Diaz Nesamoney

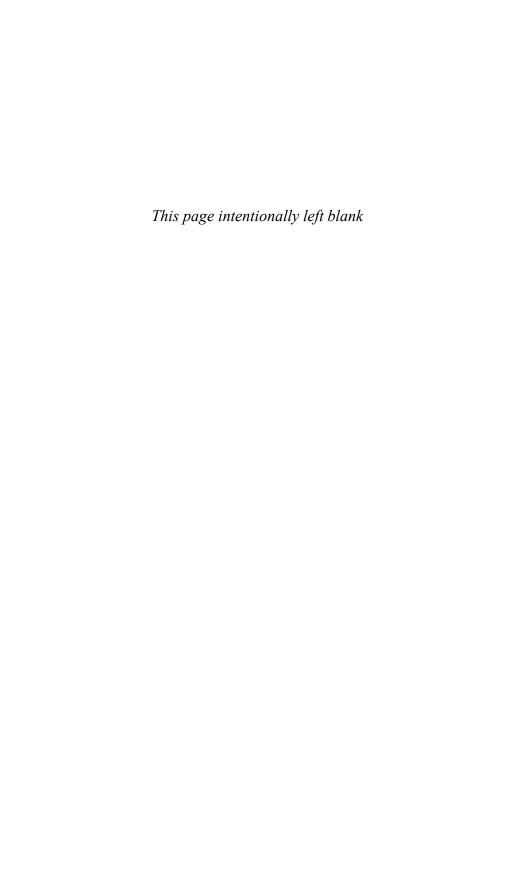
Foreword by Cary Tilds, Chief Innovation Officer, GroupM



PERSONALIZED DIGITAL ADVERTISING

How Data and Technology Are Transforming How We Market

Personalized Digital Advertising



Personalized Digital Advertising

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Diaz Nesamoney

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Published by Pearson Education, Inc.

Old Tappan, New Jersey 07675

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Printed in the United States of America

First Printing April 2015

ISBN-10: 0-13-403010-9

ISBN-13: 978-0-13-403010-4

Pearson Education LTD.

Pearson Education Australia PTY, Limited

Pearson Education Singapore, Pte. Ltd.

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Library of Congress Control Number: 2015931957

This book is dedicated to the "mad" men and women who continue to work diligently to make advertising beautiful, fun, relevant, and engaging. Whether on TV, print, digital, or new media we haven't even thought about, advertising needs to remain all of the above to contribute to a brand's success.

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Foreword

I first met Diaz at an industry meeting at the Interactive Advertising Bureau held by Peter Minnium (who writes in Chapter 23, "Industry Perspectives"). This meeting was a combination of creatives and technologists whose mission was to address the challenges that were ahead of us related to the proliferation of screens. The problem at that time was addressing mobile and native content, but we'd soon determine that was just the tip of the iceberg. What new approaches would we take as an industry? How would those affect creative development, media placement, and measurement?

In the early meetings, Diaz and I were instant teammates in a battle for which we had not enlisted. It was called the "technologists" against the "creatives." The notion of "dynamic creative" was a slap in the face to any decent creative person's skillset. The heated arguments that ensued were about the future of creativity and continued constrained resources against our known digital future of screens.

The arguments have not gone away, and they shouldn't, as it is an important debate to be had. However, the debate of "or" itself seems fleeting. The debate should not be creative *or* technology. Instead, we should seek the right equilibrium of creative *and* technology.

Technology is changing the way consumers interact with content and media. Messaging on the next billion devices will look quite different than our approach to the current landscape of screens. Specific and structured standard ad sizes grew our world up until now; for example 30s, 60s, and even 90s in TV or 300×250 s or 468×90 s in display. However, as we all know, "what got us here won't get us there."

Nonstandard media formats will continue to rise, requiring us to rethink standards with the notion of specifications, variables (creative, content, context, and consumer), predictive algorithms, and machine learning.

Key technology and consumer growth areas in our world, like smartphone meeting telematics, the gamification of everything, location fueling the Internet of Things (and Everything), and the rise of the cognitive interface, will push us to evolve our approaches to creating messages. In all cases, we will have more devices, more formfactors with which to connect to consumers, and a continued lack of standards.

We must understand how to paint brand messages in new ways. This will prove to be challenging in our existing systems as the "tools and processes were built with the assumption of a static ad that remains the same through a campaign" (as Diaz noted). Development of a dynamic creative is challenging because the dimension of variability must be considered. However, if we look at other models to understand how to handle variability, we might be able to stretch our creative palette to its potential.

What if we applied the thinking behind a popular coding site called ifttt.com (If This Then That), where the tagline reads: "Put the Internet to work for you"? This messaging is profound. What if we let the Internet works for us, rather than be a resource drain to us?

