated medium" (Rodgers & Thorson, 2000, p. 43).

Both function and structure could determine the internet users' information processing of advertising in cyberspace. The functionalist view explains how (mode) and why (motive) users use the internet, as well as the various stages of information processing (attention, brand liking, etc.), consumer's attitudes (e.g., form attitudes toward the ad), and behaviors (e.g., click on the ad) as outcomes influenced by online ads. The structural view, on the other hand, helps to understand the basic components (ad types, formats, and features) of the stimulus environment primarily controlled by advertisers at the time of the model's inception.

### Function

From a functionalist perspective, the IAM proposed that internet users control the initiation of internet activity, as they enter cyberspace with specific goals in mind and constantly adjust to the interactive environment to fulfill these goals. Internet motives, the inner drive to carry out the internet activity, can explain why individuals use the internet. Four categories of reasons were identified as the primary motives for entering cyberspace (Rodgers & Sheldon, 2002): researching, communicating, surfing, and shopping. The categories of internet motives were suggested to not only influence consumer responses to online ads differently, but also to help advertisers determine the most effective ad appeal and ad type. However, users could have more than one internet motive in mind before entering cyberspace and switch motives during their online activities when seeing an unexpected stimulus, or for some other reason.

Mode, the extent of a user's goal-directedness of internet activities, conjointly determines the level of ad processing with motive, as internet motive will influence the mode in which users use the internet. For example, researchers tend to be "serious" with a highly goal-directed mode, while surfers tend to be "playful" without a specific goal in mind.

As discussed, individuals are also expected to experience several stages of information processing of online ads: attend to, remember, and develop attitudes toward internet ads, as well as actions taken in response to internet ads. In terms of evaluating consumer responses to online ads, almost all measures used in traditional advertising could be applied to interactive advertising, such as attitude toward the ad or purchase intention. In addition, new types of measures were available to examine effects of online ads, e.g., hits, click-through rates, and time spent on websites.

### Structure

The IAM argued that information processing of online ads would be influenced by the presentation of the interactive ad, as well as characteristics of the stimulus environment. Thus, the structural view was provided to complement the functional view in terms of understanding how physical features could interact with users' motive or mode. As a result, the IAM provided a classification of all the "then available" ad types and formats 15+ years ago and discussed some common ad features at that time.

### Ad Type

Ad type represents the general structure of any advertisement and was classified into five main categories according to Thorson (1996): product/service, PSA, issue, corporate, and political. The IAM argues that ad type can predict whether, or how much, cognitive effort is involved in processing online ads and how different ad types can often indicate consumer responses to the ad.

### Ad Format

Ad format is the manner in which the online ad appears. The IAM argued that different formats would result in differential processing and outcomes. Several then-popular interactive ad formats were examined using the IAM model: banners, interstitials (pop-ups), sponsorships, hyperlinks, and websites.

### Ad Feature

The internet was conceptualized as having more ad features than broadcast or print media because the medium itself was more complex than traditional media. The IAM provides a comprehensive list of two subjective ad features, structures based on consumer responses (e.g., "attitude towards the website" and "interest"), and objective ad features (e.g., color, size, or typeface) across print, broadcast, and the internet. The IAM suggests that both objective and subjective ad features would have an impact on consumer responses and would interact with users' motives as well. In addition, interactivity was seen as the most salient ad feature made possible by the internet, and it would allow users to be involved in the persuasion process by changing the structural elements.

# Methodology

Now that the basic components of the IAM have been reviewed, the next step was to conduct a search of the literature to collect scholarly articles that cite the IAM. This was accomplished with a literature search on Google Scholar with the aim to collect peer-reviewed literature citing the IAM. Compared to other databases, Google Scholar not only has relatively accurate citation counts, but also covers a larger collection of conference proceedings and international journals (Meho & Yang, 2007). A total of 385 citing articles were found, at the writing of this chapter, using a "cited-by" search in Google Scholar, and the citation details (i.e., author, publication, title, and year) were exported using Zotero for further content analysis.

