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INSIGHT CENTER COLLECTION

Data-Driven Marketing

Data-Driven Marketing

The Science of storytelling and brand performance

Today's marketers have so much data at their fingertips that it can be tough to know where to start—and you might be forgiven for thinking you need a statistics degree to understand many an analytics dashboard. But most marketers consider themselves storytellers as much as strategists. They know marketing is as much art as science—and the best marketers know how to blend both. This insight center helps the modern marketer use the metrics at their disposal more effectively, marshaling the insights in the data in support of their own vision for the brand. Marketing campaigns are most effective when they're evidence based, and this insight center helps them identify and use the metrics that matter most.

- 1 4 Ways to Improve Your Content Marketing**
Frank V. Cespedes and Russ Heddleston
- 5 Extracting Insights from Vast Stores of Data**
Rishad Tobaccowala and Sunil Gupta
- 8 Use Big Data to Create Value for Customers, Not Just Target Them**
Niraj Dawar
- 11 Facebook Is Changing How Marketers Can Target Ads. What Does That Mean for Data Brokers?**
Dipayan Ghosh
- 14 How Advanced Analytics Is Changing B2B Selling**
Lori Sherer and Jamie Cleghorn
- 17 How Leading Marketers Get Time on Their Side**
Sponsor content from Google
- 19 What Blockchain Could Mean for Marketing**
Anindya Ghose
- 23 Time is of The Essence: How Leading Marketers Match Messages to the Right Moments**
Sponsor content from Google

- 25 How Nextdoor Addressed Racial Profiling on Its Platform**
Phil Simon
- 28 The Ways Customers Use Products Have Changed—but Brands Haven’t Kept Up**
Antonis Kochilas
- 32 How Companies Can Use the Data They Collect to Further the Public Good**
Edward L. Glaeser, Hyunjin Kim, and Michael Luca
- 35 How Our Hotel Chain Uses Data to Find Problems and Humans to Fix Them**
Ana Brant
- 39 How Leading Marketers Get Ahead in Today’s Data-Driven World**
Sponsor content from Google
- 41 How GDPR Will Transform Digital Marketing**
Dipayan Ghosh
- 44 Technology Is Changing What a Premium Automotive Brand Looks Like**
Jian Xu and Xiaoming Liu
- 49 Is Your Marketing in the Right Place but at the Wrong Time?**
Sponsor content from Google
- 51 How to Convince Customers to Share Data After GDPR**
Einat Weiss
- 54 How Do Consumers Choose in a World of Automated Ordering?**
Greg Portell and Abby Klanecky
- 58 How AI Helped One Retailer Reach New Customers**
Dave Sutton
- 62 How Marketers Can Start Integrating AI in Their Work**
Dan Rosenberg
- 66 How Consumer Insights and Digital Have Led to Adidas’ Growth**
Sponsor content from Google
- 68 Why Marketing Analytics Hasn’t Lived Up to Its Promise**
Carl F. Mela and Christine Moorman
- 73 Using Analytics to Prevent Customer Problems Before They Arise**
Paul D. Berger and Bruce D. Weinberg
- 76 Protecting Customers’ Privacy Requires More than Anonymizing Their Data**
Sachin Gupta and Matthew Schneider
- 80 Trust, Transparency and Value—How Google is Working to Improve Online Advertising for Everyone**
Sponsor content from Google

- 82 How Marketers Can Get More Value from Their Recommendation Engines**
Michael Schrage
- 86 5 Surprising Findings About How People Actually Buy Clothes and Shoes**
Jeremy Sporn and Stephanie Tuttle
- 90 A Survey of 1,700 Companies Reveals Common B2B Pricing Mistakes**
Ron Kermisch and David Burns
- 95 Time Is of the Essence. Time Flies. There's No Time Like the Present.**
Matt Lawson, Vice President, Ads Marketing, Google

SALES

4 Ways to Improve Your Content Marketing

by Frank V. Cespedes and Russ Heddleston

APRIL 19, 2018



HBR Staff/Chris Minerva/Getty Images

In the past decade, content marketing has become a widely established practice. Companies have hired writers and Chief Content Officers to run departments, create blogs and other materials, and, in the process, some have assured sales people that content marketing can mean the end of cold calling.

The playbook sounds simple: attract prospects with content relevant to each stage of their buying journey and extend offers that motivate them to contact your sales team for a demo or discussion. With online technologies and targeted lists, this should be a cost-effective tool for separating the

suspects from the prospects, accelerating customer conversion through the sales funnel, and, equally important, optimizing “data-driven marketing” by tying each piece of content to metrics like opens, reads, downloads, and so on.

But as Churchill reportedly said after [Gallipoli](#), “However beautiful the strategy, you must occasionally look at the results.” Consider: [blog output](#) by brands has increased over 800% in the past five years but organic social share of blogs has *decreased* by 89% and about 5% of content gets 90% of engagement. An estimated 70% of the content generated by Marketing is never used by Sales reps and a similar percentage of the leads generated disappear into a “[sales lead black hole](#).” And despite the repeated mantra about “data-driven,” there is contradictory advice about which content-marketing benchmarks indicate success as well as many blithe assertions about best practices in this area.

We examined 34 million interactions between customers and content on [DocSend’s platform](#), which allows sales organizations to upload and share documents with prospects. The result is empirical data and a good starting point for examining core aspects of any content marketing initiative: how much time prospects actually spend on content, on which devices, when, and the type of content they prefer.

You have under 3 minutes to make an impression, and there *is* an optimal length

It’s no secret that buyers are bombarded with messages and the web has exacerbated the situation. That likely explains why the average viewing time for content is 2 minutes and 27 seconds. During that brief period, prospects are making many rapid-fire judgments, including whether or not they will move to the next step. Conversely, many sellers need to share lots of information with prospects to motivate desired buyer behavior.

Our data indicate that you should do your best to get that information into documents that are 2-5 pages — compared to content of longer lengths, first-time prospects spend more time viewing each page of the document and are more likely to view all of it. Documents uploaded to DocSend’s platform include case studies, overviews and guides, e-books, and proposals. (Keep in mind that prospects further along their buying journey may require more information.)

Our data also indicate that much of marketing and sales collateral is read by prospects outside of the normal work week. If initially engaged, a prospect reading a piece on Wednesday often returns for a longer visit on the weekend. This reflects an important 21st century buying reality that pipeline metrics often obscure: increasing numbers of buyers don’t move sequentially through a funnel; rather, they adopt [parallel streams](#) to explore, evaluate, and engage with content and sales people. Buying is a continuous and dynamic process, and content forms, formats and sequencing must adapt.

Mobile is important but overhyped

The proliferation of smart phones, iPads, and other devices has generated a certain folk wisdom about crafting content for the mobile buyer. But our data indicate that, at the top of the funnel, it typically makes sense to optimize content for viewing on multiple formats and devices. Further, once a lead is handed off to sales and becomes an opportunity, an overwhelming majority of prospects view sales content on desktop devices, *not* mobile.

These findings have actionable implications for marketers. Desktop devices remain very important, so avoid needless optimization for a single type of device and format. Focus on creating content that offers visuals to convey key messages quickly and that performs well on multiple formats. Think succinct copy and core take-aways that punctuate each slide, and avoid text-heavy information drops on each page. Also, given the way prospects often return for a closer look outside work time, consider creating a content-sequencing process for coupling an initial view with additional engagement to help your sellers prioritize their follow-up actions. And in doing this, recognize inherent differences between marketing- and sales-relevant content. In the former, the goal is to establish awareness and interest; for sales, the goal is to get the customer to sign a contract.

There's no “best day” of the week to send content

There are many assertions about the best day of the week to send content. But opinions about Tuesday afternoon or Thursday morning simply don't hold up to empirical examination. Our data indicate that total visits by prospects to sellers' sites were almost evenly distributed across each day of the work week — slightly more on Tuesday, Wednesday, and Thursday and, unsurprisingly, a bit less on Monday morning and Friday afternoon.

Do not focus on specific days for sending content. In fact, doing that probably indicates unused capacity and a lack of cadence in your marketing and sales process. Instead, it's better to prioritize based on level and type of prospect engagement with specific types of content and a process for follow-up after initial engagement. For many companies, this often means linking your content marketing efforts to what you know about the vertical your prospect is in and relevant guides for each type. Content by vertical also plays well with most sales teams.

Prospects still prefer one type of content more than others

Marketers put a lot of time and effort into crafting content. And the data indicate they need to keep working on this to improve actual use of their content by prospects and sales colleagues. But which type of content routinely outperforms others in terms of completion rate? The tried and true case study is, by far, the content that prospects complete more than others. In our data, case studies have an 83% completion rate — orders of magnitude higher than other sales and marketing content provided during the buying journey.

Buyers, especially B2B buyers, want to know what others *are* doing with your product, not what they *might* do to improve productivity or other outcomes. Good case-study content does that, while providing a compelling reason for the prospect to learn more and initiate a change process. Especially

in B2B contexts, buyers must justify a decision to others in the organization who have competing priorities for limited funds. Knowing how other organizations have successfully integrated and used a new product, service or process is more important than grand assertions about “thought leadership” or “disruption.” As a result, good case content, like good follow-up, often has a specific and relevant vertical focus. And the process of finding and articulating that content requires on-going interaction between marketers, sales, and service people in your firm — interactions that often yield other benefits in addition to relevant and credible use cases.

Content marketing is evolving, and, as buying becomes increasingly non-linear, can play an important role in aligning selling with buying. But there are now many myths and unexamined assumptions that have accrued around content marketing as the practice has exploded. Don’t follow the herd. If you can’t track what prospects read, when, where, and for how long, you have a blind spot in a big part of your marketing budget and are unlikely to get the ROI possible with this approach.

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ANALYTICS

Extracting Insights from Vast Stores of Data

by Rishad Tobaccowala and Sunil Gupta

AUGUST 30, 2016



Companies have invested millions of dollars in big data and analytics, but [recent reports](#) suggest most have yet to see a payoff on these investments. In an age where data is the new oil, how are smart companies extracting insights from these vast data reservoirs in order to fuel profitable decisions?

In a provocative and influential [article](#), Chris Anderson, the editor of Wired magazine, argued, “...faced with massive data, this approach to science – hypothesize, model, test – is becoming obsolete... There is now a better way. Petabytes allow us to say: ‘Correlation is enough.’ We can stop looking for models. We can analyze the data without hypotheses about what it might show.”

