Learning to Read the River

Dimitri Maex

The Red Papers:

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Ogilvy & Mather

Learning to Read the River:

Using Math Marketing to increase your return on investment

Introduction

Yesterday was just a normal day. When the alarm on my cell phone blasted me out of a dream at 6:15, I fumbled for the snooze button to get a few more precious minutes of sleep. A few winks later, I rolled out of bed and lurched from the shower to the closet and then headed to the kitchen for breakfast. Thus refreshed, I stepped out of my apartment, picked up the New York Times from my doorstep and took the subway to work, all the while listening to the latest Brit pop sensation on my iPod. Once at the office, I headed to the gym downstairs where I ran for half an hour on a treadmill, staring slack-jawed at the ESPN screen in front of me. My next ten hours flashed by as I ran around the office to various meetings, made a few phone calls and ignored a few others, checked my BlackBerry way more than I should have and pecked away at my laptop writing emails and PowerPoint presentations – pausing for a spell of intense concentration as I built a spreadsheet in Excel. Come evening, I took the subway home but got out one stop early so I could hit the supermarket to buy pasta dinners – linguini with clams for my wife and a hearty Bolognese for me. We ate, played a bit of Rock Band on the Xbox360, watched an episode of True Blood on HBO, and went to bed. Lights out: 11 p.m.

During this unremarkable day, I left behind a rich trace of data, most of it unconnected with time in front of a computer. Not only can AT&T see when I woke up – or at least tried to – they can follow me all around the city that day. The New York Times, if it's clever, will see that I still like to get my newspaper delivered in the morning despite my habitual check of their website every day. The Metropolitan Transit Authority can count me as another passenger on the overcrowded L train from Brooklyn to Manhattan. The next time I sync my iPod, Apple will see that I'm grooving on the Arctic Monkeys album I bought from iTunes more than some of my other recent purchases, and they ought to use that information to make better recommendations next time. (Lady GaGa? Not for me.) I would love for the gym at work to have a swipe card that tracks and summarizes my workout. I would be able to see my recent form and get suggestions on improving my regimen while the gym gathers a ton of information about my health and workout habits. Yes, I prefer to watch ESPN while I run, and no, I haven't yet added a weights circuit even though I know I ought to.

My employer, if it wanted to, could track every hour I spend, not only through the electronic timesheets I fill out but also via the badge I have to use to open the door at every floor in the building. All of my computer data goes through their system, and it's a snap for them to check my online calendar and track the activity on my laptop. Because I use a bonus card when I shop, the supermarket knows it was pasta night at the Maex's. If I had connected to Xbox Live (which I no longer do since I was verbally abused the first time I used it by a twelve-year-old from Wisconsin who wasn't impressed with my gaming skills), then Microsoft would know that I am one of the many thirty-plus players hooked on Rock Band. They could even classify me as a social gamer by matching me up with my wife's performance on the guitar. HBO and Time Warner Cable know everything I watch on TV, and therefore, probably know me better than I know myself.

These incredible volumes of data are waiting to be explored by companies who seek greater demand for their products and services through a better understanding of what their customers do, think and feel. The information they gather, but hardly use, could give them valuable insights into how and why their marketing succeeds and fails. Knowing that would pay off in a dramatic improvement in return on investment. Mathematics, still a neglected skill in most marketing departments, is the only tool able to extract crucial learnings from the masses of data every person generates every day. The age of Math Marketing is here.

Incredible volumes of data are waiting to be explored by companies who seek greater demand for their products and services.
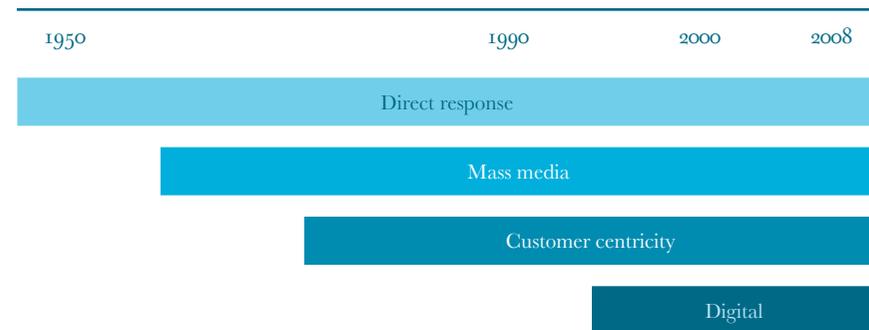
History of Math Marketing

Aaron Montgomery Ward invented the mail order catalog in 1872. With that single sheet of eight by twelve paper, he also, albeit unwittingly, invented Math Marketing. Ward's breakthrough, soon bloated to over 500 pages, led Richard Sears and Alvah Roebuck to launch their own catalog in 1886. For the first time, large merchants had an objective means to measure their marketing success and optimize their operations. We do not know exactly how Ward, Sears and Roebuck did it, but we know they did a good job. After all, both catalogs are still around today!

The catalog merchants and other direct response advertisers ushered in an era of utopian optimism in the new science of marketing. To contemporary eyes the problem of successful advertising had been solved. "The time has come when advertising has in some hands reached the status of a science," wrote a smugly self-satisfied Claude Hopkins in 1923. "It is based on fixed principles and is reasonably exact. The causes and effects have been analyzed until they are well understood. The correct methods of procedure have been proved and established. We know what is most effective, and we act on basic laws." For a few years he and his fellow commentators were on target. It took the invention of mass media to prove them wrong.