Of the 385 articles identified by a Google Scholar search, 243 were scholarly journal articles (63.1%), 71 were theses or dissertations (18.4%), 39 were book chapters or sections in books (10.1%), and 32 were conference proceedings (8.3%). We report results from all sources citing the IAM, as presented; however, several sources were not read for this analysis because they were written in languages other than English.

A codebook was then developed for a content analysis of all 385 cited articles. There were five main coding categories, adapted from Kim et al. (2014, p. 1): 1) basic information (title, item type, publication, year, author, university, and locale); 2) methodology (research approach, reasoning, method type, method, theory presence, and theory); 3) data collection (sampled population, unit of analysis, data collection method, big data, and technology); 4) research details (independent variables, dependent variables, phenomenon, topic area, media effect type, ad format examined, and social media examined); and 5) IAM contribution (IAM use, IAM citing aspect, IAM citing detail, implications of broader research, and implications of IAM).

Two graduate students were the coders. Inter-coder reliabilities were taken at the beginning and ending of the content analysis, and an overall intercoder reliability of .788 (Scott's pi) was achieved.

# Results

## IAM Citation Trends

As shown in Figure 1.1, the past five years have seen an increase in citations of the IAM, particularly between 2011 and 2014, during which more than 160 articles

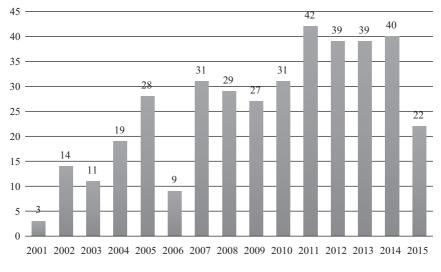


FIGURE 1.1 Number of Journal Articles Citing the IAM Since 2000 (Total N=385)

Publication	No. Of Citing Articles
Journal of Interactive Advertising	23
Journal of Advertising	9
International Journal of Advertising	9
Int. Journal of Internet Marketing and Advertising	5
Journal of Marketing Communications	3
Advances in Consumer Research	3
Journal of Current Issues & Research in Advertising	3

TABLE 1.1 List of Journals that Frequently Referenced the IAM

were published citing the IAM. The number of citing articles appears to peak in 2011 (42 articles).

Three journals that contributed the most in terms of the number of published citing articles include *Journal of Interactive Advertising* (23 articles), *Journal of Advertising* (9 articles), and *International Journal of Advertising* (9 articles). In addition, the IAM appeared three or more times in the following advertising journals: *International Journal of Internet Marketing and Advertising* (5 articles), *Journal of Marketing Communications* (3 articles), *Advances in Consumer Research* (3 articles), and *Journal of Current Issues and Research in Advertising* (3 articles).

In terms of international impact, first authors affiliated with non-U.S. institutions contributed to more than 65% of the 372 articles linked to a known university. International scholars represent 75 countries and regions, among which scholars from Spain, South Korea, Germany, China, and Taiwan authored more than 100 citing articles combined. In addition, more than 50 journal articles citing the IAM were written in languages other than English.

# Evaluation of the IAM's Contribution

To accurately evaluate the contribution of the IAM, the content analysis examined the extent to which the articles referenced the IAM (IAM use), how other scholars used the IAM (IAM citing aspects), and what specific topics were discussed in reference to the IAM (IAM citing detail). Results showed that over 35 percent of all citing articles used the IAM to provide evidence to support the discussion of two main aspects: hypothesis development and/or research results. About 12 articles (4.3%) applied the IAM as a theoretical framework to develop a hypothesis or test prepositions and make predictions from the original article (Rodgers & Thorson, 2000). For example, the study by Burns (2006) looked at how audience attitudes varied by six different digital ad formats, which was supported by a major implication of the IAM regarding the variation of processing outcomes of different ad formats. The rest of the articles (60.6%) briefly mentioned or referenced the IAM to inform the background or discussion of internet advertising.