Uncovering hidden patterns in data thus became the new Holy Grail. But even if data scientists are able to find the Grail, these discoveries are often divorced from business problems.

Companies that *have* been successful in harnessing the power of data start with a specific business problem and then seek data to help in their decision making. Contrary to what Anderson preached, the process starts with a business problem and a specific hypothesis, not data. Consider these three cases:

Amazon's Prime Now

In 2005 Amazon launched its Prime service, which offers members free two-day shipping. Brick-and-mortar retailers who found it hard to compete on price or variety highlighted that customers could immediately pick up products in their stores instead of waiting for days. To stay competitive, Amazon launched free same-day delivery for its Prime members in 2015. Soon it announced a new service, [Prime Now](#), allowing its members to order from over 25,000 products that could be delivered to their doorsteps within two hours. How can Amazon deliver thousands of products to millions of households within hours when other online businesses take three to five business days? While efficient warehousing and logistics is part of the answer, Amazon uses customers' past purchase behavior to predict what they are likely to order in the future. This insight helps Amazon optimally locate its warehouses and stock them with the appropriate products. Amazon knows the products you are likely to order even before you do. Better predictive ability from rich customer data has another important benefit: Amazon does not keep most of its products in inventory for very long, significantly reducing its working capital requirement. In fact, its [cash conversion cycle](#) is 14 days, much smaller than the nearly 30 days for most retailers.

Heineken's Cities of the World

In 2014 Heineken was facing a challenge around the world: Its consumers, especially the young “in crowd,” were beginning to prefer local craft beers that were seen as more authentic. How can a global brand stay relevant to these consumers? Heineken executives recognized that beer drinking is part of consumers’ social life. So what other things or events drove and enriched their social behavior? The company saw that people were using social signals to determine what was hot in a city (bars, restaurants, events) to reduce FOMO (fear of missing out). Using this insight, Heineken launched a campaign called “Cities of the World,” supported by a Twitter-based service called @wherenext to drive social engagement. To use this service, consumers simply tweet @wherenext and geo-tag their location to receive recommendations of restaurants, events, or clubs in their area, effectively turning mobile phones into a customized map of city hotspots. Heineken fueled the @wherenext algorithm with insider information, mobilizing influencers to post about their adventures. Soon more than 100 markets translated this global strategy into local markets, creating other unique ways to help consumers find adventurous, worldly experiences. In London [Heineken-branded cabs](#) literally drove people out of their comfort zones, delivering customers who drank a pint of Heineken to other pubs in the city for free; in Mexico [green Heineken doors](#) around the city opened to surprising experiences — an unexpected bike ride, a trip to London, or a fabulous dinner out. Apart from creating strong affinity for the brand, the overall activation led to 5% volume growth in the top 20 markets.

BuzzFeed's Native Ads

Native advertising, or sponsored content that often blurs the line between advertising and editorial, is all the rage among advertisers. BuzzFeed, one of the leaders in this field, was founded by Jonah Peretti in 2006 on the premise that it was possible to reliably produce content that would go viral. BuzzFeed now generates 7 billion views from 200 million unique visitors every month. Advertisers flock to Buzzfeed for its ability to create sponsored content that achieves 30%-80% [social lift](#), a measure of virality. How does BuzzFeed achieve this level of virality consistently? Jon Steinberg, former president of BuzzFeed, [explained](#), “There is a lot of creativity [in producing content], but once the posts are published the system takes over. We take control during takeoff, but while the thing is in the air it is on autopilot, steered by an algorithm.” The company effectively uses insights from data that allow algorithms to feed the winners and starve the losers.

These examples have one thing in common: The insights from data emerge from having a laser focus on a business problem rather than from taking shots in the dark in the hope of uncovering a hidden truth. Sure, there are scenarios where data patterns that are discovered by chance yield insight, but most of the benefit from data comes from pursuing well-defined problems.

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MARKETING

Use Big Data to Create Value for Customers, Not Just Target Them

by Niraj Dawar

AUGUST 16, 2016



Big data holds out big promises for marketing. Notably, it pledges to answer two of the most vexing questions that have stymied marketers since they started selling: 1) who buys what when and at what price? and 2) can we link what consumers hear, read, and view to what they buy and consume?

Answering these makes marketing more efficient by improving targeting and by identifying and eliminating the **famed half of the marketing budget that is wasted**. To address these questions,

marketers have trained their big-data telescopes at a single point: predicting each customer's next transaction. In pursuit of this prize marketers strive to paint an ever more detailed portrait of each consumer, memorizing her media preferences, scrutinizing her shopping habits, and cataloging her interests, aspirations and desires. The result is a detailed, high-resolution close-up of each customer that reveals her next move.

But in the rush to uncover and target the next transaction, many industries are quickly coming up against a disquieting reality: Winning the next transaction eventually yields only short term tactical advantage, and it overlooks one big and inevitable outcome. When every competitor becomes equally good at predicting each customer's next purchase, marketers will inevitably compete away their profits from that marginal transaction. This unwinnable short-term arms race ultimately leads to an equalization of competitors in the medium to long term. There is no sustainable competitive advantage in chasing the next buy.

This is not to say firms should never try to predict and capture the next purchase – but that they can only expect above-average returns from this activity in industries where competitors are lagging and where there are still some rewards to being ahead of the game. In many industries, including travel, insurance, telecoms, music, and even automobiles, we are rapidly closing in on equalization of predictive capabilities across competitors, so there is little lasting competitive advantage to be gained from predicting the next purchase.

To build lasting advantage, marketing programs that leverage big data need to turn to more strategic questions about longer term customer stickiness, loyalty, and relationships. The questions that need to be asked of big data are not just what will trigger the next purchase, but what will get this customer to remain loyal; not just what price the customer is willing pay for the next transaction, but what will be the customer's life-time value; and not just what will get customers to switch in from a competitor, but what will prevent them from switching out when a competitor offers a better price.

The answers to these more strategic questions reside in using big data differently. Rather than only asking how we can use data to better target customers, we need to ask how big data creates value for customers. That is, we need to shift from asking what big data can do for us, to what it can do for customers.

Big data can help design information to augment products and services, and create entirely new ones. Simple examples include recommendation engines that create value for customers by reducing their search and evaluation costs, as Amazon and Netflix do; or augmenting commodity utilities with customized usage information, as Opower does. More intriguing examples include crowd-sourced data that can give customers answers to important questions such as “what can I learn from other consumers?” or “how do I compare with other consumers?”

A look at startups that create new forms of value using big data is instructive. Opower allows customers to share their utility bills with Facebook friends to determine how they rank in relation to

other customers like them. INRIX, aggregates traffic data from customers' mobile phones and other sources to provide real-time traffic reports. Zillow combines information from an array of sources to provide consolidated insight about home attributes and values, competitive properties, and other market characteristics to buyers, sellers, and brokers. These companies are big-data natives. Their success should be a wake-up call to all businesses: Today, there is no business that is not an information business.

Every company should ask three questions to examine how its big data can create customer value:

What types of information will help my customers reduce their costs or risks? Multi-billion dollar businesses such as Yelp, Zagat, TripAdvisor, Uber, eBay, Netflix, and Amazon crunch quantities of data including ratings of service providers and sellers in order to reduce customers' risk. Currently, these good-bad-ugly ratings provide generic evaluations of sellers on standard scales. But increasingly customers are looking for more specific answers to questions such as what do *customers like me* think of this product or service. Answering such granular questions requires a much deeper understanding of what customers are looking for, and how they see themselves. That is an opportunity for the next generation of big data value creation.

What type of information is currently widely dispersed, but would yield new insight if aggregated?

Is there any incidentally produced data (such as keystrokes, or location data) that could be valuable when assembled? InVenture, a fascinating new startup operating in Africa, is turning incidental data on smartphones into credit ratings that allow base-of-the-pyramid customers access to loans and other financial products. In an environment where most of the population has no credit history, and therefore no credit rating, even rudimentary phone usage data serves as a handy proxy (people who organize their contacts with both first and last names are more likely to repay loans).

Is there diversity and variance among my customers such that they will benefit from aggregating others' data with theirs? For example, a company selling farm inputs (seeds, fertilizer and pesticides) can collect data from farmers with dispersed plots of land to determine which combinations of inputs are optimal under different conditions. Aggregating data from many farms operating under diverse soil, climatic, and environmental conditions can yield much better information about the optimal inputs for each individual farm than any single farmer could obtain from his own farm alone, regardless of how long he had been farming that parcel.

Big data has helped marketers address fundamental questions whose answers have long been out of reach. But the true contribution of big data will reside in creating new forms of value for customers. Only this will allow marketers to turn data into sustainable competitive advantage.

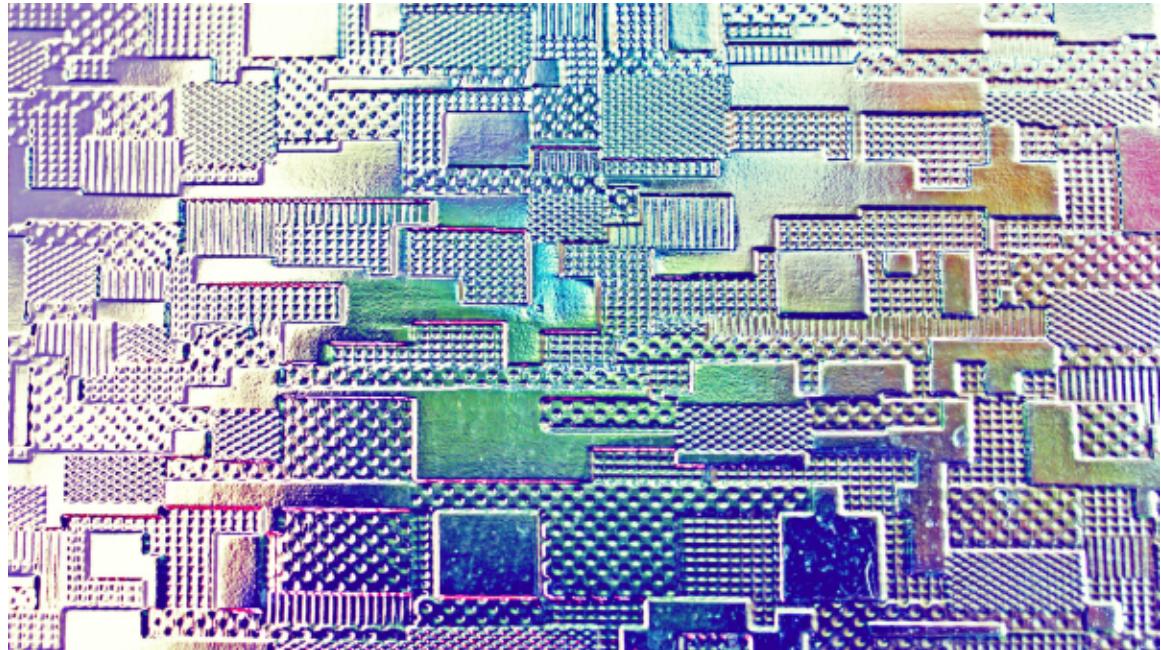
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TECHNOLOGY