1950		1990	2000	2008
Direct response				
	Mass media			
		Customer centricity		
			Digital	

Marketing goes mass

While America's first radio station, KDKA, went on air back in 1920, it took until the 1950s for marketers to approach broadcast media with anything like the mathematical precision they once enjoyed. Anyone with a pulse could see the appeal in reaching millions of people at one time, but figuring out what worked and what didn't remained opaque. Mass marketing could not be measured with the old tools, and so leading edge marketers turned to operations research and management science models to gauge effectiveness. Data was scarce, and the application of even the latest scientific methods had its limitations. Absent unimpeachable facts, marketers turned to econometric modeling to understand better the impact of broadcast marketing on brand awareness, consideration and, ultimately, sales and profit. It worked surprisingly well. Econometric modeling still helps modern marketers judge the effectiveness of mass media. If anything, econometric modeling is underused today, and, as Warren Buffet might tell you, an undervalued asset can be a powerful money maker.

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Mr. Company, I'd like you to meet Ms. Consumer

It took another few decades, but, by the 1990s, marketers laid their hands on another batch of cool toys to play with. Computers. The plunging costs of computing power and information storage made it possible to capture, store and analyze vast amounts of data. Enough data, in fact, to know a little something about every one of their customers, especially their most valuable ones. Businesses invested heavily in data warehousing technology to store all customer information in one database, and marketing entered the age of customer relationship management (CRM). Direct marketing transformed from a blunt, one-way sales channel into an elegant means for companies to stay in touch with their customers, no matter how they bought. Marketers were freed from total reliance on the imprecision of mass media measurement. Using these tools, Frederick Reichheld demonstrated that a five percent improvement in customer retention yields a twenty-five to one hundred percent increase in profit. Garth Hallberg followed up by showing that a small proportion of the average company's customer base represents a disproportionate share of revenue. No wonder marketers poured their lives — and their dollars — into these new tools.

Now that companies knew how much their best and most loyal customers meant to the bottom line, businesses strived to figure out who these gold mines were and how to keep them in the fold. They subjected "single customer views" to rigorous analysis of transactions, value, response rates and even demographics. Established statistical techniques such as logistic regressions and discriminant analysis enabled marketers to predict their customers' next move, and other techniques classified customers according to recency, frequency and monetary value of purchases (RFM). Lifetime value models predicted what a customer would be worth to the company over that individual's lifetime, and anti-attrition models assessed the likelihood a buyer would drift away.

Soon, the exponential growth in computing power brought new data-mining techniques, machine learning and artificial intelligence into the marketing toolkit. The stage was set for the vast quantities of data derived from digital media. Math Marketing had finally come into its own.

The golden age of Math Marketing

My average day has gone from being an evanescent journey of interest to me and my loved ones alone to a trail of digital spoor for a clever marketer, eager to bag my next purchase, to follow. The easy stuff is already being done. Closed-loop systems, such as e-commerce environments, are as close as we're going to get to marketing nirvana. Digital traces shows us exactly which media individuals have seen. Website tracking notes where individuals came from (or, in the case of search, what terms they typed in to arrive at a site). We can observe an individual's entire shopping experience, all the way to their actual conversion to a sale. With more and more media becoming digital, soon most, if not all, media exposures will be traced to an individual sale. The world has become our focus group. Now imagine what could happen if you could learn to read the river of data all of us leave behind every day, even when we're not sitting at a computer.

Math Marketing's possibilities seem endless, and they are. They are also easily defined: Math Marketing can increase your return on investment through a thorough appreciation of the effectiveness of all your marketing efforts and a fundamental, transformational understanding of your customer. Bringing those benefits into your organization requires some significant organizational and philosophical adjustments. Fortunately, others have already made the rookie errors. I have learned from their mistakes – and my own – and am confident that you can make Math Marketing work for you.

Everything has become measurable, even mass media. Everything generates data, and the volumes are enormous. Google's digital database, perhaps the world's largest, captures almost ten billion searches per month. With these huge quantities of data, we have unprecedented insight into how our customers engage with brands and how that engagement leads to revenue. That's the good side. On the other hand, what had been a nourishing trickle of data has turned into a roaring torrent. The trick, as any whitewater guide could tell you, is learning to read the river.

My average day is a trail of digital spoor for a clever marketer, eager to bag my next purchase.

Making Math Marketing work for you

Accountability
Ergonomic measurement

Insight
Prioritization, personalization and precision

People
Math Marketing organization

Data
New single enterprise view

You don't go plunging down some terrifying class five rapids without proper preparation. Yet that is exactly what many companies do when faced with the sudden influx of beguiling data flowing into their servers. It's no wonder they get swamped or capsize. Moving your organization into top Math Marketing form requires careful preparation. This four-step structure will help make the transition smoother.

Ergonomic measurement

Math Marketing will help you understand how your marketing activities impact profits and how you can optimize that marketing by doing more of what works and less of what doesn't. And the way to do that is with measurement. Now here's the funny thing about the state of marketing measurement in 2010: almost everything is measurable. Yet plenty of surveys of marketers suggest that measurement is their main challenge. They get lost in the deluge of metrics. I see their thousand-yard stares every day. The cure is what I call ergonomic measurement. Ergonomics concerns itself with understanding and improving the interactions among humans and everything else, and we have a crying need for it in marketing measurement. We need systems that do for measurement what the iPod did for mp3 players. Despite the high degree of technical complexity under the hood, the user experience is simple and elegant. Ergonomic measurement is a process of constant refinement, but building on this framework will get you started off right.

