

CESAR A. BREA

Foreword by Bob Lord, CEO, AOL Platforms

MARKETING AND SALES ANALYTICS

Proven Techniques and Powerful
Applications from Industry Leaders

Praise for *Marketing and Sales Analytics*

“Solid ideas and experiences, well-told, for executives who need higher returns from their analytic investments. Captures many best practices that are consistent with our own experiences at Bain & Company, helping clients develop actionable strategies that deliver sustainable results.”

—**Bob Bechek**, Worldwide Managing Director, Bain & Company

“Successful marketing today demands balancing analytic sophistication with the practicality that can put insights to work. Cesar’s book synthesizes a set of ideas and case studies that offer proven approaches for getting this balance right.”

—**Torrence Boone**, Managing Director of Agency Relations for North America, Google Inc.

“Cesar has explored a complex subject in a clear and useful way as senior marketers look to more effectively leverage the power of data and analytics.”

—**Bill Brand**, Chief Marketing and Business Development Officer, HSN, Inc.

“Loaded with meaty lessons from seasoned practitioners, this book defines the guideposts of the Marketing Analytics Age and what it will take for marketing leaders to be successful in it. Cesar Brea has provided a practical playbook for marketers who are ready to make this transition.”

—**Meredith Callanan**, Vice President, Corporate Marketing and Communications, T. Rowe Price

“In my time at both Condé Nast and Gilt, we used data extensively to create the best possible experiences for our clients and partners. Cesar’s focus on getting the conditions right for analytics, and the experiences he captures to illustrate this theme, bring uniquely valuable perspectives to the conversation on this topic.”

—**Sarah Chubb**, Digital Media Consultant, former president, Condé Nast Digital and Gilt City

“In Marketing and Sales Analytics, Cesar Brea takes complex Big Data issues and frames them in a straightforward way that business executives of all kinds will find helpful and enlightening. This book is a great first step to using data analytics strategically to build stronger and more genuine customer relationships that drive growth and profitability.”

—**Chris Malone**, Managing Partner, Fidelum Partners and co-author of *The HUMAN Brand: How We Relate to People, Products and Companies*

“As a provider of a marketing attribution management platform, we work with many leading brands that have charted a course to more holistic measurement across their entire marketing ecosystem. This has resulted in truly actionable insights as well as recommendations for optimizing their overall performance. Cesar’s book is a tremendous guide for marketers looking to implement a more integrated, cohesive measurement and optimization strategy, empowered by a data driven approach that’s woven into the fabric of their businesses.

—**Manu Mathew**, CEO, Visual IQ, Inc.

“While the field has a lot of books on the statistics of marketing analytics, we also need insights on the organization issues and culture needed to implement successfully. Cesar Brea’s Marketing and Sales Analytics has addressed this gap in an interesting and helpful way.”

—**Scott A. Neslin**, Albert Wesley Frey Professor of Marketing, Tuck School of Business, Dartmouth College

“Cesar’s book comes at a time of unprecedented change for sales and marketing executives. He’s captured the transition point between analytics as we have known it with the future of Hadoop and related big data technologies to create a driving force of continuous learning and optimization.”

—**John Schroeder**, CEO and Co-founder, MapR Technologies

Marketing and Sales Analytics

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Cesar A. Brea

Associate Publisher: Amy Neidlinger
Executive Editor: Jeanne Glasser Levine
Operations Specialist: Jodi Kemper
Cover Designer: Chuti Prasertsith
Managing Editor: Kristy Hart
Project Editor: Andy Beaster
Copy Editor: Katie Matejka
Proofreader: Jess DeGabriele
Indexer: Cheryl Lenser
Senior Compositor: Nonie Ratchiff
Manufacturing Buyer: Dan Uhrig

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Foreword

Cesar's book has arrived at an exciting moment. Thanks to the unprecedented amount of data that businesses now have at their fingertips, smart analytics can help shape marketing and sales like never before. With social networks, loyalty programs, mobile apps and all kinds of data-rich technologies providing new insights into peoples' likes, dislikes, behaviors and interests, brands can go beyond simple demographics and engage with consumers at a level previously not possible. Consider, for example, how retailers use analytics to personalize every customer touch point, whether it's an email, ad, or live interaction with a salesperson at the register—and how brands are using data to personalize not just messages, but also the experiences they deliver to their customers. We truly are breaking new ground in terms of how much more relevant and powerful our strategies can become.

With these increasing opportunities for engagement in mind, how can today's businesses set the stage for analytic success? This book, which synthesizes Cesar's experience from a long, varied career spanning marketing, sales, and technology—as well as insights and lessons learned from more than a dozen accomplished executives—provides a solid template for planning your analytics evolution.

Beyond focusing on internal tools and the analysts that use them, Cesar outlines the importance of cultivating a broader set of resources, capabilities, and even attitudes. He helps readers solidify a clear vision for engaging analytics, and provides practical advice about how to build a roadmap for moving forward. And, since I've known Cesar for nearly 25 years in a variety of professional capacities, it's no surprise that he presents these ideas not only skillfully, but also in his typical straightforward, approachable way. More than just theory, he delivers nuts and bolts analytic strategies that readers can deploy immediately.

During the course of my own long career in advertising, marketing, and technology, I've been a proponent of the use of innovative technologies to shape, plan, execute, measure, and refine media and creative strategies. Analytics are a critical part of this. For example, data optimization is the driving force behind programmatic technologies designed to automate processes for advertisers, agencies and publishers, which are rapidly changing how an increasing volume of digital inventory is bought and sold. Sophisticated algorithms spin data into valuable insight, empowering every brand—no matter how big or small—to continually test, learn about, and optimize their campaign planning. All of this is done in order to consistently deliver the most compelling message, at the right time, on the right screen and devices, to the right consumer. The coming together of technology, media and creative is what I like to call *convergence*. Brands that are able to effectively align these three disciplines, while also taking advantage of all the insights that analytics have to offer, will realize the most powerful results.