Facebook Is Changing How Marketers Can Target Ads. What Does That Mean for Data Brokers?

by Dipayan Ghosh

APRIL 09, 2018



kelly bowden/Getty Images

Last month, Facebook announced in a [brief statement](#) that it will be shutting down Partner Categories, a feature that allows marketers to target ads on the company's universe of platforms by

using third-party data provided by data brokers. The move, which comes during a period of intense scrutiny over the social media giant's privacy and security practices following the Cambridge Analytica [revelations](#), marks a first-of-its-kind pivot among internet companies. This development could have major repercussions for internet companies and the broader digital advertising ecosystem if the firms at the center of this industry follow suit, collectively distancing themselves from data brokers and increasing transparency into their practices with personal data.

Traditionally, marketers on Facebook — and on most major platforms that allow targeted ads — have had three types of data streams they could leverage for targeting. First, they could use data they have collected themselves, like the names and email addresses of the customers who visit their brick-and-mortar or online stores. Second, they could use data gathered by Facebook, which maintains a rich data profile on users based on their use of the platform, web browsing history, and cellular location, among other sources. And third, they could use data provided by third parties — which typically are the companies we know as data brokers. Among these are [well-known names](#) in the industry, including Acxiom, Oracle, Epsilon, and Experian.

A critical aspect of this announcement — one that has gotten much less attention — is that the use of such third-party data is a common practice available through most internet companies' ad-targeting services. While the spotlight has been on Facebook, the broader issue is that most of the industry is not transparent about its practices with data brokers because there are no regulations that directly require such transparency. Until other platform companies that enable targeted advertising using third-party data open up about their relationships with data brokers and commit to further privacy protections, we can expect the internet's threat to digital privacy to persist.

The broker data that Facebook provided to marketers through Partner Categories threatens user privacy because its sources are unclear and consumers are often in the dark about its use. Advertisers on Facebook have long used that data to target users who were, say, in the market for a new car or who had just had a baby. What makes this data so sensitive is that brokers like Experian collect information that is hard for most firms in the digital advertising ecosystem to otherwise find. Brokers have close relationships with all kinds of other businesses, from large department stores to credit card agencies, which sell data about their customers to the brokers or share it. Customers typically don't know much about this; they often unwittingly sign away their rights to this data in the act of making purchases.

That Facebook's shutdown of Partner Categories comes on the heels of the Cambridge Analytica scandal is telling. Clearly, Facebook has realized that it must fundamentally change its data practices to restore its users' and shareholders' trust. This latest move helps us paint that picture; Facebook, like most other leading internet companies, has little control over how third-party data is collected, maintained, and used. If that data is used by marketers to reach people on Facebook's platforms, and another privacy breach like the Cambridge Analytica incident happens because of it, Facebook is left holding the bag. It can be argued that Facebook should have known better — but, then, so should every platform firm that shares broker data with advertisers. It's sensible risk management for

Facebook to shut down data conduits that are particularly damaging to individual privacy, and it would be wise for other internet companies to learn from Facebook's move.

This development is an immensely positive step forward for digital privacy, consumer protection, and the fight against disinformation. Facebook's announcement signals a significant public policy change for the company: Moving forward, it will hold both itself and its data partners more accountable. Other platforms that share data from brokers are surely studying Facebook's decision and considering how they, too, can distance themselves from brokers and increase their data transparency — if only out of enlightened self-interest.

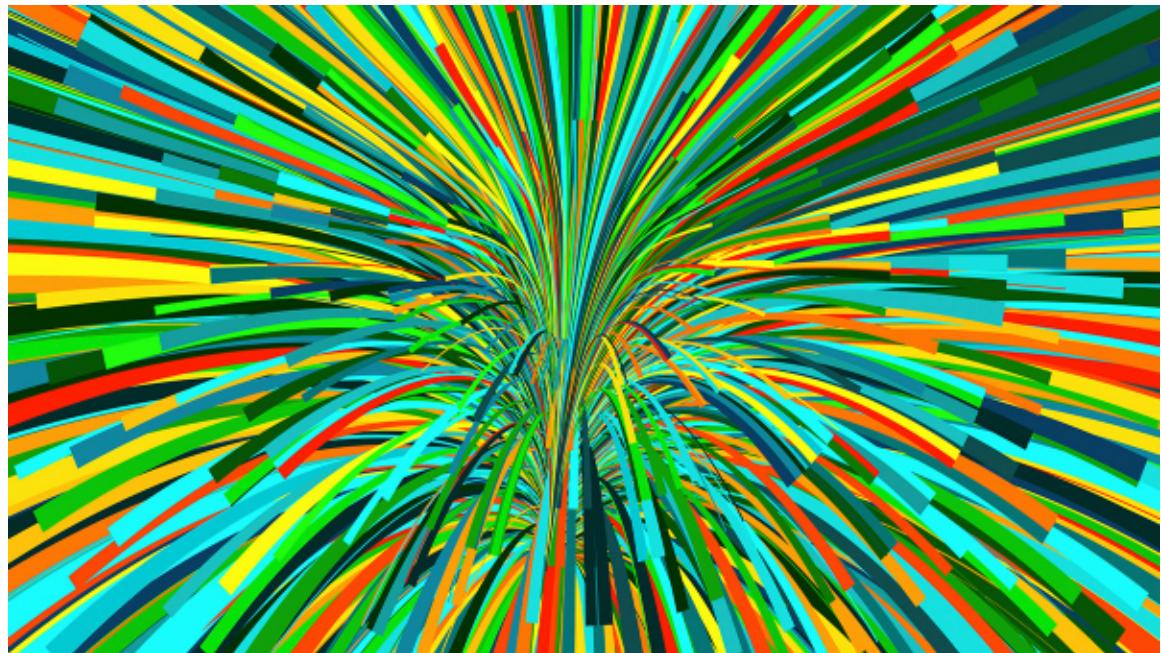
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SALES & MARKETING

How Advanced Analytics Is Changing B2B Selling

by Lori Sherer and Jamie Cleghorn

MAY 10, 2018



Marcus Winther/Getty Images

From targeted online advertising to more precise recommendation engines, consumer markets are bursting with innovation around machine learning and advanced analytics. While there's less buzz around business-to-business markets, these innovations are changing the game in B2B as well, even in old-line industries selling what might be considered commodity products.

A growing number of B2B companies are using data and analytics to add services that bring new elements of value to customers, and in some cases new sources of revenue. These elements are

fundamental attributes of a company's offering in their most essential and discrete forms – things like product quality, flexibility, and associated expertise; they lift value propositions above commodity status and benefit customers in particular ways. (For a deep dive into the elements, see our related HBR article “[The B2B Elements of Value](#)”).

Consider recent moves by Australia-based Orica, which provides packaged explosives materials to mining companies worldwide. Orica’s explosives are being used in roughly 1,500 blasts per day, and until a few years ago, data on those blasts existed on bits of paper and in disparate electronic sources. Orica invested in digitizing all that data and combining it with data supplied by its customers, including the objectives of the blast, conditions of equipment at the site, the exact techniques and products used in the blast, and the outcome.

Orica used the data to build pre-blast modeling and post-blast measurement and analysis, packaged in a user-friendly online system called Blast IQ. The service provides benchmarks and insights to ensure sustainable, cost-effective improvements in blast performance. When a mining customer enters information about an upcoming blast such as geological data, drilling equipment data and the desired outcome, Blast IQ runs a set of sophisticated models to simulate blast outcomes. This enables engineers to fine-tune a “high-resolution blast” so that it produces more predictably sized rock and dirt for subsequent loading, hauling and grinding, which together account for most of a mine’s operational costs. Producing blasted rock of the proper size helps Orica deliver a crucial element of value: *reduced cost*.

Orica is now codifying the decision logic of the most experienced blasting managers through predictive modeling to serve up personalized recommendations on demand. And as customers use Blast IQ and contribute more of their own data, over time, the company will have a large enough dataset to train more powerful machine learning models.

Blast IQ thus delivers a whole new level of value to customers apart from the purely functional or economic elements—notably in the areas of enhanced productivity and a closer relationship with Orica. Through an “elements of value” perspective, we see that Blast IQ provides *time savings, information and expertise*. At an even higher level, Blast IQ helps a less experienced engineer move up the learning curve much faster than in the days when one learned strictly by trial and error. The service offers the possibility of enhancing an engineer’s *marketability and growth and development*.

In another old-line industry, agriculture, Monsanto has steadily enhanced its core commodity chemicals business with data and analytics-based services to expand the value elements delivered. One of its boldest moves was the 2013 acquisition of The Climate Corporation, which was founded by two former Google engineers who built on 30 years of free government weather data to help underwrite weather-related risks. The Climate Corporation chose to focus on agriculture given the size of the industry and the fact that adverse weather conditions are a leading cause of crop failure. They assembled a massive data set using soil sensors and field experiments. Monsanto folded the

entity into its suite of farmer advisory services, and has continued to build a loyal customer base with additional mobile applications and advisory services.

Taking this strategy a step further, the company established Monsanto Growth Ventures (MGV), a venture fund based in San Francisco that looks for other inventive, environmentally sustainable ways to improve crop yield. In the past two years, The Climate Corporation acquired two of the companies in the MGV portfolio: HydroBio, a data-based, irrigation management platform that incorporates satellite imagery and crop models to improve the yield on water supply; and VitalFields, a reporting and tracking application that incorporates climate, disease and growth patterns to help farmers comply with local environmental regulations and better plan their season.