Making Math Marketing work for you

Begin with the basics

If you want to understand the impact of your marketing efforts, you must start with measurement first, moving on to analysis of the results after that. Only then can you use the insights you generate to optimize your marketing efforts. With marketing budgets under increased pressure, many companies skip measurement and analysis and shoot for instant optimization. This never works. You need the foundation of metrics and insights before you can optimize. To do otherwise will cost much more in the long term.

Align metrics to objectives

Measure what you need to measure, not what you can measure. Only focus on the data that aligns with your goals. All-but-limitless storage enables you to store everything you learn, but sifting through data unrelated to your business goals distracts your marketers. Consult with the other business units in your organization to ensure that the metrics you measure dovetail with their objectives. Mapping metrics to objectives often improves the quality of the objectives themselves.

Use a mix of financial and non-financial metrics

The last couple of years have seen a number of efforts by marketing professionals and academics to summarize marketing's performance in one metric. Some of these metrics, such as Reichheld's Net Promoter Score, Peppers & Rogers' Return on Customer and Doyle's Increase in Shareholder Value, can be useful performance indicators, but they will never offer a full explanation of the spectrum of your marketing. At the same time, finance departments are forcing marketing departments to adopt financial metrics. While this is a good thing, focusing on financial measures to the exclusion of all others is not. Counting the money is not enough; marketers (and all non-marketing decision makers) need to understand where the revenue comes from. IBM does this well. In addition to their financial calculations, the IBM marketers measure how their efforts influence brand awareness and image. Their innovative Favorable Selling Environment Index assesses how receptive the environment is to their sales force.

Use statistical modeling to identify drivers of business performance

Sometimes the basics aren't enough. Getting an understanding of the impact of various elements of the marketing and media mix on outcomes such as brand awareness, consideration and, ultimately, sales and profit can be a complicated task, especially in today's multichannel world. Advanced and proven techniques such as econometric modeling can reveal the impact of different marketing investment levels and mixes. The insights you gain will lead to recommendations for allocating, dispersing and timing your TV, radio, print, out-of-home, search, display and other media investments. Econometric modeling has been around for over half a century, and its power in helping marketers understand what works and what doesn't is well established. Despite that, its use is relatively limited. The UK's IPA awards set the international gold standard for advertising material, but only fifteen percent of the case studies submitted used econometric modeling to assess the effects of the campaigns.

Build a marketing dashboard

Don't keep your marketing story to yourself. Parcel out the marketing intelligence you gather to marketing and non-marketing folks alike. Once this practice required lengthy, highly structured reports, but now electronic marketing dashboards provide visible and tangible sharing of your measurement efforts. Dashboards often become the collaborative forum through which ergonomic measurement comes to life. The design of a dashboard leads to a conversation about what metrics are important, which, in turn, forces you to align your metrics to your objectives. You will need to populate the dashboard, and that will spur you to post up financial and non-financial metrics as well as the more sophisticated statistical models your organization can use to optimize its marketing. Dashboards bring the data to the desktops of the decision makers. Having a dashboard in itself will not make an organization more efficient and accountable, but they provide the means to make that possible and are an essential element in creating a culture of Math Marketing.

Making Math Marketing work for you
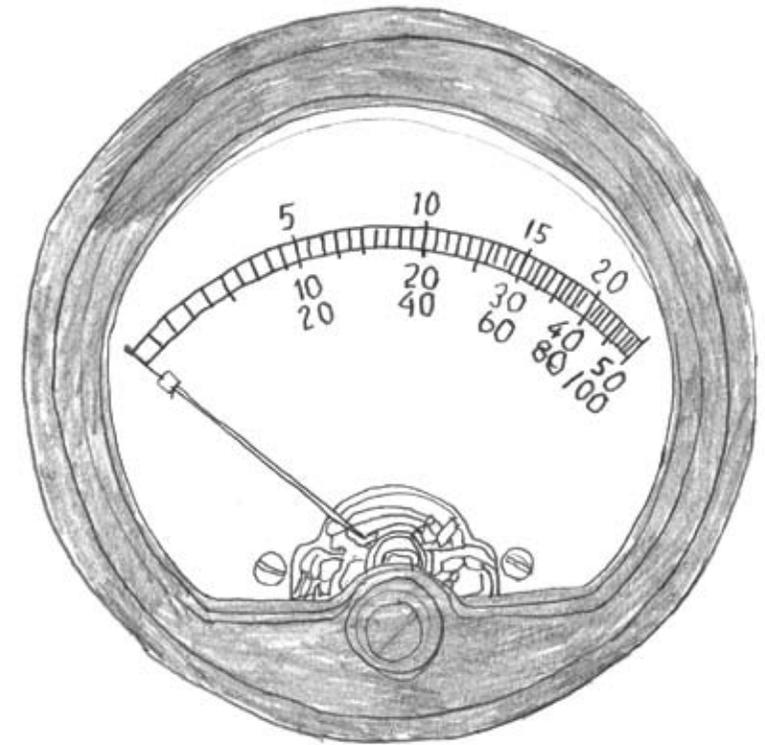
Three-Step insight

Data is only as valuable as the insights you distill from it. Those discoveries are what Math Marketing brings to your organization. The valuable consumer insights Math Marketing uncovers can be turned into powerful ideas that fuel future growth. The range of techniques available is nearly as broad as the spectrum of data you can measure. To bring order from that swirl, start with the basics and prioritize your data mining efforts based on the questions they will answer.