This book will help your business build a more thoughtful, converged, and well-executed marketing and sales analytics strategy, which is vital in today's data-driven world. Knowledgeable, curious, and technically savvy, Cesar is an excellent guide for readers who are ready to take their analytics approach to the next level.

—**Bob Lord**

Chief Executive Officer, AOL Platforms

Acknowledgments

Even in the world of analytics, where “what you know” would seem to be what it’s all about, “who you know” still comes up trumps. At least that’s what I discovered in writing this book, as regardless of how much direct experience or book learning I amassed, it would not have been remotely possible without the generosity of clients, friends, colleagues, and mentors from across the years.

First, of course, I’d like to thank the executives I interviewed for their enthusiasm for the project and their patience with my many questions. For me, the best part of this book is hearing their stories and perspectives directly, and hopefully I haven’t mangled things too badly in the attempt to illustrate some main ideas with their perspectives. It was truly an honor to spend time with each of them, and I’ll be a better professional for it.

Next, I’d like to thank friends who were especially generous in making introductions that led to these conversations as well as suggestions for the book, and in particular to Tip Clifton, Mark deCollibus, Joe Fuller, Perry Hewitt, Judy Honig, Blaise Heltai, Jeffrey Hupe, Bob Lord, and Erica Seidel. I’m also grateful to friends, colleagues, and mentors whose experiences and relationships in this field I’ve learned and benefitted from, including Mike Bernstein, Lee Bissonnette, Susan Ellerin, Sheldon Gilbert, Trish Gorman, Ben Kline, Janelle Leonard, Jay Leonard, Bob Neuhaus, Jeffrey Rayport, Tad Staley, and my business partner Jamie Schein. Special thanks go to Judah Phillips for introducing me to Jeanne Glasser Levine, my editor at Pearson, and to Jeanne and her colleagues for their guidance and support through this project. Your confidence in me was inspiring and I hope the result justifies your faith!

I’m grateful also to the clients who, daily, give my colleagues and me the opportunities to work with and learn from them. This is an

arena where the clay is still very wet, and there's no substitute (not even this book!) for the time spent with them.

Finally, I'd like to thank my wife Nan and my children, Ben, Kate, and Will, who bore the brunt of this effort through a tough winter, and who now face the prospect of more fun in Phase Two of The Master Plan (which I'll reveal as soon as I figure one out). The answer to "Where did you find the time?" lies with them.

About the Author

Cesar A. Brea is Managing Partner of Force Five Partners, LLC (forcefivepartners.com), a marketing analytics agency that works with clients in a number of industries to design and execute multi-channel marketing and sales strategies, and to build pragmatic, sustainable analytic foundations.

Cesar has more than twenty years experience as a line executive, advisor, and entrepreneur. Prior to co-founding Force Five Partners in 2008, Cesar served as Global Practice Leader for MarketSpace, the digital media and marketing practice of Monitor Group, the international strategy consulting firm founded by Harvard Business School Professor Michael Porter. Formerly, Cesar was CEO of Contact Networks, an early LinkedIn competitor sold to Thomson Financial in 2006, and was Senior Vice President for Sales and Marketing at Razorfish, the world's leading digital advertising agency. Before Razorfish, Cesar was Vice President for Marketing and Business Development at ArsDigita Corporation, an open-source software firm focused on online communities acquired by Red Hat Software in 2002. Earlier, Cesar was a management consultant at Bain & Company and a banker at J.P. Morgan.

Cesar holds an MBA from Dartmouth's Amos Tuck School, where he was named an Edward Tuck Scholar, and received his undergraduate degree from Harvard College. He is a frequent writer and speaker on marketing in the digital age. In 2012, Cesar published his first book on this topic, *Pragmalytics: Practical Approaches to Marketing Analytics in the Digital Age*. Cesar has been a guest lecturer in undergraduate and graduate programs at MIT and Harvard, and writes about marketing and ebusiness on his blog at <http://octavianworld.org>, and on Twitter (@cesarbrea).

Cesar and his wife Nan Leonard live in Dover, Massachusetts, and have three children, Ben, Kate, and Will. On summer weekends, they enjoy sailing on Nantucket Sound.

Introduction

This is a book of, by, and for senior executives who want to build marketing and sales analytics capabilities that will produce significant competitive advantages for their firms.

The core idea of this book is that successful marketing and sales analytics is much more about creating and sustaining conditions for success than it is about the brilliance of any particular insight.

When you are done reading this book, you will:

- Be able to assess and enhance important eco-systemic conditions crucial to the success of your analytic investments and efforts
- Have a simple, practical set of frameworks, techniques, and guidance you can use to organize, manage, communicate and, govern your analytic efforts for maximum impact
- Have a range of real-world experiences and lessons from accomplished executives that will give you both some specific ideas to pursue and general lessons to apply

Why This Book

Last September, at an analytics conference in Berkeley, I was having breakfast with Mohammed “Mo” Chaara, a director in Leno-vo’s corporate analytics group. He asked a good question: “With all the potential value to be realized from Big Data in so many domains, why has it evolved more quickly in the world of sales and marketing? Why not, for example, in delivering health care, a much more important challenge where much more money is spent?” That was kind of deep for seven-thirty in the morning, before the first cup of coffee. But “Pride goeth...” so I waded in anyway. “Here are three ideas. First, maybe because the technologies that generate digital data have seen their first main expression as enablers of a new communication medium, and sales and marketing are prime use cases for this medium. Second, because there are large and clearly defined budgets for the old media, which the new medium competes with in a much more accountable way. And third, sales and marketing are, relatively speaking, less constrained by regulation—nobody dies if a display ad is mistargeted.” Mo nodded patiently and politely. We munched on our toast quietly, and the conversation shifted to something else.