Here's how it works: The site helps create useful combinations of coding functions into one statement called a "recipe." The recipe has two functions: a trigger and an action. The trigger helps us understand what something did. The action helps us program what we should do about it. Pretty simple, actually. By applying the notion of recipes to the concept of dynamic creative, we have a message fabric and a mechanism to reach people not just on new screens but also in new functionalities within those screens.

We are experiencing a point in time where many things are colliding to create an environment for not just a new standard but a holistic shift in our thinking. This is happening *now*. The explosion of new screens, content layers, and messaging moments like in-image, augmented reality, and the Internet of Things are potential moments to expand the brand fabric and require unique assets for messaging to consumers.

This is our present and our future. If we become masters at leveraging personalized, dynamic, and native messaging approaches and learnings, we will best prepare ourselves for these new places to advertise.

Cary Tilds

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Acknowledgments

I would like to acknowledge the many people who inspired me and supported me throughout this project. In the midst of my busy schedule as CEO of a rapidly growing company; maddening travel each week between the San Francisco Bay Area, New York, Los Angeles, and India; trying to be a good dad to two young kids; and keeping my commitments and passion as director of a charitable foundation, it was quite a miracle that this book actually came together when it did. I now know it takes a team and starts at home.

First, I thank my wife, Usha, without whom I would not have been bold enough to even undertake this project. It came about at a time when neither of us could imagine finding even an hour a week to do anything new. In spite of her very busy and seemingly endless responsibilities, she always seems to be able to support me in what I do.

I was also inspired by my kids to write this book. Our daughter Sophia published her first book, *The Other Side of Carroll* (now available through Amazon), when she was 9. Our son Sean, who is now 9 and not to be outdone, is finishing up his first book. I also want to acknowledge both of them for being patient with me each time they were told "Daddy is finishing his book" when they wanted me to help with homework or go out and play with them.

Thanks to my colleagues at work—Naren Nachiappan, Sanjay Dahiya, Jaimie Villacarlos, and Daniel Green, the "dream team" who helped productize a lot of what you will read in this book, were an amazing source of ideas and insights into how personalized advertising should be done.

Thanks to my admin and my company's people manager, social manager, and trusted confidante of over 11 years, Claudia. She was always there 7×24 to make sure I was able to make progress with the book in spite of my grueling travel schedules. I can't think of anyone else I could call late evening on my way to the airport, saying I needed a power supply to finish my book on my long flight to India. She pulled it off, finding a store that was open and couriering it to me just before I had to board my flight.

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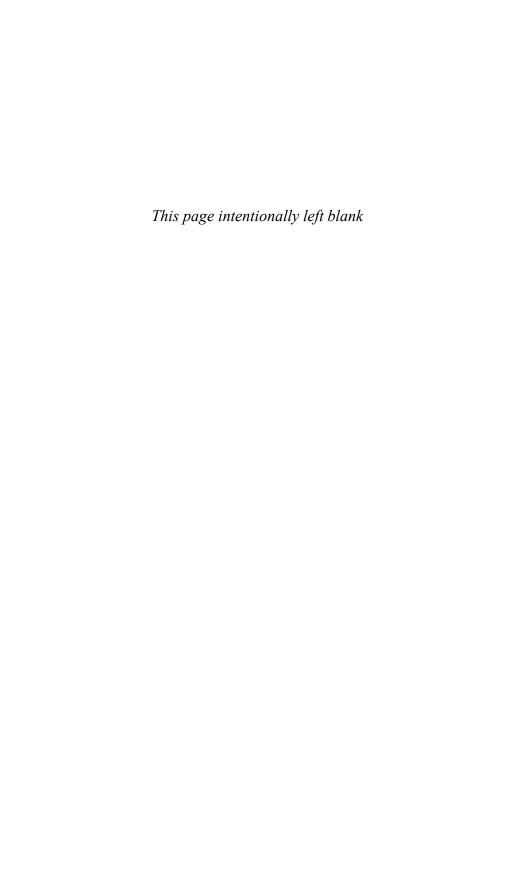
Thanks to my mentors in the subject matter of personalized advertising. Each of them has a tremendous wealth of industry knowledge and freely brainstormed with me and generously gave of their time to not only share their perspectives but also contribute a few paragraphs to the book. Thanks to Cary Tilds, chief innovation officer, GroupM; Gregg Colvin, chief operating officer, Universal McCann; Peter Minnium, head of brand initiatives, IAB; Gowthaman Ragothaman, chief operating officer, Mindshare APAC; and Karin Timpone, global marketing officer, Marriott International. They all gave me amazing anecdotes and insights into why embracing personalized advertising is important for marketers.

I also want to acknowledge the amazing team at Jivox, who have turned what were just ideas a few years ago into products, customers, and campaigns. We have broken new ground every day as we have implemented a lot of what I talk about in this book. I also want to thank them for listening to me patiently as I rambled on and on about how important and big personalized advertising was going to be.