## Most Cited Aspects of the IAM

The original IAM model proposed two ways of looking at the interactive processing of online ads: consumer-controlled aspects or advertiser-controlled aspects. The results from the content analysis suggest that about 35.3 percent of citing articles focused on consumer-controlled aspects, while 25.2 percent focused on advertiser-controlled aspects of online ads. The remainder of the articles did not have a clear emphasis on either consumer- or advertiser-controlled aspects.

Several citing aspects emerged as themes that were frequently referenced by the articles: internet motives and modes (30.3%), ad formats and ad features (23.0%), consumer responses and outcomes (21.1%), and interactivity (9.6%).

# Internet Modes and Motives

The aspect of the IAM that has received the most scholarly attention relates to the functional aspects presented by the model, i.e., internet motives and modes. Among the 384 citing articles, "mode" was mentioned in 123 articles and "motive" was mentioned in 68 articles.

As discussed, motive and mode are two concepts dealing with "drive" and "goal-directedness" of web users' surfing behavior, respectively, both of which can influence the information processing of advertising stimuli. Rodgers (2002) examined the moderating role of internet motives on processing of banner ads when there was a match of ad appeal and individuals' motive. The same study also

Primary Aspects of the IAM	Count of Adjusted IAM Citing Details	Percentage of Adjusted IAM Citing Details
Internet motive	61	23.37%
Consumer responses/outcomes	55	21.07%
(forget the ad, purchase the product, etc.)		
Ad formats	41	15.71%
Model	29	11.11%
Interactivity	25	9.58%
Ad features	19	7.28%
Mode	18	6.90%
Cognitive tools (attention, memory, attitude, etc.)	7	2.68%
Ad type	6	2.30%
Grand Total	261	100.00%

TABLE 1.2 Primary Aspects of the Interactive Advertising Model

provided a review of the original concept of motive to complement the IAM and also suggested the necessity of looking at motives and modes conjointly to account for individual variation.

Following this study, scholars started to research how motives can impact consumer behavior from various aspects upon receiving an advertising stimulus. For example, Yang (2006) examined how information versus entertainment motive can moderate search patterns of product information; Zanjani, Diamond, & Chan (2011) evaluated ad recall of congruent e-magazines by information seekers versus surfers. While the classification of the originally proposed four basic motives proved to be valid, a cross-cultural study suggested internet motives differed by country (Rodgers, Jin, Rettie, Alpert, & Yoon, 2005).

Other studies looked at mode, or the goal-directedness of the internet users. The IAM suggested that users with a higher level of goal-directedness would be more defensive against online advertising. Hupfer and Grey (2005) found that highly goal-directed individuals perceived banner ads with a sample offer as a distraction, while the same incentive generated positive attitudes from experiential users. Other studies incorporated the IAM to examine some negative "side effects" of internet advertising, such as banner blindness, advertising avoidance (Duff & Faber, 2011), and advertising clutter (Ha & McCann, 2008). Likewise, goal-orientated users were found to be more responsive to website design elements and customized features (Kabadayi & Gupta, 2011).

#### **Consumer Responses to Exposure of Different Ad Formats**

The IAM provided a framework for understanding ad processing, which made it easier for researchers to compare consumer responses to different formats of digital advertising. Among different ad formats, banners (15.8%) and websites (24.8%) received the most extensive examination from scholars that cite the IAM. Attitudes toward a specific ad format were not only found to significantly influence attitudes toward the ad (Burns & Lutz, 2006), but also could implicitly impact attitudes toward the advertised brands due to the intrusive nature of some ad formats, such as pop-ups (Madhavaram & Appan, 2010). General attitudes toward online advertising were also found to influence behavioral intentions toward brands (Lee & Miller, 2006). More studies evaluated antecedents and consequences of processing online ads of different formats: social factors (Zeng, Huang, & Dou, 2009), persuasion knowledge (Tutaj & van Reijmersdal, 2012), and advertising device or medium (Tutaj & van Reijmersdal, 2012) played a significant role in influencing reactions to different advertising formats. In addition to affective outcomes, internet advertising credibility (Choi & Rifon, 2002) was also investigated.