Whether or not you like my answer to Mo’s question, in the world(s) of sales and marketing, this is indisputably the Age of Analytics. Pundit after pundit, in book and article and talk upon book and article and talk, bows before the Big Data *zeitgeist*. And we don’t just have abstract prophecies, but also accessible avatars to reinforce this reality. In the vanguard of the modern economy, a small group of firms—the major digital advertising networks, for example—provide not only revolutionary services to their users, value to their customers, and returns to their investors today, but also fully-realized, continuously-evolving visions of what the data-driven future holds.

The Rest Of Us follow, in a modern-day migration that makes prior evolutions of these functional areas look quaint. There are other success stories, of course, but for virtually all, the journey is hard

and full of obstacles; our collective results confirm this. If just a few months ago we spoke of “data lakes,” some now speak of “data landfills.”¹ Last August, the physicist-turned-journalist James Glanz had a piece in *The New York Times* titled, “Is Big Data An Economic Dud?” The article, and others like it at the time, marked an inflection point in the usual hype cycle that surrounds things like this. Glanz noted that despite all the data now available, along with ever-more powerful tools to exploit it, “There is just one tiny problem: the economy is, at best, in the doldrums and has stayed there during the latest surge in web traffic.”² Other research echoes his observation, with numbers. For example, a study by *Wikibon* founder and researcher Jeffrey F. Kelley published in September 2013, spanning 100 firms implementing Big Data capabilities, found an average ROI of just 55 cents on every dollar invested and noted “a lack of compelling business use case” among three main causes.³

“Be patient,” you might say, “It’s just a matter of time.” Of course you’d be right, and I’d agree. (Sadly) programmed as I am, some of the usual-suspect business frameworks, like Gartner Group’s Hype Cycle⁴, sprang to my mind to frame his piece. But other voices crowded in too. I thought of the futurist Roy Amara’s saying, “We tend to overestimate the effect of a technology in the short run and underestimate the effect in the long run.”⁵ The science fiction

¹ Roberts, Jeff John, “When data lakes become landfills: how to avoid drowning in surplus information,” *Gigaom.com*, September 9, 2013, <http://gigaom.com/2013/09/19/when-data-lakes-become-landfills-how-to-avoid-drowning-in-surplus-information/>.

² Glanz, James, “Is Big Data an Economic Big Dud?,” *nytimes.com*, August 17, 2013, <http://www.nytimes.com/2013/08/18/sunday-review/is-big-data-an-economic-big-dud.html>.

³ Kelly, Jeff, “Enterprises Struggling to Derive Maximum Value from Big Data,” *Wikibon.org*, September 19, 2013, http://wikibon.org/wiki/v/Enterprises_Struggling_to_Derive_Maximum_Value_from_Big_Data.

⁴ “Research Methodologies,” Gartner, <http://www.gartner.com/technology/research/methodologies/hype-cycle.jsp>.

⁵ “Roy Amara,” http://en.wikipedia.org/wiki/Roy_Amara.

novelist William Gibson flashed to me: “The future’s already here—it’s just not very evenly distributed.”⁶ Finally, I remembered Arthur C. Clarke, maybe interpreting Gandhi for the corporate crowd: “New ideas pass through three periods: 1) It can’t be done. 2) It probably can be done, but it’s not worth doing. 3) I knew it was a good idea all along!”⁷

These are wonderful aphorisms, but they are not Manifest Destiny. The order in which organizations come to the promised future matters a great deal. Pioneers may get killed, but settlers get very, very rich, and once new data-driven industry structures form, it gets very hard to buck their economic realities. So, starting six years ago, rather than starting yet another tool vendor and joining the “supply-side” evangelical bandwagon, I’ve been much more interested in working on the “demand side,” helping large organizations that face complex, multi-channel sales and marketing investment and execution challenges, to accelerate the pace at which they realize the potential those frameworks and sayings suggest.

To bundle up what I thought I had learned, I wrote a short book a couple of years ago titled *Pragmalytics: Practical Approaches to Marketing in the Digital Age*, which summarizes experiences and insights that were useful to me in my work. *Pragmalytics* explores three ideas. First, successful marketing and sales analytics are mostly *not* about whether My Algorithm Can Beat Up Your Algorithm, but are instead about cultivating what I’ve called “Eco-systemic Conditions.” Second, planning backwards from desired business results, and not forward from the allure of a concept, keeps you both focused on bottlenecks for getting to results and disciplined about how much to invest in opening each bottleneck before moving on to the next constraint. Third, informed partly by things I’ve been exposed to in

⁶ “William Gibson,” http://en.wikipedia.org/wiki/William_Gibson.

⁷ “Arthur C. Clarke Quotes,” *Brainyquote.com*, http://www.brainyquote.com/quotes/authors/a/arthur_c_clarke.html.

other aspects of my life, is the idea of applying behavioral science lessons to address change management challenges that the analytics revolution demands.

However, hearing about those experiences through my filters isn't as interesting and useful as it would be to hear directly from a range of senior executives who have had to build their firms' sales and marketing analytics capabilities in real time while also driving business results under the tumultuous conditions of recent years; they are the people who have been changing the tires at seventy miles an hour. So while my earlier synthesis suggests a structure to organize around and some hypotheses to pressure test, the main reason for this book is to enrich the how-to gene pool with some executive-level bio-diversity. I hope you'll agree it's a vast improvement.

Who It's For

By now, an effective analytic capability supporting marketing and sales is not just something your board, or your boss, suggest *might* be worthwhile to explore—it's something they demand. The competitive examples of organizations doing this are out there and well documented. Inside your own shop, forecasts are expected to be tighter and less subjective. And in today's highly digital world, operations are expected to be driven, increasingly automatically and close to real time, by these predictions.