Starting from explosives and farming chemicals, these B2B companies have embedded their expertise in powerful software platforms to expand beyond the traditional products. They have enhanced the underlying data assets with search capabilities and algorithms that recognize patterns and make recommendations that can inform a complex array of decisions.

This kind of access to expertise and logic provides substantial additional value to B2B customers, whether through *risk reduction*, *information* or other value elements. In Monsanto's case, this evolution also opens up opportunities to position the brand as a company that uses data and analytics to provide the elements of *hope* and *social responsibility* in farming.

Any product that requires some expertise to use is a candidate for analytics innovation. B2B companies that neglect this area could find themselves sinking into a commodity trap. Stores of wisdom and experience in their employees' heads, hard drives and file cabinets cannot become valuable until they are packaged up and made accessible to customers. Machine learning takes all that experience, tests it in algorithms and delivers the best tailored answer more comprehensively than any human could.

Lori Sherer is a partner at Bain & Company in San Francisco and is co-leader of the firm's Advanced Analytics practice.

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How Leading Marketers Get Time On Their Side

How leading marketers get time on their side

Bain & Company, in partnership with Google, surveyed over 500 senior marketing executives in North America to find out how they use insights and technology to engage their customers. The overwhelming answer: Leading marketers deliver relevant ads and experiences—in the moments that matter most.



Leaders own their digital destiny



Marketing leaders are **1.6x more likely** to prioritize integrating technology, and they are **1.2x more likely** to be advanced users of their technology.

Leaders have a stronger understanding of their tech stack and see the benefits of it as a pathway to success.

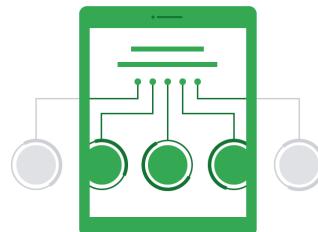
Leaders work faster, smarter



Marketing leaders are **1.7x more likely** to refresh their most critical marketing metrics and dashboards at least weekly.

Fresh information and a frequent review of performance helps leaders uncover trends and patterns. That way they can quickly take action on insights.

Leaders gain visibility and take control



Marketing leaders are **2x more likely** to manage technology within marketing in three years.

Because they're closer to the source of insight, leaders can easily understand their media investments and make better decisions to improve performance.

Learn how marketing leaders act when the time is right

Download the full report:
g.co/timelyconnections

Source: Bain/Google Marketing Leaders Study, North America, November 2017. n=516 marketing and advertising media and technology executive decision makers. Leaders and Laggards are defined using a composite score of self-reported revenue and market share growth. Of the total n=516 respondents, there are 123 Leaders and 105 Laggards.

Google

DATA

What Blockchain Could Mean for Marketing

by Anindya Ghose

MAY 14, 2018



Marcia Straub/Getty Images

Companies are collecting more data than ever before, and are making significant business decisions based on it. Of the [4 Vs of Big Data](#) (Volume, Velocity, Variety, and Veracity), we have now seen ample evidence of the impact and importance of the first three. A higher “Volume” of data has led to more efficient decision-making in numerous instances, such as in [programmatic marketing](#) and in [banking](#). [Research](#) has shown how leveraging high “Velocity” data — such as data from mobile devices — has unearthed knowledge that has helped firms better understand their customers. The significant potential of high “Variety” data — data that is unstructured in the form of text, images,

videos, and so on — to make better predictions has been documented in numerous academic [studies](#). But what about issues related to the accuracy, reliability, and transparency of the data itself, which basically comprises the fourth V, “Veracity”? In the field of data-driven marketing, an answer to addressing this limitation lies in blockchain technology.

How Blockchain Works

Here are five basic principles underlying the technology.

1. Distributed Database

Each party on a blockchain has access to the entire database and its complete history. No single party controls the data or the information. Every party can verify the records of its transaction partners directly, without an intermediary.

2. Peer-to-Peer Transmission

Communication occurs directly between peers instead of through a central node. Each node stores and forwards information to all other nodes.

3. Transparency with Pseudonymity

Every transaction and its associated value are visible to anyone with access to the system. Each node, or user, on a blockchain has a unique 30-plus-character alphanumeric address that identifies it. Users can choose to remain anonymous or provide proof of their identity to others. Transactions occur between blockchain addresses.

4. Irreversibility of Records

Once a transaction is entered in the database and the accounts are updated, the records cannot be altered, because they’re linked to every transaction record that came before them (hence the term “chain”). Various computational algorithms and approaches are deployed to ensure that the recording on the database is permanent, chronologically ordered, and available to all others on the network.

5. Computational Logic

The digital nature of the ledger means that blockchain transactions can be tied to computational logic and in essence programmed. So users can set up algorithms and rules that automatically trigger transactions between nodes.

In recent years, a major pain point for brands and advertisers has been the lack of transparency and accountability in being able to ascertain how their ad dollars have been spent. Digital advertising is complex, because ensuring that the media that was purchased was actually delivered as it was intended, is non-trivial today. Ad fraud is pervasive, and costs marketers and publishers a significant amount of money. [Forrester reports](#) that as much as 56% of all display ad dollars were lost to fraudulent inventory in 2016. And the cost of [ad fraud](#) globally is expected to increase to \$50 billion over the next decade. A recent [study](#) into the state of programmatic advertising revealed that 79% of

advertisers surveyed expressed worries about transparency, with over a third regarding the lack of visibility on third parties as one of their key concerns. It's why we are increasingly hearing that major brands like P&G have cut their ad budgets, because their media agencies failed to give them the transparency they needed.

Blockchain can make data-driven marketing more transparent by validating and analyzing every consumer's journey through verified ad delivery, confirming that a real person saw the ad as per the specifics of a media contract. Marketers will be able to control how their assets are delivered by monitoring exactly where their ads are being placed, alleviating ad fraud from automated bots by ensuring that real followers and consumers are engaging with their ads, and ensuring proper ad engagement tracking that will lead to more precise digital attribution.

Another fundamental pain point in the mobile economy is experienced by consumers. Companies are overwhelming their customers with too many ads, emails, coupons, and messages. The reason they send out a dozen different messages is that they don't know much about consumer preferences, as astonishing as that might seem in today's data intensive economy. The current practice is often akin to throwing a dozen darts in the air and hoping one will hit the bullseye. A [survey](#) of brand and agency marketers revealed that 94% of marketers don't have a single view about their consumers that could have facilitated cross-platform continuity. Therefore, there's a disconnect between consumers and marketers with respect to what people want, when they want it, where they want it, and how they want it. This problem manifests itself when you see that same display ad for a hotel following you from one website to another, even though you already made a booking for that hotel two days ago. Blockchain technology can prevent the same display ad from being over-served to anyone, ensuring the optimal frequency of ad serving for each consumer. [Studies have shown](#) that when it comes to the impact of frequency of ad exposure on consumers' propensity to buy, anywhere from four to six ad exposures is optimal. However, it has been nearly impossible to deliver on this optimal goal due to issues of data quality (the fourth V). A smart contract on blockchain can fix this by providing a level of tracking and transparency that is currently not available to brands.

If consumers share more of their preference information, brands will know more about them, which in turn will increase the relevance of their messages and decrease the frequency of advertising. But for some consumers, an impediment to sharing information with firms is often a lack of trust with what firms might do with that data. Blockchain's inherent ledger-based transparency can help companies build trust with consumers. We have seen ample evidence of how consumers are [willing to share](#) their data with firms in return for better offers from the companies they regularly patronize. Their revealed preference is that they are more than willing to part with data to gain something of [tangible value](#). This implies that brands who have earned [consumer trust](#) and who offer a relevant, value exchange will be given greater access to personal information. The advent of blockchain technology offers tremendous potential for mitigating such consumer concerns by giving consumers a transparent look at how their data has been used by marketers and advertisers. This will likely give rise to markets for consumer data that will not only give users a transparent look at how their data *has been* used by advertisers, but will also give them more control over how their data *should be* used.

It also has the potential to allow newer ad tech vendors, such as telecom providers like Verizon and AT&T, a credible chance to [compete against](#) the likes of Facebook and Amazon.

All this said, we are still a while away from actual implementation of blockchain by the ad-tech ecosystem. The key roadblock that needs to be fixed is the speed of transactions. Because of its distributed nature, where transactions are verified by “miners” around the world, blockchain generally takes between 10–30 seconds to [validate transactions](#). This means that as of today, it cannot validate ad-tech transactions (that occur in milliseconds) fast enough. So ad tech vendors will have to aggregate ad transactions into one block to create a single transaction, but of course that reduces transparency. In the short term, brands will likely use blockchain as a post-campaign layer to validate and authenticate transactions, not in real-time, but after-the-fact. However, this is still a vast improvement over current practices.

Despite its speed limitations, blockchain will change the data-driven marketing business landscape.

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Time Is of The Essence:

How Leading Marketers Match Messages to the Right Moments

By Sean Downey, Vice President, Media Platforms, Google

A few years ago, it was clear that mobile technology was changing the way people searched when they wanted to [know, go, do or buy](#). With advancing technology, people are again changing how they search—and time is of the essence.

Google data shows that in the U.S., search interest for “[open now](#)” grew 300 percent from June 2015 to June 2017. During that same period, mobile searches related to “same-day shipping” grew 120 percent. And travel-related searches for “tonight” and “today” grew 150 percent.

Perhaps it’s no surprise that as people navigate life from the palm of their hand—or with just their voice—they’ve become more curious, [more impatient](#) and more likely to make decisions on the fly. As people search for answers, assistance becomes the new marketing battleground. And the biggest challenge marketers face in this [age of assistance](#) is knowing when to act.

Changing Expectations

New technology has changed people’s behaviors—and it’s also changed marketers’ expectations for the tools we need in order to measure results and react just in time. The companies leading the way are those that embrace both sides of this equation. They uncover insights to better understand their customers, and they use technology to [deliver messages at precisely the right moment](#).

Bain & Company, in partnership with Google, [surveyed marketing decision makers](#) around the world to gain a deeper understanding of how marketers use audience insights and technology to drive growth. Marketing leaders—defined in the study as the top 20 percent in a composite score of revenue and market share growth—are gaining a competitive edge because they are:

- **1.6x** more likely to [prioritize integrating technology](#)
- **1.2x** more likely to be advanced users of their technology
- **1.4x** more likely to manage marketing technology within their marketing organization today

As the Bain report notes, “Timing comes into play through signals, sequence and speed. And the technology now exists for marketers to test with high confidence when to communicate and in what order—and to do so in near-real time.”