- Do you know who your best customers are?
- How can you find prospects with the same profile?
- What drives your profitability?
- What makes your customers and prospects engage with your brand?
- How should you communicate with customers and prospects?

These questions will determine whether you need a value-segmentation, an attitudinal segmentation, a lifetime value model, an anti-attrition model, a browsing typology or any other Math Marketing tool at our disposal today. Answer these questions – or others that you may pose – through a three-step process: Prioritization, Personalization and Precision. In other words, find out how you can prioritize your most valuable customers and prospects, personalize the way you communicate with them, and find the right time and place to target them.

Prioritization
Determining whom to target

Prioritizing your most profitable and highest-potential customers and prospects focuses resources where they really matter. Prioritization tools describe how customers or prospects behave and how that translates into current or future profits. They allow the marketer to rank targets according to a positive business outcome. Prioritization tools such as decile analysis, share of wallet segmentations, lifetime value models and recency-frequency-monetary value schemes combine multiple behavioral attributes into one scale for ranking targets from high to low importance. Most traditional database segmentations fall into this category.

*Data is only as valuable as the insights
you distill from it.*

Personalization
Determining what to target them with

In order to tailor your messaging, you need a thorough understanding of why targets behave the way they do. Personalization tools uncover groups of targets who share similar needs, lifestyles, demographics and many other revealing attributes. Brand planning and media planning research segments tend to fall into this group. Since most personalization tools start from what consumers need, they can also be powerful drivers of new product development.

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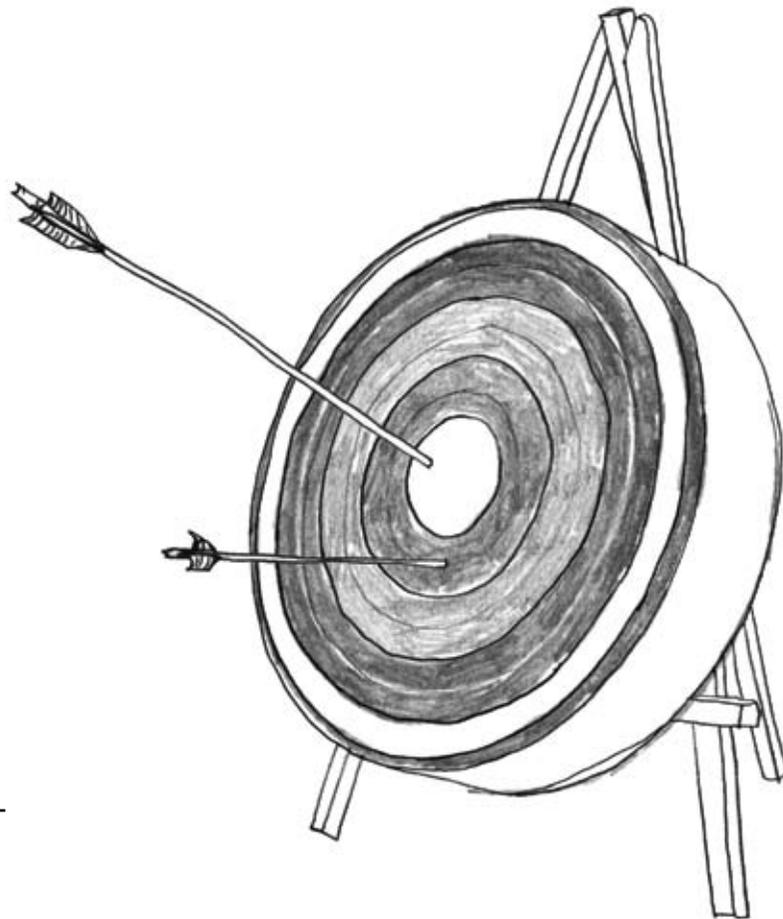
Precision
*Determining where and when to target them*

In a digital world, consumers often reveal in real time what their intentions are, and Math Marketing has taken advantage of that with an ever-growing suite of breakthroughs in precision targeting. Precision targeting tools enable the marketer to identify individual customers and prospects at the right time and in the right place. A drill manufacturer, for example, wants to know whether a person has searched for drills on Google, whether he clicked on a banner for drills, or whether he saw a drill-related video online. These observed events are direct indications of a consumer's interests and desires at that moment. A whole industry has sprung up offering "Behavioral Targeting" (BT) solutions based on the instantaneous availability of this data. In its early days, BT generated twenty to thirty percent lifts in advertising performance. As a result, it has become standard industry practice. Innovations in BT are shortening the lag between when the information is gathered and when it is acted upon. When someone searches for a drill on Google, that is very valuable information if I can target that person immediately. On the other hand, knowing that someone searched for a drill three months ago doesn't do me much good. The predictive power of self-disclosed data starts to decline minutes after the observed event. Future innovations will focus on capturing multiple events in real time, increasing the value of even older data, and shortening the cycles between observation and action. Real-time buying, an early entrant into this field, is the vanguard of what will no doubt become a transformative phenomenon. In the digital world, timely insight equals profit.

Consumers often reveal in real time what their intentions are.