In response, you've hired the staff or outsourced the work to your agency/systems integrator/consultant. You've bought (or you're renting) the tools, and your teams have done first or second generations of analytic work. But the sheen of the first six months to "implement the capability," capped often with cool visualizations describing insights with potential value, has dulled. Now, you're under pressure to show some business results for your investments and efforts, and you can't

do it alone. You've got to pull people together, coordinate them, and even, when necessary, show them how.

So, you are one of four people.

1. You are the top functional (marketing and/or sales) executive, responsible for getting leverage from the analytic capability you're investing in—you need to show results on key business metrics.
2. You are the top analytic executive, charged with building and managing the resources that generate insights and communicates and packages them in a way that they can be acted on appropriately.
3. You are a student, in an academic setting or business training program, that not only seeks to produce technical competence but functional awareness—the difference between, for example, how to throw a forward pass and how to lead your team down the field to score.
4. You are a teacher in such a program, seeking to illustrate and enrich what can be dry topics with a sense for how they will be applied in practice.

Where It Fits

If you're reading into this field, you may have observed three kinds of writing. At the highest level (where level means perspective, not just quality), primarily for the C-suite and aspirants thereto, there are “evangelistic” titles, like Tom Davenport's *Competing On Analytics* and Ian Ayres' *Supercrunchers*. These works do a good job of calling attention to, describing, and illustrating the Big Data *zeitgeist*.

At the coalface of the data mines there are “how-to” guides for the analyst and the first-line manager charged with supporting

decision-makers. Avinash Kaushik's excellent *Web Analytics: An Hour A Day* and its successors are some of my favorites; another wonderful effort is *Visualize This* by Nathan Yau. Even Edward Tufte's classics, such as *The Visual Display of Quantitative Information*, fall into this category for me.

In the middle are books aimed more at managers and executives who have to define questions worth asking and then orchestrate resources not just to answer them, but also to act on them. The best example of this very practical guide approach I've read recently is Judah Phillips' *Building A Digital Analytics Organization* (Pearson, 2013).⁸ (Judah kindly agreed to be interviewed for this book, and—full disclosure—also generously introduced me to my editor Jeanne Glasser Levine and her colleagues at Pearson.) My book fits into this middle tier. It differs from Phillips' book by coming at the analytics challenge more from the requirements end and by offering the reader a chance to interpolate where he or she may end up through hearing a variety of practitioner perspectives. In this sense, the two books are highly complementary.

How to Use It

I hope you'll use this book in two ways. First, it can help you organize your thinking about how to tackle an analytically intensive initiative. Think of the specific suggestions here as “scaffolding” checklists for how to shape a question, or anticipate and address some challenges to it. Second, I hope it will provide you with experiences from other executives that help you calibrate your current situation and approach, or assess where you should be. The examples here are certainly not exhaustive, or even “statistically significant” for representing

⁸ Phillips, Judah, *Building A Digital Analytics Organization*, (Pearson, 2013), <http://www.amazon.com/Building-Digital-Analytics-Organization-Integrating/dp/0133372782>.

the full range of challenges you might face, but they do have enough in common (and are sufficiently different) that they can help give you and others you need to influence a sense for your own needs and potential ways forward.

A word about focus: In the context of Professor Jerome McCarthy’s “4Ps of Marketing” framework (Product, Price, Placement, and Promotion)⁹, my judgment is that most of the action today that’s driving the evolution of marketing and sales analytics is in the “Placement” dimension—in particular, the rapid evolution of native digital channels like mobile device advertising and the digitization of legacy channels like print. So, there’s a disproportionate amount of attention to these elements of the marketing mix here.

How It’s Organized

The book has four parts.

Part I, “Improving Your Odds: Eco-systemic Conditions for Analytic Success,” explores what I call “eco-systemic conditions.” These include strategic alignment (agreeing on opportunities worth investigating), access to data, operational flexibility (being able, through a combination of infrastructure, process, and people readiness, to act on insights generated through analytics), and individual and organizational capacity. We start here because a recurring theme across all the experiences described in this book as well as my own is that without getting these conditions right, investments you make in analytic capabilities will not generate returns. It’s like buying a prize-winning pumpkin seed and trying to grow it on a parking lot’s blacktop.

Part II, “Practical Analytics: Proven Techniques and Heuristics,” explores how practitioners apply research, analytic, and testing

⁹ McCarthy, Jerome E., *Basic Marketing. A Managerial Approach*, (1960), Homewood, IL: Richard D. Irwin.

techniques and heuristics in real-world situations to strike a balance between thoroughness and practicality as they seek to inform decisions and actions. Included in this section is a discussion of the value and limitations of stories, and more generally hypotheses, to guide analytic approaches in this time. Also, we'll explore specific techniques for managing bias in "uncontrolled" decision-making settings.

Part III, "Making Progress," conceives of analytic capabilities as living, breathing things that need to make continuous, carefully throttled progress to stay vital and provide feedback, and it suggests how to evolve these capabilities. So, it explores the balance between building these capabilities and delivering insights and supporting actions through those capabilities. In particular, it explores issues of pace, governance, and measurement of the productivity of analytic capabilities themselves.

Finally, Part IV, "Conversations with Practitioners," presents summaries of the conversations I had with the executives who agreed to participate in this project. Of course, relevant aspects of these conversations are woven throughout the first three parts to help illustrate and extend the ideas presented there, but I found it equally valuable to take in their perspectives as they conveyed them. Sometimes these were presented in the context of their firms' recent histories; other times they came in musings on specific technical topics; and some came through in the narrative arc of career stories. For me, they were all fascinating and useful, and I'm sure you'll feel the same way.