Leading the Way

Both our own work with our customers and the research with Bain show that marketers making the biggest leaps forward share four common ways of working:

1. Leaders connect their systems. These companies take the initiative to merge their internal systems with media platforms to understand their customers and their marketing performance more deeply. In North America, 80 percent of marketers [prefer integrated marketing and advertising technology](#) from a single vendor.

More than that, North American marketers surveyed in the Bain study say that their top priority for achieving their marketing goals in the next three years is [gaining an improved understanding of and reaching the right customers](#).

2. Leaders act fast to improve performance. Leaders turn to technology to help them act in just the right moments—and keep up with the changing media landscape. Marketing laggards are 1.7x more likely to be [held back by slow decision making](#). But leaders are using technology with built-in intelligence to surface ad trends and patterns in near-real time so they deliver more relevant marketing with speed to assist consumers in the moments that matter.

3. Leaders take control and gain visibility. The [Bain research](#) showed that leaders are 1.7x more likely to indicate that their CMO is the final decision maker for advertising and marketing technology. With marketers driving decisions about their tech stack, the marketing department can ensure that the tools teams use provide greater visibility and control over investments and channels. For example, connecting analytics and advertising systems helps marketers easily see what parts of their strategy are working and make informed decisions to better allocate budgets and improve performance.

4. Leaders share insights across teams. Decisions can happen faster if you share customer insights across your organization so everything doesn't have to go through the same old bottlenecks. That's why we're seeing more leading companies invest in a test-and-learn approach, with the goal of quickly uncovering and sharing insights to not only improve campaign performance but also drive business growth. A key to that culture is near-real time information. According to the study, marketing leaders are 1.7x more likely to [refresh their most critical marketing metrics and dashboards](#) at least weekly.

Making Timely Connections

As customers grow more time-sensitive and demanding, companies need technology that can help them keep pace. Marketers who use rich insights, cross-functional collaboration and integrated technology are best positioned to break through the clutter—and make those winning customer connections right on time.

Download the full report from Bain & Company and Google to learn how leading marketers get their timing right.

BUSINESS PROCESSES

How Nextdoor Addressed Racial Profiling on Its Platform

by Phil Simon

MAY 11, 2018



chuttersnap/unsplash

On March 3, 2015, hyperlocal social network Nextdoor announced that it had raised \$110 million in venture capital. The deal valued the company at more than \$1 billion—revered, unicorn status. It had to be a giddy moment for CEO Nirav Tolia and co-founders David Wiesen, Prakash Janakiraman, and

Sarah Leary. But just three weeks later, all of that celebrating must have seemed like a distant memory.

The news site Fusion ran [an article](#) explaining how Nextdoor “is becoming a home for racial profiling.” Reporter Pendarvis Harshaw detailed how presumably white members were using Nextdoor’s crime and safety forum to report “suspicious” activities by African Americans and Latinos. Jennifer Medina of *The New York Times* followed up, [reporting](#) that “as Nextdoor has grown, users have complained that it has become a magnet for racial profiling, leading African-American and Latino residents to be seen as suspects in their own neighborhoods.”

As I discuss in my book *Analytics: The Agile Way*, how Nextdoor responded illustrates not only the importance of [reacting quickly in a crisis](#), but how useful a data-driven, agile approach can be.

Agile teams benefit from different perspectives, skills, and expertise, so the co-founders assembled a small, diverse team to tackle the issue. Members included product head Maryam Mohit, communications director Kelsey Grady, a product manager, a designer, a data scientist, and later a software engineer.

As for the data, much of Nextdoor’s data here was unstructured text. Especially at first, this type of data doesn’t lend itself to the type of easy analysis that its structured equivalent does. This goes double when trying to deal with a thorny issue such as racial profiling. Five employees were assigned to read through thousands of user posts.

The outcome of all of this was a three-pronged solution: diversity training for Nextdoor’s neighborhood operations team; an update to Nextdoor’s community guidelines and an accompanying blog post; and a redesign of the app. This last step proved to be the thorniest.

Nextdoor had long allowed people to flag inappropriate posts, either by content or location. For instance, commercial posts don’t belong in noncommercial areas of the site. Nextdoor realized that a binary (re: flagged or not flagged) was no longer sufficient. Their first attempt at fixing the problem was simply to add a *report racial profiling* button. But many users didn’t understand the new feature. “Nextdoor members began reporting all kinds of unrelated slights as racial profiling. ‘Somebody reported her [neighbor for writing mean things about pit bulls](#),’ Mohit recall[ed].”

The team responded by developing six different variants of its app and testing them. Doing so helped the company answer key questions such as:

- If the app alerted users about the potential for racial bias before they posted, would it change user behavior?
- Characterizing a person isn’t easy. How does an application prompt its users for descriptions of others that are full and fair, rather than exclusively on race?

- In describing a suspicious person, how many attributes are enough? Which specific attributes are more important than others?

In keeping with [Lean methods](#), the team conducted a series of A/B tests. Blessed with a sufficiently large user base, Nextdoor ran experiments to determine the right answers to these questions. For instance, consider two groups of 25,000 users divided into cohorts (A and B). Each group would see one version of the Nextdoor app with slight but important differences in question wording, order, required fields, and the like.

Over the course of three months, Nextdoor’s different permutations made clear that certain versions of the app worked far better than others. And by August 2015, the team was ready to launch a new posting protocol in its crime and safety section. Users who mentioned race when posting to “Crime & Safety” forums were prompted to provide additional information, such as hair, clothing, and shoes.

No, simply adding additional details and a little bit of user friction did not eliminate posts by insensitive people or racist users with axes to grind. But by taking a data-oriented and agile approach to design, the company reported it had reduced racial profiling by [75 percent](#).

Nextdoor was able to stem the bleeding in a relatively short period of time. A different organization would have announced plans to “study the problem” as it continued unabated. Nextdoor took a different approach, and the results speak for themselves.

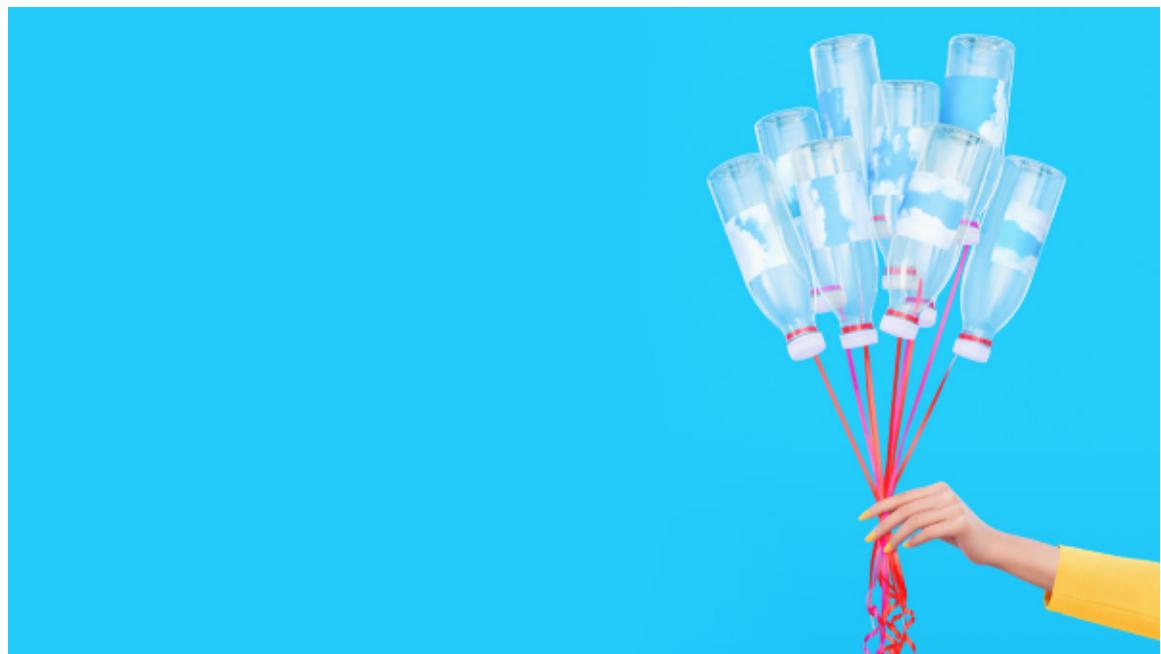
Phil Simon is a frequent keynote speaker and recognized technology authority. He is the award-winning author of eight management books, most recently [Analytics: The Agile Way](#). He also teaches system design, analytics, and business intelligence at Arizona State University’s W. P. Carey School of Business.

BRANDING

The Ways Customers Use Products Have Changed — but Brands Haven't Kept Up

by Antonis Kocheilas

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Ilka & Franz/Getty Images

Here's a truth: many in the marketing industry today don't really understand brands. They may think that "brand" and "customer experience" are different. But that kind of brand is a *layer of*

communications. That is the stuff of blowhard manifestos — too high-minded to sell anything, and too lofty to be useful. Today, when there's more of everything — more channels, more choice, more speed, more confusion — more noise and less signal, it's fair to ask: What is a brand?

In order to answer this question, we have to think about what has changed over the last decade. The emergence of the iPhone and smart technology completely altered the way consumers interact with media and brands. “Digital” and “social” have become inseparable from everyday life. People are consuming media and content as well as curating and creating it. Consumers quickly became accustomed to the opportunity to interact and dictate media culture.

The conversation now runs two ways. If companies can get their data-driven content and platforms right — as brands such as Lego, GoPro, Marriott, and KLM have done — you can turn people into media, willing to spontaneously spread your brand's gospel far and wide. Provide them with a platform to participate in your products and services — as Coca-Cola managed to do with its personalized “Share a Coke” initiative — and then you have the chance to embed people directly into the narrative or fabric of your brand.

As a response to these shifting expectations and behaviors, brands had to hand over a certain amount of agency to consumers. Rather than the push of establishing symbolism and telling stories to consumers, brands have had to invite and pull consumers in to help craft their meaning. In short, brands began evolving from stories to systems.