The new single enterprise view

Data is the raw material for Math Marketing, and the volumes gathered every day are staggering. Imagine for a moment that you had a database that held every word ever spoken by a human being, every utterance from the dawn of language on to babble you hear around you right now. That's a damn big database, right? You would need twenty databases of that size to hold the data that will exist by the end of next year. And the amount of data we spool out skyrockets every year! Not all of this data can be used by companies to improve their marketing efforts. After all, much of it is junk, but quite a bit of it can be helpful. Companies that adapt to the new scales of available data will thrive. Those that do not, well, no one said that evolution was kind. Adapting organizations will adopt a single enterprise view of their business, not to replace the traditional single customer view but to augment it. This will allow them to access huge volumes of data, producing intricate analytics and targeted messaging that has both mass economies of scale and single-customer precision.
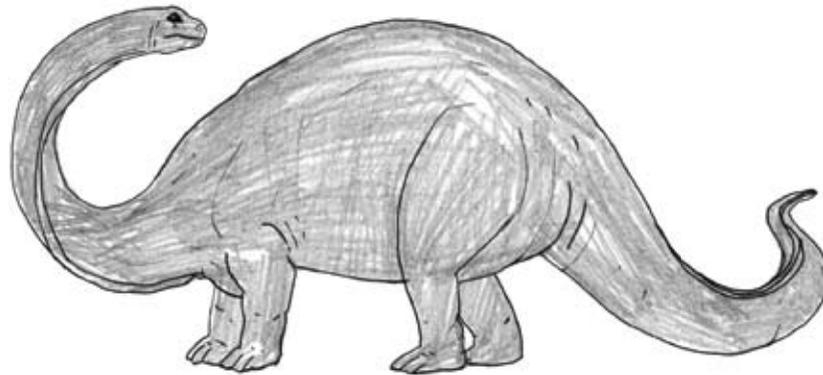
Moving beyond the traditional single customer view

Many companies have been building single view corporate data warehouses since the early CRM days. Creating these has been an expensive and labor-intensive task. Most likely, you now have a valuable asset. For example, Tesco in the U.K. estimates that sixteen percent of their margin is attributable to the knowledge they get from their customer database. That makes their database a $3.2 billion asset.

Tesco's customers, and everyone else's as well, are generating massive quantities of data outside of the corporate systems. This data is owned by platforms like Facebook, Twitter, Google, Microsoft and Yahoo!, and companies need learn how to integrate it into the databases they already have in place. The data gathered in these new integrated databases will extend beyond the individual to the entire enterprise of selling. Any measure that can generate consumer insights or improve marketing accountability will be part of this new single enterprise view of the future.

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The new single enterprise view

Companies and a new entrant, third-party data clearinghouses, are developing systems to integrate these data sets with existing data warehouses. To fully realize the potential inherent in the single enterprise view, these new solutions must include these new data sources:

- Search-intent data: Search data is rich in information. And it's free. Search intent modeling tools mine that data and feed back insight on the search terms consumers use to find your brands and products. In addition to the obvious benefit of improved keyword targeting, this analysis reveals the thought processes of your target audience. Knowing the words they use and conjure to talk about your brand can improve the effectiveness of your overall communication.

- Listening posts: Social web platforms such as blogs, microblogs, forums, social networks, and opinion and review sites are another easily accessible source of consumer data. Mining this data for insights may not be quite as straightforward as it is with search-intent information, but it is worth the extra effort to learn what your consumers are saying. Listening post technology collects data from the social web and performs semantic analysis of the conversations happening there. From this, marketers can learn how many people are talking about a brand, whether those conversations express positive or negative opinions, and which other brands or characteristics are brought up during the exchange. Ogilvy used careful analysis of listening post data to help hotel chain Harrah's change the offers and language in their advertising efforts. In online reviews, customers raved about the views from the hotel – a finding that would not have been picked up by any other means. Harrah's now features those views in their ads, and that simple, transformative insight resulted in a fifteen- to thirty-percent improvement in return on their online advertising.

- Primary research: If you want to know what consumers think, just ask them. That is how primary research works and why it has been the main data source for generating market intelligence for a long time. Today's primary research is an entirely new discipline from what it was even a decade ago. Social communities and online survey tools have cut the costs of primary research dramatically. Companies use these tools for idea generation, polling and even in-depth interviews. Instead of waiting weeks or months for research results to filter back in, decision makers can learn almost instantaneously what their customers think. Careful cultivation of these research panels can open a feedback channel with engaged customers, providing marketers with a constant influx of fresh perspective.

- Results repository: A results repository to store all marketing metrics in one place is probably the most important asset a marketer can have in the quest for efficiency and accountability. Though this sounds very obvious, it surprises me how few companies have one. The challenge is not technological – that part is remarkably easy. The difficulty is in the discipline. With the constant pressure to do more with less, few marketers take the time to capture performance metrics over time. This is especially true when it comes to cost metrics. Data on marketing costs tends to be stored as batches in financial systems making it useless for performance analysis. By keeping a robust results repository – including both performance and cost data – marketers can add a crucial layer of efficiency analysis to their single enterprise view.

A new single enterprise view of your data can have as profound an impact on your company as single customer views did two decades ago. This crucial strategic asset will soon become more than just a competitive advantage; it will be the mark of a healthy organization.

Organizing for Math Marketing

All the Math Marketing in the world won't do you a bit of good unless your company is organized to employ it. People, not numbers, not algorithms, make the difference in successful Math Marketing. Throwing bodies at the problem will not work. A company needs the right organizational framework and leadership mindset, which few have in place at this time, to enjoy the benefits of Math Marketing. To get this right without the expense or dislocation caused by organizational turmoil, set up a base of skills, construct a Center of Excellence (COE), forge the right external partnerships and foster a pervasive Math Marketing culture.