Any book on a subject that's evolving this quickly can only hope to be a temporary push on a carousel of progress. Ongoing conversations among operators and analysts in the arena are the real fuel for learning, and I hope I'll have the chance to talk with you. So if you have comments or questions about the ideas here, I'm @cesarbrea on Twitter or please email me at cbrea@forcefivepartners.com.

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1

Strategic Alignment—First You Need to Agree On What to Ask

Any number of articles and books about “data science” (side note: the term’s a bit oxymoronic, I think) emphasize the importance of asking the right question. “If I had an hour to solve a problem, I’d spend 55 minutes thinking about the problem and five minutes thinking about solutions,” said Albert Einstein famously.¹ Personally, while I’d want to get a peek at the data I had to work with a little before the 55th minute of the hour to see how close it might get me to answering the questions I’d really like to pursue, his point is well-taken. In the context of marketing and sales analytics, as elsewhere, the ultimate questions are where to shift scarce resources like dollars and people.

Most books on analytics start with a list of common questions and techniques for how to solve them. This book starts differently, by trying to understand the decision-makers who must absorb and act on your analysis. One important realization our real-world questions suggest is that the ultimate resource-related questions we describe above are rarely asked and answered by a single individual alone.

People have different ways of defining possible challenges to focus on, ways of evaluating performance, and means for assessing tradeoffs among possible solutions to challenges. So, for any decision-making

¹ Although this quote, or variants of it, is widely attributed to Einstein, the date and place where he said this remain enigmatic. For more, see http://en.wikiquote.org/wiki/Talk:Albert_Einstein

process with more than one participant, Einstein’s advice should be extended to weaving these three elements into a *deliberation structure* that each person with a hand in the decision can connect to, even as you try to select an *analytic structure* most suited to the business challenge or opportunity at hand. If you can’t get senior executives who will use the fruits of the analytic labor to agree on what they want, or even how to ask for it, you are doomed.

In this chapter, we’ll explore how different executives think about these needs and suggest a synthesis that might serve as a point of departure for you. We’ll also highlight some common organizational “fault lines” that you’ll have to navigate and offer some ideas for how to recognize and address them. Then, in Part II, “Practical Analytics: Proven Techniques and Heuristics,” we’ll present analytic frameworks and techniques that can serve as candidate “common currencies” for facilitating strategic alignment across the divides we identify in this chapter.

Framing Your Focus Beyond the Answer Itself

So, first, there’s the question of where to focus your analytic attention. My former boss George Bennett, who co-founded Bain & Company and then successfully built and sold several services firms after that, used to say, “Come prepared to talk; be prepared to listen.” Consistent with his advice, the first challenge is to develop your own perspectives on possible questions and answers from multiple angles, not only for a richer set of options, but also to help you identify and compensate for your own biases. At the same time, you need to understand what questions others are asking and what solution options they might be lobbying for, as well as what logic and fact set led them to their conclusions. Then, while you can’t satisfy everyone

all the time, you can provide discipline as to how priorities get set that goes beyond the individual analyses you've done. If people feel that the processes for deciding where and how to spend scarce resources are rigorous and fair, they'll be better able to accept the answers. In our conversations for this book, Judah Phillips (who has built and run the digital analytics functions at Monster.com and elsewhere, and has written an excellent book on the subject called *Building The Digital Analytics Organization*) memorably suggested, "If information is power, then analytics is inevitably a political act," and you have to think several moves ahead about how to influence direction and progress in the best interests of the business. (We'll tackle this third issue more extensively in Part III, "Making Progress.")

Three Perspectives for Marketing and Sales Analytics

The conversations for this book suggest three main orientations executives have for marketing and sales analytics. For short, I call them "Venus," "Mars," and "Earth." "Venus" is primarily a way to tell "outside-in" customer experience stories about how people connect to your firm, and how your sales and marketing efforts map and execute against the contexts these customer experiences define. By contrast, "Mars" is an "inside-out" numbers-first way of thinking about how you should shift marketing investments across different channels. Today, "Attribution Analysis" (the Big Data Brother of media mix modeling) is the most well known specific technique for this angle on marketing thinking. Finally, "Earth" describes an "infrastructure-up" order for building properties and presences that is essentially reasoned from a blank slate ("Ok, first we need a web site, then we need a mobile version of it, then we need to be on Twitter..."). The sequence the Earth perspective suggests is generically sensible, but typically untethered from an appraisal of how your specific customers want to navigate

toward purchases and of the relative performance of your current investments to help them.

Different senior executives have, through their backgrounds and inclinations, a dominant framework among these three that influences them. Creatives like to tell stories. Analysts like to talk numbers (and with the glorification of quants on Wall Street, marketing analysts now also talk in terms of “arbitrages” and “trades” as well). Builders express themselves in terms of “foundational capabilities” with “end-state” visions, phased plans, and “process designs” for managing them. Because of these biases, senior teams with similar backgrounds run the risk of groupthink and missed opportunities, while other teams with widely differing backgrounds run the risk of confusion and paralysis. So in addition to the intrinsic value each framework offers on its own, using them collectively is very helpful so team members can tune into each other’s points of view.

Venus

Various analytic disciplines apply the same fundamental Venus perspective using different terms. Strategists talk about “customer segments,” the “pathways” each customer travels, through a grid defined by “buying process” stages on one axis and “channels” on the other. Business (or “functional”) analysts talk in terms of “users” and “use cases,” also frequently documented using process maps or requirements documents for technical solutions. Creatives talk in terms of “personas,” “occasions,” and “touchpoints,” bundled into “narratives.” Regardless, Venusians like stories, and so the common denominator for them, regardless of functional training and experience, is the largely “left-to-right” narrative arc of the “customer experience.”