Regarding types of media effects, the results of the content analysis showed that approximately 86.1 percent of citing articles (N = 251) evaluated one or more aspects of cognitive, affective, and behavioral effects to ad exposure. Attitudes toward ads, attitudes toward a specific ad format or ad medium, and attitudes toward brands were the most common affective measures examined in articles that cited the IAM (21.1%, N = 251); ad recall, recognition, and level of information processing were among the measures of cognitive effects examined (7.1%, N = 251); purchase intention and intent to revisit the websites were examined frequently for behavioral aspects of ad effects (17.8%, N = 251).

#### New Ad Formats and Promotional Techniques

Some recent studies have examined several of the newer trends in digital advertising to better understand the underlying mechanism of ad processing, such as the investigation of brand recall of in-game advertising (Siemens, Smith, & Fisher, 2015), attitudes toward branded flash mob video ads (Grant, Botha, & Kietzmann, 2015), and psychological effects of ad-video congruency on YouTube (Kononova & Yuan, 2015). Interactive television advertising was also examined from cognitive, affective, and behavioral aspects (Benning & Ang, 2002; Levy & Nebenzahl, 2007; Aymerich-Franch, Delgado, Reina, & Prado, 2010; Levy, 2010).

For new ad formats made possible by new technologies, social media advertising and mobile advertising were two emerging trends due to the widespread use of smartphones. Advertising on Facebook, YouTube, and Twitter received the most extensive scholarly attention.

While most citing articles examined the effects of exposure to online ads, an increasing number of recent studies have gone beyond the traditional definition of "advertising" and extended implications from the 2000 IAM to examine other interactive promotional techniques. For instance, approximately 10 percent of all citing articles that focused on media effects (N = 202) involved evaluation of interactive applications. These studies examined both online and offline promotional techniques, such as an online product tour or demo (Gao, 2011;

Park, Park, & Rhee, 2013), public display applications (Alt, Schneegass, Girgis, & Schmidt, 2013), digital menu boards (Peters, 2011), and humanlike navigation (Yang, 2006). It should also be noted that the majority of the research in this stream came from outside the advertising discipline.

# Evaluation of Interactivity and Other Ad Features and Technologies

Rodgers and Thorson (2000) argued that interactivity was a unique feature of internet advertising that added complexities beyond what traditional advertising experiences account for when examining processing of online ads, and that subjective and objective interactivity should both be investigated thoroughly.

With the progress of web technologies over the years, there has been a call for a distinction of users' perception of interactivity and what constitutes interactive features. Tremayne (2005) argued that functional aspects and perceptual aspects of interactivity should be examined independently, and that the users' role, rather than technological manipulation, should be emphasized in terms of cognitive processing patterns and individual traits related to interactivity. Wu (2005) found that perceived interactivity mediated the role of actual interactivity on influencing attitudes toward the websites. Broekhuizen and Hoffmann (2012) found perceived interactivity influenced low-skilled individuals more prominently in terms of information processing quality, despite the fact that high-skilled users were more involved with interactivity features on websites (Rodgers & Thorson, 2000). Gender (McMahan, Hovland, & McMillan, 2009) and need for cognition (Sicilia, Ruiz, & Munuera, 2005) were also found to impact perceived interactivity. Animation is another ad feature that has received a lot of attention in articles citing the IAM, especially when animated banner ads were first popular. Scholars have looked at how animation speed (Sundar & Kalyanaraman, 2004) can positively impact recall and attention, as well as potential positive attitudinal outcomes resulting from animation (Yoo, Kim, & Stout, 2004).

#### Discussion

The purpose of the chapter was to assess the impact of the Interactive Advertising Model (IAM) on the literature by examining scholarly articles that cited the model over a 15-year period (2000 to 2015) with the goal to draw on results to update the model and improve the model's utility. Citing articles were identified with a Google Scholar search, yielding 385 articles at the writing of this chapter. A content analysis was undertaken to understand who is citing the IAM, what aspects of the IAM are being cited, and what potential criticisms or gaps are apparent in the IAM.