Now, the word “system” may sound unemotional. It isn't. It signifies the rise of the consumer to the role of interlocutor. In a system, the brand and the consumer play equal roles in influencing the brand. Its definition encompasses the interdependent, reciprocal nature of the modern relationship between brands and people. The currency of this reciprocal nature is “data” — flows of information between the brand and the user which aim not to exploit, but to strengthen their relationship and deliver mutual benefits to both parties.

Brands in today's marketplace are required to be relevant, useful, *and* entertaining. It sounds obvious, but such an approach requires a fundamental reboot of the traditional marketing monologue, which was dominant during the “story” era defined by TV commercials and characterized by military terms like target, bombard, campaign, collateral, and guerrilla. In today's “system” era, a brand's meaning stems not just from how a company positions the brand, but also from how consumers experience it. In other words, the brand becomes the customer experience and the customer experience becomes the brand.

To further illustrate the structure of a brand system, let's look at the example of Nike. Nike, once an athletic apparel brand telling stories of athletic solo willpower, has now taken on a systemic nature by introducing brand *experiences*, such as Nike Plus, Nike Plus Training Club, Nike Plus Running Club, etc. Nike, through partnerships like the Nike Apple watch, and initiatives like Breaking2 — the

company's much-publicized attempt to break the two-hour marathon mark — Nike has managed to cast a wider net of interactions with people.

These integrated narratives and experiences ensure that Nike is not just a brand that consumers use to *appear* athletic, but one that they use to *be* athletic. Nike Plus offers consumers the opportunity to interact with the brand, even when they are not purchasing a product (via workout instructions, health tracking, etc.). As such, people are not just carrying out transactions with Nike, but forming relationships with Nike, powered by data. These relationships are mutually beneficial; consumers use Nike Plus to enhance their healthy lifestyle while Nike uses consumer interactions and their subsequent generation of data to better understand the needs and lifestyles of its consumers. As a result of this reciprocity, the Nike brand is not only what Nike tells or sells you. Nike is what you do with Nike.

As companies and consumers enter into these reciprocal relationships, the line between culture and commerce begins to blur. Brands are no longer only tokens of culture and lifestyle. They are now tools that allow people to *practice* a certain culture or lifestyle. Today, consumers do not just use brands to denote something; they use brands to *become someone*.

The Physics of Brand Systems

The core tenet of a brand system is its reciprocal nature. However, the successful functioning of a brand system also depends on the careful management of *space and time*. At the risk of sounding Kantian or borderline sci-fi, a modern brand must now monitor its spatial and temporal relationship to a consumer — an idea that Aaron Keller, Renee Marino, and Dan Wallace discuss in their book, *The Physics of Brand*.

What exactly does this mean?

Space, as it relates to a brand system, denotes the proximity of a brand manifestation to a consumer. This goes beyond the traditional idea of physical availability — a term popularized by Byron Sharp, author of *How Brands Grow*, which he used to describe how brands can get their products physically in front of their consumers wherever they are, right when they want them. A successful brand must now be intimately integrated into the consumer's life. It's not enough for a brand to be physically available; it must also be relied upon.

Continuing with the example of Nike Plus, the Nike brand is granted access to personal health information so that it may help a consumer pursue their active lifestyle. As such, the Nike brand becomes spatially intimate with the consumer. Consumers trust and depend on Nike to help them carry out a certain aspect of their lifestyle. In this context, Nike acts as a lifestyle companion more so than a commercial entity. Thus, the consumer's relationship with Nike becomes deeply personal, not just transactional.

Time, in a brand system, helps both the brand and consumers to share long-term relationships, medium-term objectives and short-term actions. The long-term relationship is cultivated by sharing a purpose with consumers — an overarching intent above and beyond the moment of purchase. Nike invites consumers to embrace their inner athlete and “Just do it,” by talking and acting as coach and personal trainer first, and as an apparel vendor second. This long-term relationship establishes an emotional bond between the consumer and the brand, thereby improving the overall **salability** of Nike products. It lays the foundation for sales, which serve as the medium-term interactions between the brand and the consumer. The medium-term objectives are satisfied for both the consumer and the brand by communicating specific offerings aimed to fulfill more immediate consumer needs and wants.

For example, Nike fulfills seasonal needs of the market (i.e. “Back to School”) with promotional programs and specialized product lines. By communicating these offerings in a way that either solves a problem or fulfills an aspiration, the brand materializes its long-term purpose in tangible ways. Finally, in today’s social-media-enabled world, brands have to be responsive and ask for consumer participation in short-term actions that utilize opportunities in the everyday fluctuations of culture and commerce, engaging consumers in events such as “Woman’s Day”, “Cinco de Mayo”, the premier of *Avengers 4*, or “Black Friday,” for example.

As customers demand more from brands, brands must strive to be strategic and clear about what they stand for and why — their organizing principle. But at the same time, as platforms and consumer behaviors shift like sand in a windstorm, companies must be adaptive in how they achieve such aspirations. Marketers must think of themselves as the driver of a car. Head out with a destination in mind, but be ready to slow down in treacherous conditions, stop to fuel up, or swerve to avoid an accident. There’s a daily tug of war between long-term brand building and short-term sales goals. A systemic view of the brand means getting those goals to work together in harmony by keeping our eyes on the prize, but being flexible in the short term.

Now that change has become the new normal, brands have to evolve from the power of symbolism and the power of narration to the power of reciprocity. As brands morph from symbols and stories to systems, they need to find new ways to be relevant, useful, and entertaining. They need to create hospitable ecosystems and build upon ideas that welcome and nurture consumer relationships now and in the future.

* *This post has been updated to add a citation for the book [The Physics of Brand](#).*

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MARKETING

How Companies Can Use the Data They Collect to Further the Public Good

by Edward L. Glaeser, Hyunjin Kim and Michael Luca

MAY 16, 2018



Fanatic Studio/Getty Images

By the end of 2017, Yelp had amassed more than 140 million reviews of local businesses. While the company's mission focuses on helping people find local businesses more easily, this wealth of data has the potential to serve other purposes. For instance, Yelp data might help restaurants understand which markets they should consider entering, or whether to add a bar. It can help [real estate](#)

investors understand where gentrification might occur. And it might help private equity firms with an interest in coffee decide whether to invest in Philz or Blue Bottle.

The potential value of the large data sets being amassed by private companies raises new opportunities and challenges for managers making strategic data decisions. While there are plenty of well-publicized examples of data repurposing gone wrong, we think it would be a shame for companies to decide the only option is to hoard their data. Before you decide that your data can't be put to a new use, consider how it might help augment public data sources.

For example, in a [recent paper](#), we explored the potential for Yelp data to measure local economic change and augment the official data, often from the U.S. census, which has long been the bread and butter of economic analyses. Our motivation was simple: Census data is valuable but can be slow-moving and coarse. Public-facing census data can tell you whether more restaurants are opening in a ZIP code, but only after several years. Yelp data can tell you, almost in real time, not only whether restaurants are opening in a ZIP code but even whether more-affordable restaurants are opening on a specific block. We found that Yelp data can help to meaningfully predict trends in the local economy well before census data becomes available, especially in more urban, more educated, and wealthier parts of the country.

This speaks to the broader potential for data from online platforms to improve our understanding of all of America. Just as Yelp can shed light on local economic changes, Zillow could inform our understanding of housing markets, LinkedIn could provide insight about labor markets, and Glassdoor could teach us about the quality of employment options in an area. Companies increasingly recognize the possibility of repurposing their data in these ways for the public good. But repurposing data can have benefits for a company far beyond the warm glow of having done some good. As researchers work with the data, new insights about their data and platform design choices may surface. As policy makers rely on the insights from the data, new relationships can form and facilitate valuable collaborations. Public-facing data efforts can also increase awareness of a company's brand — allowing companies to do well by doing good.

Of course, there are times when repurposing data is not an option, because the data is either sensitive or not that useful. But we often see examples in which a potentially successful use of a new data source fails to deliver because of poor execution.

Drawing on our academic research assessing repurposed data sources, as well as our work with organizations, we see that simple guiding principles can help companies understand how to successfully repurpose their data.

Principle 1: Understand your unique perspective. When deciding whether and how to use your data, it's crucial to take the time to understand whether it has real value relative to the information people already have access to. Start by looking for the best data available. Choose a broadly accepted benchmark, and set a narrow goal to see whether and where you can meaningfully add value.

When looking at Yelp data, for example, we considered census data a significant benchmark, since it is something commonly used within research and policy work. And we set the narrow goal of understanding whether Yelp data can augment existing data points with additional variables and provide more up-to-date information (since it's updated in real time, while the census happens every 10 years). This flavor of incremental improvements can, paradoxically, lead to the largest gains, by making sure that you are going down the right path.

Principle 2: Develop credible analyses. For every exciting new use of digital data that we've come across, we've seen countless others fail to deliver. Successfully repurposing data requires taking benchmarks seriously and cross-validating against them. If your data doesn't match existing benchmarks, then you have to understand why. If the differences are irreconcilable, then you might reconsider the value of your data on that dimension. And if you do go forward with using the data, it's important to think through the best approach to analysis, taking the mismatch into account.

Credible analytics also requires understanding — and being transparent about — the strengths and limitations of your data. Returning to the Yelp example, we highlighted the strengths above. One limitation is that Yelp coverage varies over time and across places. Maintaining credibility and making the most of the data requires understanding and factoring this and other limitations into the analysis and conclusions drawn from the data.

Principle 3: Build partnerships. Even a company that has a great internal data team may not have the right skills to produce public-facing data that will have a real impact. Working with outside researchers and policy makers can help you gauge general interest, build a product that will have credibility, and develop insights that will create value for a broader audience.

There is no such thing as a perfect data set. This is both why new data sources are valuable and why repurposing data can be hard. Tech companies are now collecting unprecedented amounts of data, and they have the potential to greatly improve our understanding of the economy and policy. Yelp ratings are now being used for a variety of purposes, from [predicting which restaurants are most likely to have health code violations](#), to helping understand [which businesses are going to be impacted by increases to the minimum wage](#), to shedding light on how [gentrifying neighborhoods are evolving](#). Other platforms have similar potential. And when done carefully and incrementally, each platform adds one piece to the puzzle, leading to a deeper and more nuanced understanding of the economy — all the while harvesting benefits for the company.