If numbers are introduced into the resulting Venusian stories, they are expressed as costs-per-something (for example, per impression, click, lead, or acquisition) at each step, or as a percentage yield from one step to the next (for example, conversion rate). But very

often they are not included at all—a crucial miss. Even more rarely are they updated. A more common outcome is a beautiful flowchart, capturing the existing or desired experience in amber, displayed in a large framed print on an office wall.

Mars

Martians like data. So they take what various channels produce and look for significant answers to the question, “When I change x (and y and z), what happens to a (and b and c).” Then they divide costs by these results working toward the holy grail—a common currency for “pricing” investments for different options (“full attribution”). Next, they use these “prices” to “buy” and “sell” media, messages, and audiences (at the extreme, this could be in real time, such as real-time bidding in display ad markets).

Today, there’s lots of data. And, the relationship among different data is increasingly *deterministic* (I see search result X and click through to page Y) rather than *probabilistic* (I see BigCo’s TV ad X , and later visit BigCo’s store Y). Further, the tools for capturing and making sense of all this (cloud computing, Hadoop and its friends, modeling and visualization packages, and so on) are widely available and more cost effective than anything to this point.

On the other hand, data volumes can be overwhelming, the data itself can be very messy and hard to integrate, and with so many moving parts, analyzing and acting on it can be pretty complex. Skills to set up, use, and interpret the available and affordable tools are scarce. Plus, there’s the classic joke: “Q: Why does the drunk man look for his lost keys under the lamp post, instead of the bushes where he fell? A: Because that’s where the light is!” In other words, by starting with data we *do* have about the things we *are* doing for the people we *do* see, we miss opportunities to do things we don’t yet do, for people we don’t yet know.

Among the three perspectives, Martians are the most likely to test as well. Because of their primary orientation to data and not to design, they don't fall in love with their creations and confuse these means for ends. On the other hand, their relatively lower engagement with design of infrastructures and experiences sometimes limits their orientation to data-rich and test-friendly channels, recapitulating the "drunken man" dynamic described above. Smart executives see this bias, and while they respect and embrace the discipline of an analytic, test-oriented mindset, they don't allow it to dominate their options. Speaking of La-Z-Boy's analytically-inclined culture, CMO Doug Collier says, "It's almost a joke... 'If you don't bring me a control group, don't bother talking to me!'" He explains the firm's insistence on a "double-delta": "Don't just tell me how we compare with past performance—I also need to understand the lift over control." So now, "Even the PR and brand guys will come in with numbers to support their suggestions." Yet at the same time, speaking of the firm's significant investment in its brand awareness campaign through a relationship with the actress and model Brooke Shields, "Signing Brooke wasn't something you could do as a test. We had to go, and we felt combining Brooke's appeal with our prior brand equity would lead our target customers to give us a chance." However, speaking to the data-driven discipline balance he tries to strike, he added, "On the other hand, we didn't just jump; we did a lot of careful qualitative and quantitative research on our brand platform to shape our advertising. We didn't want to make Brooke the brand, but rather have her be the vehicle through which our target customers could discover that our product line fits their lifestyle, and that our stores are great places to shop." The firm has done seventeen spots with Ms. Shields so far, and has the analytic infrastructure in place (including the use of extensive quantitative and qualitative testing of the spots in primary research, and the YouGov *BrandIndex* service extended with some custom questions focused on the awareness and effect of the brand platform)

to understand, scientifically, which spots, in what combinations, are effectively conveying which messages at different times.

Earth

People of Earth are more architects and engineers than operators. In the absence of good Venusian stories and Martian models to guide their paths, they document the “current state,” envision an “end state,” and then plot and launch phased programs for getting from A to B. But if you look more closely, very often the starting and ending points are described more in terms of capability inputs than performance outputs and milestones for deciding when what you’ve built is good enough and it’s time to move to the next part of your plan. Or, if implementation of capabilities is tied to related operating metrics and not just schedules, it’s sometimes hard to make investment trade-offs without the kind of common currency that Martians might prefer.²

The “builder bias”—the tendency to use this lens—is especially prevalent in digital marketing, because many of the senior people in this domain came up at a time when their priority was to field basic capabilities, rather than optimize pre-existing ones. Rob Schmults, VP of Online Commerce at Talbots, says:

If you asked a physical store manager, “How’s business?” you’d never hear, “Well, this month we installed new lighting, and the talking price tags go live next month.” They’d be less about pixels, and more about stockout rates in popular sizes. By contrast, ask an ecommerce person, “What’s on deck for next year?” and he or she tends to focus on “Design and

² One excellent example of this approach is a blog post by Google Digital Marketing Evangelist and Market Motive (<http://www.marketmotive.com/>) co-founder Avinash Kaushik, titled “Digital Marketing and Analytics: Two Ladders for Magnificent Success,” in which he suggests an *ur*-sequence for digital marketing initiatives and the metrics to go with them. (<http://www.kaushik.net/avinash/digital-marketing-analytics-ladder-step-by-step-success/>)

launch site x or feature y” and relatively less on the performance of what they are operating. This means time and time again you see insufficient attention given to inventory levels, to basic usability and shopability. A physical store manager is going to raise bloody murder if she’s hollowed out on core sizes in core product. She’s also going to be absolutely certain her store is easy to get around. The online counterpart all too often gets distracted by shiny keys.

At minimum, even with weak ties to operating metrics such as feedback loops, one thing our executives suggested looking for, to distinguish more- and less-effective applications of the “Earth” perspective, is how iterative these applications are. In other words, ideally they try to keep implementation progress in balance across your “experience”: make a little progress on the website, then shift to promotion, then back to your mobile site, then perhaps some attention to social media presence, and so on. This requires, of course, some coordinating mechanism and a strong team culture in which senior folks responsible for different pieces know when to “lead, follow, or get out of the way.”