The results of the content analysis show that the IAM has been widely cited by scholars as a conceptual framework to understand web users' information processing of online advertising. Advertising researchers were the primary citers of the IAM, but researchers from disciplines other than advertising (e.g., marketing, consumer behavior, information technology, etc.) have also cited the IAM in their research. Although advertising journals were the primary outlets for articles that cited the IAM, peer-reviewed publications in marketing, business and management, psychology, and information technology have also published articles that referenced the IAM. The IAM received broad international citation from scholars overseas, and there were quite a number of articles citing the IAM that were written in languages other than English.

The IAM presents a number of components, but the most cited component was the consumer-controlled aspects of the model, particularly related to internet motives/modes (i.e., functionalist school of thought) and, to some extent, ad formats/features (i.e., structural school of thought). Consumer responses (i.e., information processing school of thought) were examined to a lesser degree, and interactivity aspects of the model were the least cited component of the IAM. Although most of the research that cited the IAM cited it "in passing," a growing number of articles appear to use the IAM to develop or test theory, or to explain research results. Several "themes" arose in our analysis that deserve further discussion.

# **Mixed Motives**

First, the analysis revealed that some scholars disagreed with the classification of four internet motives, arguing that the IAM failed to include phenomena like "mixed motives." For example, some argued that "seeking information" can be a "fun" experience for some users (e.g., Huang, 2003) or that an individual who starts off seeking information may stop to shop after seeing an ad related to the information being sought.

Of course, internet motives were initially proposed by the IAM to deal with how a specific type of internal drive, or reason, for surfing the internet can impact the integrative processing of online ads. Motives are neither the consumer evaluation of the activity or ads (e.g., "fun experience") or the appeals or purposes associated with an ad (e.g., using humor to promote a product). The IAM, instead, was concerned with the motivated state containing energy and direction (Deci & Ryan, 1985) that drives users to switch on the computer and surf the web. So by identifying basic motives, we can better predict web-related attitudes and other consumer responses. In other words, the basic classification of internet motives does not intend to isolate nor simplify the dynamic process of users' encounters with ads, but serves to provide predictions of differential processing patterns that can lead to different consumer responses.

Moreover, what scholars in our analysis seemed to be interested in learning was how to interpret motives when people had several goals or purposes in mind during or before an internet activity. Based on the foregoing discussion, it is perhaps better to conceptualize this phenomenon as "multiple agenda" rather than mixed motives, as a motive deals with the primary motivation to surf the internet at the specific moment instead of a careful deliberation about why to surf. This was part of the reason why "motive-switching" was included in the IAM to better reflect the process. In this sense, motive-switching was meant to capture the dynamic and interactive process that occurs between consumers and advertisers in an online environment (for a new interactive response model specific to social media, see Chapter 28).

Fortunately, several of our authors expound upon this idea. For example, drawing on reversal theory, Chapter 8 describes metamotivational states that range from telic (serious-minded) to paratelic (playfulness) to explain how complex consumer behaviors fluctuate in digital environments. Chapter 12 elaborates on the relationship between motivations and brand-related activities and then illustrates how this relationship works by sharing the results of a very interesting empirical study. Chapter 15 focuses on consumers who are motivated to create content about products and brands using three characteristics (mavenism, connectivity, and persuasiveness) and five types of intrinsic motivations. They present the results of an empirical study using 2,495 respondents on SNSs and 100 brands to illustrate how brand-related content creation is the consequence of various factors working in concert, painting a much more complex picture than originally proffered by the IAM.

#### Control of the Online Environment

Second, our analysis revealed that more research citing the IAM has focused on the consumer-controlled (versus the advertiser-controlled) aspects of the IAM. Perhaps this is because internet users were once suggested as the "control center," as they were able to more easily avoid internet advertising compared to blocking traditional mass advertising on TV, radio, or print media. However, new technologies have enabled advertisers to intrude into consumers' online territory by using contextual targeting and geo-targeting to place ads according to users' interests, preferences, and purchase history. Additionally, new technologies can exert new pressures on online audiences to ensure the delivery of ads, such as inserting multiple forced viewing ads inside one episode of a TV show. Additionally, and as shown in Chapter 2 and the subsequent chapters of this book, new technologies have added extra complexities to the advertising delivery process, which may significantly influence the processing of digital advertising (and maybe even change the very meaning of what constitutes a "digital ad").