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BRANDING

How Our Hotel Chain Uses Data to Find Problems and Humans to Fix Them

by Ana Brant

MAY 18, 2018



Ron Berg/Getty Images

At Dorchester Collection of ultra-luxury hotels, we use big data and analytics to help us improve our guest offerings and marketing. Our tool, Metis, [analyzes data from online reviews and social media](#) to uncover problems and opportunities. But, as the Dorchester Collection's director of global guest

experience and innovation, I've discovered that often the data can only tell you where there's a problem, not why it exists, or how to fix it. That requires human intervention.

For instance, last year Metis looked at customer sentiment about Parisian luxury hotels. Metis discovered that guests had little loyalty to ours — Le Meurice and Hotel Plaza Athénée — or to our competitors' hotels. According to Metis' analysis, guests view Paris's 5-star hotels as interchangeable. They visit different ones simply to try something new.

But once Metis noted this lack of customer loyalty, it was up to us to figure out why, and what to do about it.

Observation and Investigation in Paris

We began by studying the market. Paris has ten Forbes five-star hotels – [second only to Macau](#) (which was awarded two this year). All Paris five-star hotels have Michelin-starred restaurants; they all provide luxury amenities (champagne, chocolates) on check-in; their rooms are roughly the same sizes and sell at similar rates.

No wonder people see them as interchangeable.

Our job would be to differentiate ours.

The Plaza Athénée's staff observed the clothes its guests wore and the shops they visited. Clearly, many were either participants in or close observers of the high-fashion world. Accordingly, the hotel decided to position and market itself as *the Haute Couture hotel* where, in 1947, designer Christian Dior debuted his inaugural collection. The hotel introduced the Dior spa and placed Guerlain products in the bathrooms. It created a ballroom called Le Salon Haute Couture, and for Fashion Week it presented a Dior-themed service at the restaurant. And, it came up with a slogan: "It's not what you wear, it's where you wear it."

Le Meurice, on the other hand, has long been a place where artists go (Salvador Dali made it his Paris headquarters) and Le Meurice staff observed that many of the guests stayed there to visit the galleries and museums. Accordingly, the hotel decided to brand Le Meurice as *the contemporary arts hotel*. Among other things, it sponsored an award of €20,000 for promising artists two weeks before the Paris Foire Internationale d'Art Contemporain (FIAC) art fair and replaced the classical art typical of Parisian 5-star hotels with contemporary art. It also re-named one of its restaurants Le Dali.

It is still early days, but Dorchester Collection has observed year-on-year growth in loyalty at both hotels. An unanticipated benefit is that they have received excellent local press and social media coverage, driving more local business to the hotels. It is always good when locals (especially Parisians) support you and advocate for your brand.

Metis told us something needed to be done about loyalty, but it took people to determine exactly *what* needed to be done.

Fixing Weddings in L.A.

We also asked Metis to look at weddings. For several years, Dorchester Collection's L.A. hotels (Hotel Bel-Air and The Beverly Hills Hotel) had increased the number of weddings they hosted, but had not seen a corresponding increase in revenue. We wanted to know why.

Metis discovered that reviews from guests attending weddings were more neutral than positive. The bride and groom, unsurprisingly, are stressed with pulling things together, but the family and guests also are stressed about helping the bride and groom. Plus, the family receives little special attention from the hotel.

Once we knew there was a problem, it was time to observe the end-to-end process, from invitations to thank you notes.

The hotel's innovation team Googled invitations for weddings at The Beverly Hills Hotel and found many people copying and pasting its iconic banana leaf pattern — extra work for a stressed couple. So, the team created a network of preferred printing companies, provided them our logo and designs, and began referring guests to them.

The team also learned from our internal event planners that many brides check in to the hotel before they shop for the all-important dress — a fraught exercise, especially as many spend tens of thousands on their gowns. So, we partnered with Rodeo Drive dress shops, and referred brides to them, providing guest discounts and receiving a commission for the referrals, thereby creating a new revenue stream.

To better serve those stressed-out members of the wedding party, the team had our planners create family trees to understand who was related to whom, so they could engage them and treat them like VIPs.

Finally, the team made it easier to find our wedding program on our website and marketed our wedding services as a differentiator.

With these improvements, revenue has increased, and guest sentiment around weddings has improved.

Combining Machine Learning with Human Observation and Understanding

Big data and analytics, unburdened by human preconceptions, can reveal counterintuitive insights: people can grow bored with champagne and chocolates; weddings can make brides and grooms

cranky, and their families and friends, too. However, information tools can't always figure out why people feel the way they do or how to solve their problems. For that, you need humans: to look, and, once they have understood the problem, to apply their hearts and minds.

Ana Brant serves as director of global guest experience and innovation for the London-based Dorchester Collection, having previously served as the quality manager for The New York Palace and the area director of quality for The Beverly Hills Hotel and Hotel Bel-Air. Brant started her career with The Ritz-Carlton Hotel Company. Brant's public speaking engagements have included the Harvard University Graduate School, the Malcolm Baldrige Awards Recipient Conference, and the 2014 Cornell Hospitality Research Summit. She's on twitter at @AnaMaritaBrant.

How Leading Marketers Get Ahead in Today's Data-Driven World

With so much information and technology at their fingertips, today's consumers expect to get things done quickly and have their questions answered in an instant. The same could be said for modern marketers—expectations for their technology stack are on the rise too.

Bain & Company, in partnership with Google, [surveyed nearly 1,700 global marketing and media decision makers](#) to learn more about the value they're gaining from investments in digital information and technology.

Google VP of Media Platforms **Sean Downey** sat down with **Laura Beaudin**, Bain partner and lead for the firm's global marketing excellence work, to talk about [what leading marketers do differently](#).

Downey: You surveyed marketers in North America, Europe, Australia and Japan. Was there any single trend that stood out?

Beaudin: The one thing that was consistent around the world was that the top priority for marketers was gaining a better understanding of their customers and an improved ability to reach them. [Customer understanding was 1.3x more important](#) than other priorities, as marketers continue to invest in providing their customers with relevant, timely and helpful information when and how they want it. That's the starting point for marketers to ask questions like:

- What insights can we learn about our customers?
- How can we create relevant experiences while respecting their privacy?
- Do we have the right talent to analyze and act on that information?
- Have we built out our technology stack to deliver the right messages and creative?

Downey: Marketers have long been focused on knowing their audience, though. What do you see that's different now as [customer understanding becomes a top priority](#)?

Beaudin: We are entering an era when you need to incorporate not only an audience profile based on demographic attributes or expected behaviors. But you need to start playing with the element of time—when you're talking to consumers—in order to ensure your marketing is reaching them in the right moment. While timing has always been key to marketing, today's technology helps marketers redefine time by being able to act on insights in real time.

That moment can either be a point in the customer journey, or a moment that consumers are ready for engagement and paying more attention to ads. For example, devices like home assistants and wearables provide new signals to help marketers better understand how and when people are looking for answers to questions or researching products. We're on the cusp of where reaching the right audiences alone isn't going to be enough. Knowing your audience is important, but so is knowing when your audience is most receptive to the message. The moments when you could really capture consumer attention and change their mind is the next frontier.

Downey: What do you see the best marketers doing differently—the ones achieving greater growth?

Beaudin: In our research, we look at leaders and laggards: the top and bottom 20 percent, respectively, based on a composite score of self-reported market share and revenue growth. The marketing leaders see their role

as being stewards of a customer conversation for a much longer journey, as opposed to being responsible only for driving awareness or driving leads at the top of the funnel. Leaders are [making strategic investments in data and technology](#), and they are 1.6x more likely to prioritize integrating technology. We also found that marketing leaders are [1.7x more likely to refresh critical marketing metrics](#) and dashboards at least weekly.

Because they're making investments in a long-term customer relationship, the leaders have become especially good at finding that right timing: not just knowing only who the customer is, but also when you can reach them to create a positive brand outcome and also get the cash register to ring.

In our study, we highlight a great example of [how Keurig analyzed purchase patterns](#) based on two years of historical data to identify four customer segments. Based on this analysis, Keurig moved from daily customer emails with price-based promotions for coffee pods to testing different messages and email cadences tailored for its four segments.

And that's where we see technology playing a bigger role: helping marketers identify patterns in customer behavior that they can apply directly to their messaging and media buys. Our research shows that the leading marketers place greater priority on tech integrations, and they are more advanced users of their technology. We're also seeing that the leaders are more likely to manage marketing technology within the marketing organization.

Downey: Are you seeing any big shifts in the [ways that marketing organizations work or organize themselves](#) given these priorities?

Beaudin: What we see is that not only are brand and direct response teams converging, but traditional media and digital groups are coming together too. The marketing leaders we speak to very much think of it as marketing, and not necessarily "digital" or "traditional."

One good example is the way that some companies are now using digital marketing to test out key messaging before making their TV buys. They use digital display or YouTube ads to test out the market and ask themselves, "Which consumers clicked through most?" or "Who actually watched the video fully?" Then they use that knowledge to make the right TV buys at the right times and reach the consumers that it resonated with most.

Downey: Have you seen any trends that indicate larger companies have more of an advantage?

Beaudin: No. Size doesn't matter. Whether it's a larger enterprise or a new brand, our research found that being agile and working across business silos is key for marketers to find and engage the right audience and motivate them to action.

The new playbook is about innovation, and it's being written both by smaller, digital native brands as well as more incumbent companies. It revolves around the idea that those parts of the organization that typically function as different teams or business units—such as digital and brand, for instance—shouldn't be separate and working against each other. Rather, they need to work in concert in order to be able to have a really good conversation with their prospective customers.

Downey: If company size doesn't appear to give some marketers an edge, are there any common traits you see as critical to putting a brand in a leadership position?

Beaudin: One thing that we've seen help brands of all sizes is an openness to change and experimentation—whether that means experimenting with new tools, new approaches or new ways of reaching your customer in a digital-first world. This [test-for-results culture](#) tends to start small, where teams talk about piloting a few things in order to build a case that something new is working. Then they educate other parts of the organization on what they're up to, and that often opens doors or unlocks new sources of insight from parts of the organization outside the marketing and media teams.

The key in all of that is to start with the data you have, prove what works and keep moving. Because with stories of results, you're able to continue to do better and reach for more.