Applying the Three Approaches

All three of these ways of looking at the world are enormously enabling and yet limiting at the same time. In our discussions, our executives don’t see using them as “either-or” but rather, “What mix, and when?” Here are some guidelines synthesized from their advice:

³ Jeremy Hsu, “The Secrets of Good Storytelling: Why We Love a Good Yarn,” *Scientific American*, August-September, 2008, <http://www.scientificamerican.com/article.cfm?id=the-secrets-of-storytelling>.

- When you can't get on the same page, lead with Venus. Research shows that humans are wired for stories³, so the Venusian approach is the most effective common denominator for driving the strategic alignment process in a heterogeneous senior team. But don't forget the numbers: Quantitatively expressed facts about yields and costs can then be layered into the stories to provide proportion and help you generalize the points your narratives make.
- When you need to maximize your near-term ROI and have limited degrees of freedom to build new stuff, emphasize Mars. Move pragmatically but persistently toward the fully-attributed future by adding more variables, source by source, to your analysis. Prioritize each successive addition by the magnitude of your spending and your flexibility to act. (It may, for example, be easier to tweak your promotional strategy, or your digital spending, than to redo your TV campaign.) Wring as much result from your existing spending through shrewd "trading" so you have more to reinvest in the re-imagined future.
- When you need to accelerate progress, be an Earthling. Don't over-think, look for obvious improvements you can make quickly, and focus on stringing together a series of these successes to get the ball rolling. Momentum is strategic, too. But make sure as you do these things that you don't just measure your progress in lines of code, but in their impact on key operating metrics (like the ones Avinash Kaushik described)—and watch for diminishing returns to tell you when to shift gears.

Figure 1.2 summarizes the perspectives and when to apply them. Even as you emphasize one approach for a particular set of circumstances, keep pilot lights lit under the others. It won't just help you get better answers—it will also make folks with different inclinations feel heard, which is just as (or more) important.

Analytic Orientation

	"Venus"	"Mars"	"Earth"
Personality/Background	Creative	Trader	Engineer
Thinks in terms of...	Customer Experience	Optimization	Architecture
Communicates with...	Stories	Numbers	Plans
Go-to artifact	"Customer Journey"	Predictive Model	Blueprint
Most useful when...	You need initial alignment among members of a senior team.	You need short term ROI improvement and have limited ability to build new channels.	You are operating in a new market and need to accelerate progress or experiment to find your way forward.

Figure 1.2 Analytic Orientation

Reconciling Organizational and Cultural Perspectives

If only it were as simple as reconciling Venus, Mars, and Earth! In addition to the “intrinsic” mindsets or approaches different people carry, there are also “extrinsic” fault lines to consider. These are extrinsic in the sense that they are a function of organizational constructs, related interests, and “tribal” dynamics, more than native personality traits and experiences of individual executives. These divisions exist to varying degrees in all organizations, and you ignore them at your peril. In what could well be a corollary to Einstein’s proposition about the importance of asking the right question, there’s Peter Drucker’s famous observation that “Culture eats strategy for breakfast.”⁴

Across our conversations, the executives interviewed for this book called out eight fault lines they’ve experienced to be relevant. Listed below and in Figure 1.3, six are functionally defined, and two are more a matter of culture.

⁴ This remark is widely attributed to Professor Drucker, but does not appear in his writings or records of his speeches.

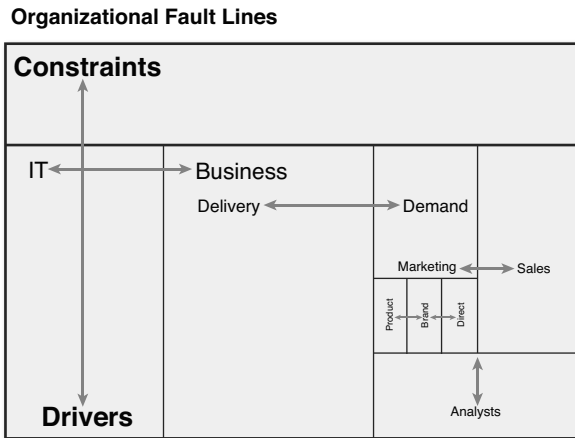


Figure 1.3 Organizational Fault Lines

1. One major border lies between marketing and sales, demarcated by the Qualified Lead. This is a hotly disputed division everywhere, even in film: recall the famous scene in “Glengarry Glen Ross” where Alec Baldwin dresses down the sales team after they complain about the quality of the leads they have to work with.⁵
2. Inside the marketing function, we often find a split between brand, product, and direct marketers, who, variously, come from “creative,” “strategic,” and “analytic” backgrounds.
3. It’s common also to find a split between analytical or research teams on one side, and the “line” sales and marketing executives they serve; this is especially true when analytical resources are collected together someplace and segregated, physically and organizationally from their “customers.” The supposed advantages of “critical mass” then have to be actively cultivated, through training, sharing, and cross-disciplinary collaboration, to offset the costs of isolation that are charged by default.

⁵ Movieclips.com, “Put That Coffee Down!” excerpted from *Glengarry Glen Ross* by David Mamet <http://www.youtube.com/watch?v=r6Lf8GtMe4M>.