Last but not least, I want to thank my editor, Charlotte Maiorana, who found me and believed I was the right person to write this book and gave me some great insights on writing my very first book. She was also patient with me when I had to extend a few deadlines to make it to the finish line.

About the Author

Diaz Nesamoney is an accomplished technology entrepreneur who founded three successful technology companies. Currently Diaz is Founder, President, and CEO of Jivox, a company that provides a technology platform for personalized advertising. He was previously Cofounder, President, and Chief Operating Officer at Informatica (NASDAQ:INFA), which he took from a startup to a publicly traded company in 1999. Informatica pioneered data integration software as a category and is now the market leader with more than \$1 billion in revenue and a \$4.5 billion market capitalization. Before founding Jivox, he founded Celequest, raised more than \$20 million in venture capital, and served as its CEO until early 2007, when the company was acquired by Cognos/IBM. Celequest introduced the market's first business intelligence and analytics appliance, a disruptive innovation that led to its acquisition. Diaz is a board member of the American India Foundation, a leading international development organization charged with the mission of accelerating social and economic change in India. Diaz is also a member of the Board of Trustees at the World Affairs Council. Diaz holds a Masters degree in Computer Science from the Birla Institute of Technology and Science in India and is the holder of six technology patents.



The Talking Billboard

In the 2002 movie *Minority Report*, Tom Cruise walks into a mall and is greeted by "live" billboards that address him by name and show him outfits he will likely be interested in. The billboards do it by scanning his retina. (Turns out it's someone else's retina, but you'll have to watch the movie to know why.)

In many ways, as advertising has gone from traditional media to new media, it has not changed very much. When I was growing up, my first exposure to advertising was posters on walls everywhere I went and a few large billboards advertising everything from tooth-paste to cars. The idea of marketing via posters was simple: Buy enough of them at the lowest possible price per poster and get them out in as many places as possible. It was about two things: volume and price. Advertisers sought the highest possible volume at the lowest possible price. Brand managers were taught in business school that it was all about coming up with a clever tagline or jingle and trying to get as many people to see and hear it as possible.

Along came newspapers, magazines, and TV—first one channel in black and white and then three channels and then cable with hundreds of channels. The same sort of growth happened with radio.

Marketers repeated the same formula used in advertising. To be sure, creative agencies came up with more clever ways to get the message across and also utilized new media like video for TV commercials and audio for radio, but the idea remained the same: Get your message out to as many people as possible for the lowest possible cost.

Despite dramatic advances in digital media, devices, and new types of media like social media, most digital ads today don't look very different or behave any differently than the billboards that have been around since the beginning of advertising. Display banner ads are simply sized-down versions of those billboards. And they're only about as effective as billboards, judging by the click-through and engagement rates that display banners are delivering to brands.

Digital media presents immense opportunities to not only make significantly more functional billboards but also smarter billboards that understand consumers' interests and tailor advertising and messaging directly to their needs. This is a largely untapped opportunity for marketers.

For some time, pundits have predicted that advertising will become much more personalized and relevant. While we don't quite have billboards scanning our retinas, it seems clear that a big wave of personalization driven by the vast amounts of data we now have is about to sweep through all of marketing.

Several factors have come together in recent years to create this inflection point—some technological, some consumer behavioral changes, and some to do with the widespread use of social media. These advances have made it possible to embark on personalizing marketing inexpensively and at scale.

Mobile Devices Become Personal Media and Sharing Devices

The biggest change in consumer behavior has been a greater willingness to share personal information. Social media has accelerated this trend, and people now share online anything and everything, including who their friends are, their likes and dislikes, where they live, where they've visited, what they've said, and what they've watched. This is a big cultural and perhaps generational shift in thinking to a general openness to sharing personal information in return for a more personalized experience.

Many years ago, people worried about others tracking them and knowing exactly where they were. Today we freely let apps like Uber, OpenTable, Yelp, and others use our location to help us quickly get a car service, make reservations, or find a restaurant nearby. We even deliberately "check in" in many mobile apps, telling everyone where we are. Many years ago, we worried about video rental information

getting into the wrong hands. Today our Facebook and YouTube pages are filled with video content we watch and let the world know we watch. In some cases—as with Uber, OpenTable, and Yelp using location information—users get something in return for their sharing; but even in cases where they don't seem to get anything, users seem more than willing to share information about themselves.

The rapid proliferation of mobile devices has essentially served to personalize our digital media consumption. Instead of a family sitting around a TV, we now have our own personal palm-sized TVs available all the time. Rather than huddle around a radio, we each have a Pandora account to listen to our own tunes (nobody needs to know you secretly listen to ABBA). Now that we can watch whatever we like on Netflix, there's no more fighting over the TV remote.