Several authors in our review brought up an excellent point: the original IAM did not account for social media. That is true because social media—in their current form—did not exist when the IAM was first published. The closest things we had to social media in 2000 were online discussion boards and chat rooms, though social networking services were beginning to surface, such as classmates.com,

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which helped people find former school classmates (Digital Trends Staff, 2016). To fill this gap, Chapter 16 offers a systematic review of best uses of social media for persuasive brand-related communication, and Chapter 21 explores the main aspects of advertising effectiveness in an SNS setting and provides a theoretical framework for understanding ad effects in SNSs as well as other digital contexts. As shown in Chapter 12, SNSs allow brands to interact with consumers, and this interaction is considered beneficial to brands. Some of the by-products of this interaction include strengthening the brand's online visibility, enhancing brand equity, and ultimately leading to better brand performance.

#### New Measures of Advertising Effectiveness

Third, the content analysis revealed reliance on traditional advertising effectiveness measures with a call for new measures that were unique to digital spaces. For instance, Russell (2009) argued that there should be more creativity of metrics to adapt to the increasingly complex environment of digital ads. While most traditional measures in advertising may be valid for measuring psychological processes of web advertising such as memory, recall, and attention (Rodgers & Thorson, 2000), industry measures such as click-through rates (CTRs) could provide unexpected results perhaps taken for granted in the traditional realm. For example, design characteristics of banner ads like size, color, and message length were found to positively impact CTRs, while animation did not have a significant effect on CTR (Robinson, Wysocka, & Hand, 2007; Khalifa, 2014). Chapter 22 provides a new way to measure efficiency of digital advertising that incorporates a broader set of metrics, including consumer empowerment, and proposes an efficiency model that captures inputs and outputs that are relevant to digital advertising campaigns. Chapter 19 outlines measures related to physiological response and behaviors that are highly scalable due to internet-based frameworks and computer vision technology.

Additionally, as Chapter 8 argues, most measures available today are focused on positive performance with little attention devoted to understanding what may harm performance measures. Chapter 14 applies an approach/avoid framework to define ad avoidance and investigates antecedents to avoidance. A number of our authors discuss the effectiveness of in-game and video advertising; for example, Chapter 18 provides an introduction to in-game advertising, outlines its benefits and drawbacks, and highlights what may constitute "effective" in-game advertising. The authors then provide the results of a case study to illustrate the impact that interactivity (defined in terms of in-game brand placements) can have on ad effectiveness. Several of our chapters on in-game advertising or video advertising are brief "think pieces" that present some of the most pertinent factors being explored. For example, Chapter 25 examines immersion and argues that the vague use of the term has resulted in findings that do not account for a nonlinear relationship or one that is moderated by ad content. Chapter 26 is on virtual direct experience (VDE) in video games, and Chapter 27 outlines some common types of in-game ads and reviews video game advertising research that is sure to spark new research ideas for those interested in advancing the gaming and advertising literature.

As Chapter 20 notes, much of the reported measures on digital advertising have been based on U.S. samples, yet digital advertising has become increasingly important for brands globally. Thus, Chapter 20 argues that consumers from different countries may have different consideration sets and executional factors related to digital advertising, which researchers must account for. Likewise, a lot has been written and researched on electronic word-of-mouth (eWOM) but, as Chapter 24 points out, few studies have examined eWOM in an international context. The author goes on to demonstrate how eWOM research from a cross-cultural perspective is necessary since different countries may have different cultural values that can have varied effects on eWOM outcomes. With more than 3.2 billion people online searching for health information, there is enormous opportunity to explore the role of advertising in this unique and highly important context. Chapters 11 and 23 are devoted to doing just that.