4. There's often a strong "demand" vs. "delivery" animus. Having to make, serve, or support what someone else promises, or, conversely, having to sell a product or service that inevitably as designed can't exactly fit what a customer might want to buy, are significant challenges. Hence the split between marketing and sales, on one side, and "ops" on the other.
5. The biggest chasm observed is often between "the business" and IT. Stereotypically, IT often thinks and talks in terms of projects, programs, service level agreements, and governance, while marketing and sales tend to be more goal-oriented and quota-driven.
6. The "driver" functions—marketing, sales, IT, operations—also eternally struggle with "constraint" functions, such as finance, legal, and even HR.
7. There's the classic "home office vs. the field" tension, best expressed by the cynical saying, "Hi, we're from corporate, and we're here to help!"
8. Finally, there's a natural tension that emerges between "old-culture insiders" and "new-culture outsiders" when an acquisition is completed or a senior executive is hired and slowly works to bring in "his or her own people." The lines of demarcation here are often stylistic, even when functional, experiential, or educational backgrounds are similar. Examples of these stylistic lines include patience versus urgency, consensual versus autocratic, degrees of polish and formality, and politeness versus directness, among many others.

How you select and mix frameworks, and how you communicate the insights they lead to, must also start with a careful appraisal of the relative importance of, and degree of stress on, each of these fault lines. At one level, what questions to ask may seem obvious ("How do we increase sales and profits?"). But depending on your training and experience, your role, your incentives, and your particular pressures,

your interests and needs can run in a very different direction from your senior peers'. Each of the groups described above will have its own idea of what questions should be asked and its own frameworks for determining those questions. For example:

- Salespeople will want clear qualification criteria with solid data.
- Finance people will want logical, well-founded (benchmarks and past precedents) business cases.
- IT people will want explicit requirements, prioritization, and timing.
- Field people will want useful, high quality “templates” (both specific and conceptual) that leave room for them to innovate, along with data for which template works best.

If you can't get some agreement on what to pursue, your investment in analytic capability building isn't likely to pay off. If you're not careful to balance the language you use across different groups' dialects, or to find some plainspoken common denominator, you will miss people. Also, you must be sensitive and intentional to perceived allocations of credit (or blame) when you present certain facts. For example, is a low or inefficient conversion from one step to the next the fault of the quality of the lead or the skill of the closer? Decisions about where to focus your de-averaging and modeling efforts will be guided in part by political sensitivities as much as factual uncertainty. In this political context, striving for a perfect answer may be practically impossible. You may need to confront the temporary reality that the “A” answer you believe in must sometimes be subordinated to the “B” answer you can make happen.

Probing for the relative importance and stress on different fault lines can be done in a very “consultative,” indirect manner. For example, you might ask questions like,

- “So, how's business?” (I've found that how a person answers this is very telling. “Well, we're ten percent behind our sales

goal” is a very different answer from “Well, my new CRM system is three months late,” or “Our market share is down five percent,” or “Really my biggest challenge is getting the team to come together.”)

- “What are the most important, least-understood issues you’re facing? Why are they the most important, and what do you think you need to know more about? How high is the burden of proof?” This is a good question to ask across the analyst/businessperson divide. It’s not uncommon for the analytic agenda to be divorced from the issues that are top of mind for the operator. (More on how to keep those connected in Part III.) Also, it’s often the case that analysts have higher bars for the precision of the analysis than the decision being supported requires.
- “What part of your experience or training called your attention to this issue? Is there a specific way of thinking about issues like this that you’ve applied, that points to this issue?” This question will help you gauge the degree of functional myopia that you’ll need to overcome.
- “What are your current plans for doing something about this? What else needs to be done? What would you suggest gets de-emphasized to make room for that?”

Packaging for Balance: “The Analytic Brief”

While this gentle-probe approach, even as simplified as it is, may make sense to you while reading this, my experience has been that it’s still not fit for consumption. To bring it to bear, you need to wrap it up in a single package. In our own work, we’ve developed such an artifact, which we call an “Analytic Brief.” The executives interviewed for this book had their own various ways of metaphorically bundling their preferred approaches. We’ll explore these further in Chapter 5,

“Practical Frameworks—For Getting on the Same Page,” and in the conversations in Part IV “Conversations with Practitioners.”

Visions for the Analytics Capability to Serve These Needs

So far, two things should start becoming clear. The first is that, in many ways, analysis is the easy part. Orchestrating analysis so that it isn’t just acted upon, but welcomed as fundamental to driving decisions and actions, is often harder and more time consuming than actually doing the analysis itself. The second is that, in the service of this first objective, you may need to start with analysis that is simpler and more transparent, both because it’s easier to orchestrate action around it, and because with less time and less rope (at least to start with), you can’t take it to the most sophisticated levels. This has major implications for a lot of things, including the vendor solutions you select and the people you hire. But once again, a major theme of this book, echoed throughout all of the conversations that inform it, is that analysis has no intrinsic value—it’s only useful if it’s acted on. And you don’t need to be absolutely right, you just need to be *better*. So one major attribute for any effective analytic capability is a practical orientation for progress and results.

As you move toward this practical orientation, a well-developed analytic capability is balanced across research, analysis, and testing. Managed in silos, practitioners of each of these techniques will stretch, at greater expense and with less certainty at potential insights. Statisticians will add variables of diminishing incremental explanatory power to models. Researchers will weight and re-weight survey responses to make up for sample shortcomings. Testing teams will stretch to multivariate scenarios that may be technically feasible but practically hard to coordinate and communicate. But managed together (or at least carefully coordinated), it’s much easier to squeeze what’s practical

from each and switch to the next when the air starts getting too thin. Belinda Lang, former CMO of Aetna Insurance's consumer group, relied on all three of these levers in launching and growing various new business options in her twenty years at American Express, and she cites the balance among them as a key driver of the success those options had.

Some discussion questions:

- Which is your dominant analytic perspective?
- Which analytic perspective pre-dominates for your boss(es), peers, and team members?
- How does homogeneity or diversity help or hinder you? What have you caught or missed as a consequence?
- What do you have planned to further leverage or overcome this diversity or homogeneity?
- What organizational fault lines are most pronounced in your situation?
- Is your communication of analytic findings tuned for the fault line you're dealing with?

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