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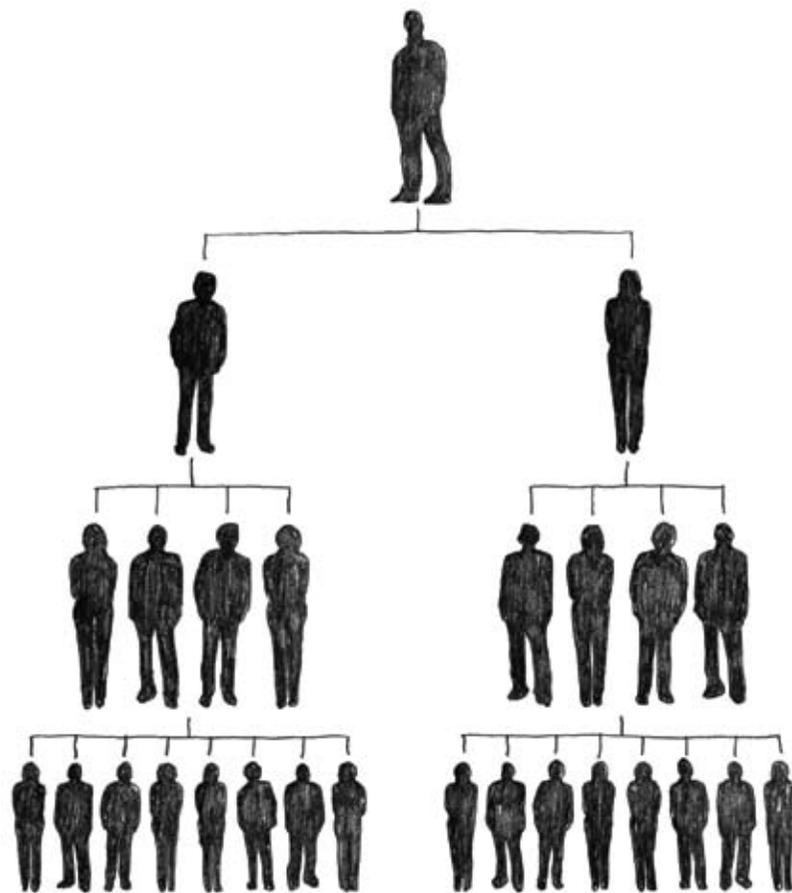
Skills

Good Math Marketing talent is scarce. Math Marketers must be able to use advanced mathematical techniques and explain their findings in a marketing context to a nontechnical audience. If you've ever hung around with a bunch of mathematicians, you know this is an extremely rare combination of talents.

The last 15 years have seen an explosion of analytical tools. In order to master them, Math Marketers need a staggering variety of skills.

If your organization wants to build out their technical Math Marketing capabilities, the skills matrix on the next page is a good road map. But other talents are also required to make Math Marketing work. Chief among them is the art of making the complex seem simple. Math Marketers specialize in analyzing the vast amounts of data in our digital world. By temperament and culture, they often prefer the company of like-minded specialists with whom they can talk shop without having to explain themselves every other sentence. When you're in the weeds of complex problems, simplicity seems irrelevant and reductive. Yet simple, elegant explanations are essential if Math Marketers are to have any impact on the organization outside of their own priesthood. Training Math Marketers to embrace both the complexity of data and the simplicity of actionable insights isn't just good politics – it's the ultimate goal of the work itself. There are plenty of techniques and tools that can help Math Marketing become more actionable. These range from personas and customer portraits to rulebooks and guidelines. Simplicity is key for all of them.

People, not numbers, not algorithms, make the difference in successful Math Marketing.

*Making
Math
Marketing
work
for you*

Business planning	Budget setting and allocation
	Business case development
	Scenario planning
Online media analytics	Online media analytics
	Online behavioral targeting
	Social media analytics
Econometric modeling	Campaign performance measurement
	Marketing mix modeling
	Media mix modeling
360-Degree measurement and reporting	Performance reporting
	Dashboard practice
Web analytics	Website reporting
	Site testing and optimization
Targeting	Segmentation
	Predictive modeling
Quantitative research	Tracking studies
	Online research

*These are the abilities that Ogilvy's Analytics department, a group of more than
200 Math Marketing specialists worldwide, shares with clients.*

Center of excellence

Many companies sensibly nurture advanced Math Marketing skills within their organization by establishing a Center of Excellence (COE) for Math Marketing. This group usually resides within a marketing intelligence group that, in turn, often sits within a broader strategy group. Most of today's marketing intelligence groups focus on market research and econometric modeling. For them, most, if not all, of the more modern Math Marketing skills are novel. These departments and their leaders grew and matured during the years of mass marketing, when research and econometrics were ascendant.

Today's Math Marketing COE must consist of at least one Web analyst, a website optimizer, a social metrics expert, a database marketer, a search analyst, a quantitative market analyst, a qualitative market researcher, a media analyst, a digital media analytics expert, an audience researcher, an econometrician, a data miner and a PR measurement specialist. Since few companies can sustain an internal COE with such a degree of specialization, many of them look outside for partners who bring some, if not most, of these capabilities.

External partnerships

The role of external partners will only grow larger as Math Marketing evolves. Companies eager to acquire Math Marketing by way of outsourcing need to establish the right organizational framework to support these relationships. On the other side, the ideal Math Marketing partner of the future needs to be strong across two dimensions.

- *Broad Aperture*: Math Marketers must comprehend the marketing landscape in its entirety, understanding all media and all elements of the marketing mix. They should understand the impact of marketing on overall business results and have the senior-level client relationships that enable them to take action.