#### New Ways to Spread Information

Fourth, and finally, when the IAM was introduced more than 15 years ago, advertising was a much more clearly defined process of persuading people to pay for branded products using professionally designed messages and paying to have the messages placed in a variety of media, like television, radio, or newspapers. To put this into perspective, the model was designed in a world without Facebook, Google, LinkedIn, Snapchat, Pinterest, or Twitter. There was email, and one could forward messages via email. There was, however, "interactivity," meaning consumers could go to brand websites and make comments or participate in games, etc. So this was truly one of the earliest stages of advertising in which it was easy for a consumer to provide feedback to marketers about their messages. Of course, prior to the birth of the interactive world, one could call or write marketers or even write comments that would appear in news media about marketers and their messages, but the effort and time required for this was great, and few consumers bothered with it.

But once advertising messages became common via the internet, there came to be lots of ways for consumers to respond to them. This was the Web 1.0 technology world into which the IAM was proffered. Ads, however, no longer need paid media to be "spread." There are now thousands of ways ads can reach people, and there are thousands of ways people can "use" ads. Targeting is presumed to enhance the opportunity for "spread" of brand-related content, but as Chapter 17 illustrates, targeting is a double-edged sword, as consumers can sometimes see it as an invasion of privacy. Chapter 2 presents a new model—the Network Advertising Model, or NAM—that builds on the IAM and uses the results reported in Chapter 1. The idea of "spreadability" is a central feature of NAM. As argued in Chapter 2, the IAM can be extended into Web 2.0 and even Web 3.0 technologies by taking the findings of Chapter 1 as well as other factors into consideration.

# Conclusion

The Interactive Advertising Model (IAM) (Rodgers & Thorson, 2000) has been widely referenced by scholars from various disciplines around the world. The IAM offers an integrated way to evaluate advertising effects from both consumercontrolled and advertiser-controlled viewpoints; however, despite the seeming utility of the model, our analysis revealed several shortcomings that need to be addressed by future scholars if the model is to be kept current. While the IAM's initial purpose was to serve as a general model to examine information processing of ad exposures online, the implications of the results of this review also shed light on research related to interactivity-related phenomena outside the scope of advertising. Several themes with regard to the model's use were identified, while a number of challenges for using the model also emerged among the citing articles. While this is by no means an exhaustive review, this examination of and reflection on the IAM after 15+ years supports an important notion proposed by Rodgers and Thorson in 2000: that methodologies and theories applied to traditional advertising can be adapted to interactive advertising, regardless of changes in advertising technologies, as long as the unique characteristics of users and ads are taken into consideration.

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# 2 NETWORK ADVERTISING MODEL (NAM)

Esther Thorson and Shelly Rodgers

## Introduction and Background

Advertising today exists in a multiple channel (or "source"), multiple media, multiple device interactive communication network-a massively interconnected set of nodes and a variety of "connections" among those nodes. This reality implies major changes in how advertising can influence people to buy brands (or vote for a candidate, or think more highly of a corporation, or adopt better health habits). Before the creation and expansion of the digital communication network, advertisers often turned to theories of "integrated marketing communication" (IMC), where a number of media (e.g., radio, TV, newspapers) were combined to bring integrated messages about a brand to people, thus reaching customers with different frequencies, at different times, and under different circumstances. IMC carried with it the assumption that paid media (advertising) would integrate with unpaid ways of reaching people, like public relations tools, e.g., brands being featured in news stories, brands seen as sponsors of events, and brands being linked with games and contests (e.g., Schultz, Tannenbaum, & Lauterborn, 1993). An advertisement or PR event that led people to talk about the ad or the brand (word-of-mouth) was also considered to be one of the "voices" of the integrated effort (Thorson & Moore, 1996).

But in the mid-1990s the internet started to come of age, and as its structures and functions developed over the next 20 years, scholars came to realize that communication was moving toward being less "mass" and more "network" oriented. Because culture is mediated and enacted through communication, a networked culture came into dominance (Castells, 2000, p. 356).

The model introduced here—called the Network Advertising Model, or NAM—is quite different from the Interactive Advertising Model (IAM) (Rodgers & Thorson, 2000) as described in Chapter 1, although, in fact, the NAM subsumes significant components of the IAM. In the new model, we continue to