Such technological change has spurred the movement toward more personalized experiences for users. In addition to mobile devices becoming personal media devices, they have also quickly become "sharing devices." Through the use of social media, these devices have unleashed a torrent of location, preference, and other kinds of data volunteered by users. This data has become a treasure trove that marketers can use to personalize experiences.

Recently, the explosion of connected devices variously called "wearables" or "the Internet of things" is creating vast amounts of personal data that adds to the arsenal of data that marketers now have to work with.

Computing power and bandwidth have also increased to a point where tasks that used to take several minutes to hours—like executing an algorithm to match a user to his or her user profile—can now be done in milliseconds. Cloud computing capabilities have also significantly reduced the costs of storing, retrieving, and processing the massive amounts of data needed to effectively personalize advertising.

Marketing Starts to Take Data Seriously

Data has always been viewed as an afterthought in marketing. Marketers were used to doing post-analysis of campaign results, research, and sales data to try to understand how to market to their

prospects and customers. Data traditionally wasn't used much for delivering campaigns and targeting and personalizing experiences for customers. But big changes are happening as we speak. Marketers now view data as a strategic asset that should be utilized aggressively as a key part of their arsenal.

In the past year, according to Forrester Research, marketers' interest in and spending for data and analytics has increased from 8% to 12%. Hardly an article today doesn't mention the role of "Big Data" in marketing. The good news is also that Big Data and analytics are being viewed as core marketing infrastructure, much like an accounting system is for the finance function within a company.

The investments in data and analytics are likely to get marketing teams the kinds of information they can use and rely on to deliver personalized services to their customers. The investments will need to be significant, but they can and will be viewed as capital investments that will enable these companies to better engage with their customers in a more intelligent fashion.

In the past year, Oracle Corporation—the largest enterprise database and applications company—acquired BlueKai and Datalogix, two Big Data companies focused on providing data for targeting and personalizing advertisements. This reflects the growing appetite marketing organizations and CMOs have to spend on marketing technology and infrastructure.

There's an API for That

Remember the Apple ad that said "there's an app for that"? We can now say "there's an API for that." APIs (or application programming interfaces) have been significantly important to the rapid evolution and adoption of technology in the media and advertising industry. The successes of Facebook, Apple, and Google as media/technology companies can definitely be attributed to their heavy and aggressive investments in APIs that have allowed third-party apps and platforms to plug into and help grow their ecosystems. In the digital advertising arena, too, APIs have played a key role.

An API called openRTB has been largely responsible for the ability for brands to buy and sell media programmatically. This API allows sellers and buyers of media to communicate electronically about availability of inventory, ask and bid prices, information about the inventory itself, etc. All this has been done using a set of standard APIs, and it has enabled programmatic media buying and selling to scale and gain adoption rapidly despite the varied media suppliers, supplyside and demand-side platforms, and exchanges that are invariably involved in such media transactions.

In the world of personalized advertising, APIs can now tell us everything from where a user is located to what the local weather is like to what movie theater is playing a particular movie. All these APIs serve up data that can be used for more effective personalization.

APIs also allow for interoperability and ease of integration between the pieces of software that have to come together to make personalization work. For example, most data management platforms have APIs by which dynamic/personalized ad platforms can fetch data to personalize ads.

Social Media Teaches Us Marketing

Brands have been inspired by the way Facebook and Twitter have been able to offer them ad products with very fine-grained targeting and real-time messaging capabilities. Today, within a few minutes, a brand can think up a message or creative idea it wants to communicate to a very specific audience and have it sent to that audience within minutes. The question many brands are rightfully asking is "Why can't I do this across all my media?" For various reasons, including especially the limited types of ad formats offered by social media platforms, brands want to use those same techniques of micromessaging and real-time marketing across their display advertising.

Marketers are also realizing that the traditional path to purchase has changed significantly due to the impact of social media and mobile devices. Now consumers can make purchase decisions in real time without following the traditional paths to purchase. This means brands also have to be able to be in that purchase path in real time with something to say or offer that will tilt the purchase decision in their direction.

A lot of the key ingredients are in place to make personalized advertising a reality, so what's missing? As in any other emerging area in digital advertising, there's a lot of confusing terminology and technologies, as well as a lack of APIs and standards for how data, content, and ad serving platforms come together to make it all happen. This is all changing as we speak, and it is already evident that marketers are taking this opportunity head on and collaborating with technologists to make their desires reality.

This book examines the rationale, opportunity, process, and technology involved in personalizing advertising. I am hopeful that it will be a handy reference to marketers and technologists for personalizing interactions with customers. As you will see in the examples in the book and anecdotes from some industry leaders, personalized advertising is already well on its way to reinventing how we market.

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