- *Specialty Skills*: Math Marketers must have the specialty skills necessary to master the modern Math Marketing toolkit. They include econometric modeling, data mining, statistics, web analytics, online ad serving competencies, quantitative market research techniques, dashboard and visualization technologies, and social media analytics. They need the intellectual flexibility to grasp and implement the latest developments in the Math Marketing industry.
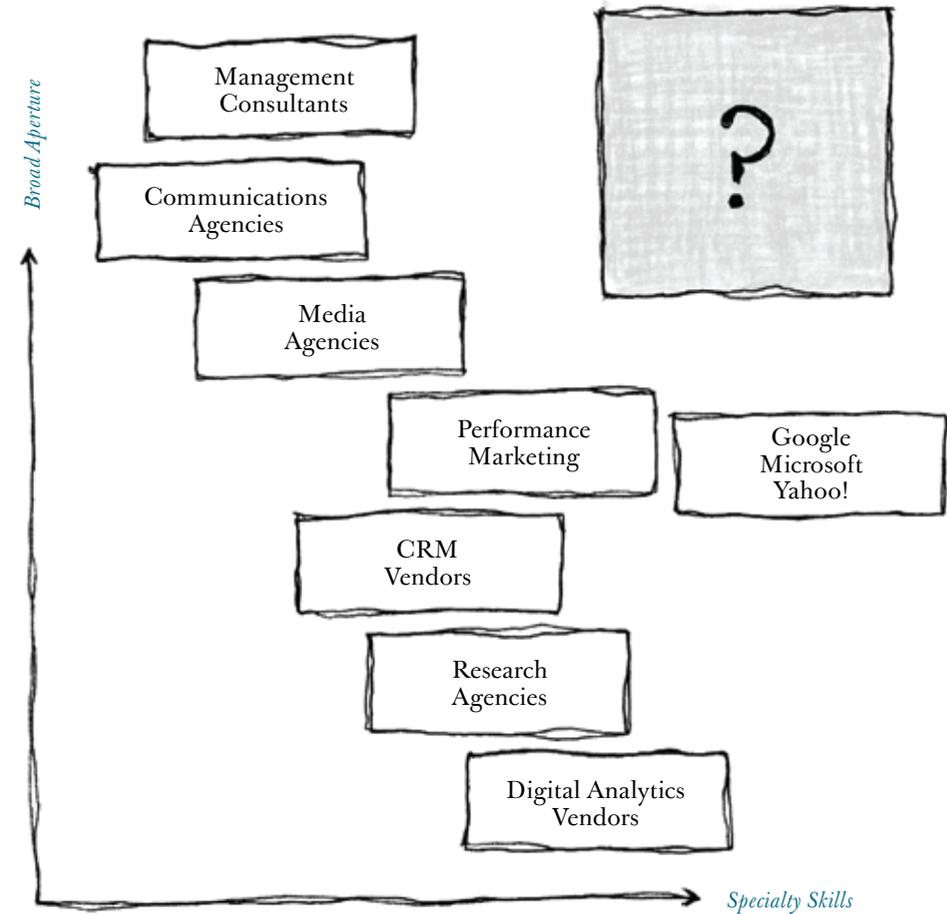
The current Math Marketing landscape, as you can see above, is lacking a clear top dog.

A true Math Marketing partner would have a combination of broad aperture vision and sharp speciality skills. This partner would appear in the upper right corner. No one is there at the moment. The main contenders — management consultants, integrated communications agencies, media agencies, Google and Microsoft — will soon be fighting for dominance in that top spot. That competition will be great news for companies eager to set up their COE.

Culture

As daunting as the talent crunch may seem, the biggest challenge companies face is internal. Effective Math Marketing requires a culture shift from the most senior leadership on down. Marketers need to be seen as full participants in an organization's financial and creative decision making rather than finding themselves kept to the side as a murky but necessary cost center. Brilliant insights won't help a company that neglects to implement them, and Math Marketers, no matter their rank, are the best choice to make their case to the C-Suite officers; they speak the same language. Already, marketing departments are under pressure to hire high-potential marketers who understand return on investment and analytics. With the average tenure of CMOs now at 28 months, it won't be long until a new generation of marketers, well-versed in the workings of Math Marketing, rise to the top.

Empowering the Math Marketers can help companies strike the right balance between analysis and action. Math Marketing should focus on educating the end users, particularly those outside of the senior leadership. Most companies spend far too little time on this. They put all their effort into generating insights, formatting them into simple, easy-to-digest formats for the bosses to absorb and then let their work languish on the shelf of the head of marketing intelligence. Communicate your business case to the decision makers and then translate the action items to the people on the front line. These can be customer service representatives, new product development engineers, creative and design teams, or anyone else who could end up benefiting from your insights. Involving them early in the process can help hone your efforts and will increase the adoption and use of those insights you generate together.

The biggest cultural challenge of all often comes from within your Math Marketing department itself. The main objective of a COE is to make decision makers outside of it smarter. The COE provides them with the insights, knowledge and tools to make better decisions independently. If a COE is successful, it will make itself obsolete. This, of course, has political implications as very few COE teams enjoy working toward their own obsolescence. Most react to this threat defensively, keeping knowledge

and expertise to themselves, securing their place as indispensable wizards. Not only does this undermine the very mission of the COE, it also sets up tension between the COE and other parts of the marketing organization. To prevent this from happening, make clear that the main goal of the COE is to drive adoption of the insights it produces. Measure this across the organization and reward decision making based on Math Marketing. Members of the COE in particular should understand that their success, as well as that of their colleagues, depends on communicating their expertise. Write it into the personal performance goals of COE members and incentivize them accordingly.

Math Marketing is a rapidly evolving discipline, and the innovations pushing its growth come from practitioners. COE members should be given the freedom and the time to discover new ways of improving the company's return on investment while they sling their own profession forward. Urge your COE to automate the cutting-edge work they do now, making it common practice. The more they do this, the more time they'll have to reinvent themselves, especially if you maintain an ongoing investment in training and research and development to support them.

Communicate your business case to the decision makers and then translate the action items to the people on the front line.

Conclusion

I never thought of my profession as controversial. Marketing — that's a middle-of-road gig, right? With the growing sophistication of digital media, things have changed. Now when I talk to my family and friends about the details of what I do for a living, I put on welding goggles first: "You're collecting all that data about me?!? That's creepy!" Consumers are rebelling against widespread data collection for commercial purposes, and they have valid reasons. Data gathering is largely unregulated and hidden, but things are changing. In the absence of other standards, the advertising industry has begun to self-regulate. We have pledged that we will not collect personal identifiable information (PII) without the consent of the consumer, and we will be transparent about when and how we use behavioral information for advertising purposes. We will give the consumer the opportunity to opt out of any data collection, but we will also educate consumers about our reasons for collecting this information in the first place.

I hope that our code of conduct, when paired with consumer education, will help people understand that what may seem like an intrusion at first is, in fact, to their benefit. I know that sounds Orwellian, but consider how few people outside of the marketing profession understand that advertising is needed to create content, especially in an age when consumers are expecting more and better free material. Consumers have demonstrated again and again that they will not pay full freight for the media they enjoy. If the situation were reversed, every website would be behind a pay wall, and every television channel would be premium.

Advertising-supported media isn't going away, but Math Marketing can make it much less of a nuisance in consumers' lives. Let's say you are a twenty-five-year-old gamer, and the TV networks need to expose you to thirty minutes of advertising a day to pay for the production of your favorite show. Would you rather have thirty minutes of advertising about the latest games or thirty minutes of general advertising? Most gamers would prefer the first scenario, but in return for that you're going to have to let the Math Marketers know something about your tastes, habits and preferences. You might be on the fence now.

Huge chunks of the advertising that people sit through has little or no connection to their lives. It is disruptive and often outright annoying, but is fixing that worth sacrificing a measure of your privacy? Math Marketing can make advertising content more relevant to the consumer, increasing the effectiveness of individual ads. What if I told you that knowing something about you improves effectiveness so much that I can cut the amount of advertising you have to put up with by half? Now I've got your attention. Ads that are personalized provide a better return for the advertiser, and advertisers will pay more for a personalized thirty second ad than for a general one. You'll see fewer ads, for which the content providers received more revenue, and those ads will be relevant to your life.

Consumers are the reason all of us go to work each day. They pay our salaries, and when you get right down to it, they're really in charge. We need to educate them, preparing the way for widespread acceptance of Math Marketing, just as we will within individual organizations. The advertising world we create together will benefit us all.

Key takeaways

Math Marketing will improve…

- *return on investment*
- *advertising efficiency*
- *the lives of consumers*

Although Math Marketing seems radically new, its roots go back to the late nineteenth century

Making Math Marketing work for you requires four major steps:

1. Ergonomic measurement
   - *Measure and analyze before you optimize*
   - *Be sure to measure what you need to measure*
   - *Use a mix of metrics*
   - *Employ statistical modeling*
   - *Build a marketing dashboard*

2. Three-step insight
   - *Prioritization*
   - *Personalization*
   - *Precision*

3. The new single enterprise view
   - *Move beyond single customer view*
   - *Combine multiple streams of data in innovative ways*
   - *Search intent*
   - *Listening posts*
   - *Primary research*

4. Organize for Math Marketing
   - *Determine your talent needs*
   - *Form a center of excellence*
   - *Forge external partnerships*
   - *Change your corporate culture's return on investment*

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Dimitri leads Ogilvy's Consulting group in North America. This group consists of approximately 100 consultants across Ogilvy's CRM, Analytics and Business Planning practices.

Dimitri began his career as a financial controller at Kraft Foods, after which he joined the Amsterdam Group (European Alcoholic Beverages Industry Group) as a market analyst for the EU. He joined OgilvyOne Brussels in 1998 as a data analyst and has worked on various clients and on international product development for the Ogilvy Group.

In 2001 Dimitri transferred to the London office to become Principal of International Consulting, responsible for developing the consultancy offering for international clients. He also became Ogilvy's global analysis community manager, a role he still fulfills.

In 2004 Dimitri moved to San Francisco to work at Cisco's headquarters in San Jose. Concurrently, as associate director of marketing analytics at OgilvyOne, he was responsible for developing the analytics department at Cisco Worldwide. After his spell in Silicon Valley, he moved to the New York office to run the analytics group which he helped double in size over the next three years.

In 2009 Dimitri was given the added responsibility of running Ogilvy's North American Consulting Group. He also became the head of Ogilvy's Global Data Practice, which made him responsible for developing Ogilvy's data and analytics offering globally.

Born and raised in Antwerp, Belgium, Dimitri studied econometrics at the University of Antwerp. He then went abroad to get his MBA in marketing at the Xavier Institute of Management in Bhubaneswar, India. His hobbies are tennis, squash, soccer and music.

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