For more on what separates marketing leaders from laggards, [read the full Bain & Company report.](#)

MARKETING

How GDPR Will Transform Digital Marketing

by Dipayan Ghosh

MAY 21, 2018



Lee Powers/Getty Images

This month will see [the enforcement](#) of a sweeping new set of regulations that could change the face of digital marketing: the European Union's General Data Protection Regulation, or GDPR. To protect consumers' privacy and give them greater control over how their data is collected and used, GDPR requires marketers to secure explicit permission for data-use activities within the EU. With new and substantial constraints on what had been largely unregulated data-collection practices, marketers will have to find ways to target digital ads, depending less (or not at all) on hoovering up quantities of behavioral data.

Consumers have already seen a range of developments resulting from the forthcoming enforcement of GDPR. Among these are the [dozens of messages](#) from web-based companies from TaskRabbit to Twitter about privacy policy updates, as well as the recent reports about how major internet companies like Facebook and LinkedIn are [moving the personal data](#) associated with non-Europeans out of Europe and into other jurisdictions – the latter of which are largely moves designed to minimize legal liability. But while digital marketers are aware of the strict new regulatory regime, seemingly few have taken active steps to address how it will impact their day-to-day operations.

GDPR will force marketers to relinquish much of their dependence on behavioral data collection. Most critically, it will directly implicate several business practices that are core to current digital ad targeting. The stipulation that will perhaps cause most angst is the new formulation for collecting an individual's consent to data gathering and processing; GDPR requires that [consent be active](#) (as opposed to passive) and represent a genuine and meaningful choice. Digital marketers know that users of internet-based services like Snapchat, Facebook, and Google technically provide consent by agreeing to these companies' terms of service when they sign up. But does this constitute an active and genuine choice? Does it indicate that the user is willing to have her personal data harvested across the digital and physical worlds, on- and off-platform, and have that data used to create a behavioral profile for digital marketing purposes? Almost [certifiably not](#).

Other components of GDPR that will make life more difficult and increase operational uncertainty for digital marketers include the [ban on automated decision-making](#) (e.g., applying algorithms to personal data to drive inferences and target ads) in the absence of the individual's meaningful consent; the [new rights afforded to individuals](#) to access, rectify, and erase data about them held by corporations; the prohibition on processing of data pertaining to [special protected categories](#) as identified in the regulations; and the stipulation that data collectors must demonstrate compliance with the regulations as a general matter.

Atop all of these measures is the additional requirement that service providers like Facebook and Google make the data they hold on individuals [portable](#). This will immediately further dis-incentivize personal data collection and implicate ad-targeting based on behavioral data; if a firm makes this data available for an individual who can then bring it to a competing service, then – barring the construction of some loophole around this measure – the incentive to collect the data in the first place weakens.

What, then, will take the place of behavioral data collection to power ad-targeting? How will digital marketers from Dior to the NBA to political campaigns channel the right marketing messages to the right eyeballs at the right times?

For many, the answer will lie in contextual advertising. Its power lies in displaying ads based not on a consumer's profile, but on the content that he or she is looking at in real time – e.g., a news article, website, news feed, mobile app screen or video game. For instance, if a New York Times reader is looking at a digital article about “Game of Thrones,” he might see a contextual ad placed by HBO

reminding him when the new season will air. Similarly, when he's scrolling down his news feed and pauses on a friend's post about a new pair of basketball shoes, Facebook might alert marketers in real time and sell ad space alongside the post to the highest bidder – an ad position of high interest to companies like Nike or Reebok.

While contextual ad placement might appear difficult to execute, many advertisers already use it and we can expect the digital sector to move quickly to further support it. Leading weather forecasting firm [AccuWeather](#), for example, makes expansive use of contextual advertising through various programs in partnership with internet platform companies among others. And though some internet companies currently lack contextual targeting options, many, like [Quora](#), already make such options available to advertisers. We can expect such programs and practices to expand and proliferate as GDPR comes into effect. Sophisticated ad exchanges and other intermediaries are adept at rapidly understanding novel regulatory environments and developing compliant ad market infrastructures. These markets and the underlying routing of digital advertisements will likely become increasingly quick, automated, and seamless.

All this said, behavioral data collection – through web and email cookies, location beacons, internet-use monitoring, cross-device tracking and all the rest – isn't going to disappear entirely, of course. These practices are largely allowed outside of Europe, and sophisticated actors – including internet companies like Facebook and Google as well as advertisers like Ford and LVMH – will doubtless seek ways to work around many of the constraints that will be imposed by GDPR within Europe. In addition, even within Europe such data collection will still be possible, but most likely with aggressively enforced transparency and consumer oversight.

The GDPR's effectiveness won't be known for some time after it goes into effect May 25. In theory, the result will be a more equitable digital advertising space for all players – including, perhaps most importantly, end consumers. If marketers and consumers mutually benefit from the improved transparency and trust as is expected, other jurisdictions outside the EU may well follow suit, which could spell even bigger changes for the digital ecosystem in the years to come.

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TECHNOLOGY

Technology Is Changing What a Premium Automotive Brand Looks Like

by Jian Xu and Xiaoming Liu

MAY 22, 2018



JEWEL SAMAD/Staff/Getty Images

Many mature industries are experiencing significant technological disruption. The automotive industry is being disrupted by electric vehicles and self-driving cars, just as home appliances is being

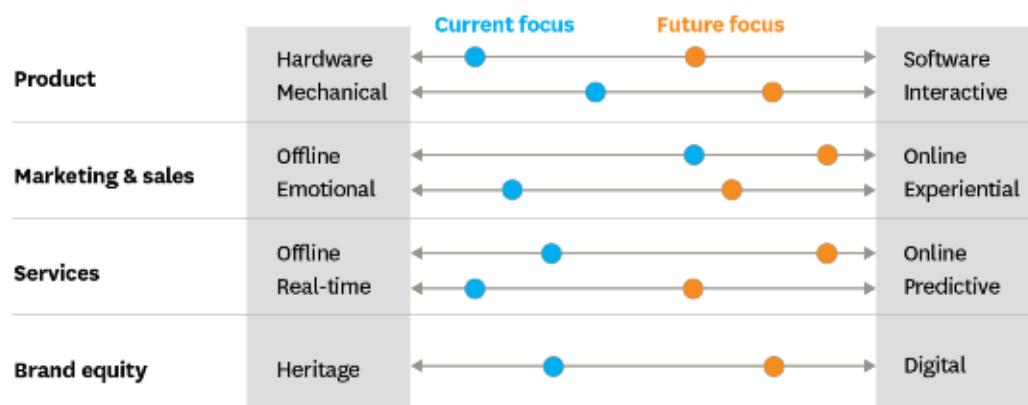
disrupted by the Internet of Things and smart appliances, home entertainment by on-demand content providers, and apparel by online personal stylists such as Stitch Fix and Trunk Club.

Leaders in every industry are no doubt keeping a vigilant eye on such developments, yet one very important aspect of this disruption has been largely overlooked: *technology fundamentally changes what makes your brand premium*.

The traditional drivers of brand premium are being joined (and to varying degrees supplanted) by newer, tech-enabled variables: software, interactive products, digital interactions, immersive experiences, and predictive services, to name a few.

How Technology Is Changing What Makes Automotive Brands Premium

Where most established premium brands focus today — and where they need to focus in the future.



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Here's how technology is changing the game in the automotive industry:

Product: hardware vs. software. While hardware currently accounts for 90% of the perceived value of a car, Morgan Stanley [predicts](#) that percentage will eventually drop to just 40%, with the remaining 60% being dominated by the car's software and content.

Product: mechanical vs. interactive. Premium car brand buyers were traditionally satisfied with a high-performing, safe, and luxurious driving experience. However, in the digital age, drivers increasingly expect their car to also be a smart device on wheels that keeps them constantly connected, makes them safer and better-informed drivers, while also entertaining them. Our conversations with automotive industry leaders suggest there will be significant growth over the next several years in premium brand cars equipped with large-screen infotainment systems, large LCD dashboards, and augmented reality head up displays.

Marketing and sales: offline vs. online. Brand marketing and the car buying experience have always been integral to being a premium automotive brand, and the majority of those crucial interactions have already moved online. In its study of “The Shifting Automotive Shopping Landscape,” [TNS Global reports](#) that premium car owners experience an average of 8.9 touch points during the purchase process, of which 5.5 occur online. And while only 2% of today’s car buyers purchased their car online, 77% say they anticipate purchasing cars online in the future.

Marketing and sales: emotional vs. experiential. Automakers have long known that the more premium a car brand is, the more emotion factors into brand perception, which is why premium brand marketing makes consumers anticipate serene gratification. However, experientially engaging car buyers may soon be as essential. A recent consumer [survey](#) revealed that 82% of current car owners and potential car buyers want to explore and configure their vehicle via immersive technologies like virtual and artificial reality. Premium brands need to do more than keep pace with industrywide efforts to provide such experiences — they need to *lead* them, or face surrendering a key element of their brand’s cachet.

Services: offline vs. online. Our review of historical data and major automakers’ announced plans indicates that connectivity devices in cars will increase from 22% in 2017 to 69% by 2020, laying the foundation for automakers to significantly lessen the need for car owners to bring their vehicle to a facility for maintenance. The rapid growth of electronic vehicles (EV) will further accelerate the shift to online services, since the EV structure greatly simplifies after-sales maintenance. The majority of service touch points may soon move online. Again, customers will expect premium brands to be ahead of the curve in providing after-sale car service convenience.

Services: real-time vs. predictive maintenance. Increased connectivity will also make predictive maintenance the main service mode, as automakers will continuously capture and rapidly analyze massive data on driving behavior, road conditions, and other variables to anticipate and finely hone vehicle service. A World Economic Forum [white paper](#) predicts remote diagnostics, enabled by telematics, will add \$60 billion of profits to OEMs, suppliers, and telematics service providers through 2025. An IoT Analytics [study](#) spanning 13 industries, including automotive, found that predictive maintenance solutions being achieved today deliver 20%-25% efficiency gains, and forecast the revenue opportunity in predictive maintenance will increase at a compound annual growth rate of 39% over the next five years.

Brand equity: heritage vs. digital. A cumulative effect of the shifts described above may be a diminished value of brand heritage, relative to a rising premium on consumer-pleasing digital innovation. This final and most strategic shift could create a historic opening for new automakers — including EV makers in developing countries such as China, and self-driving/EV start-ups by internet companies. Proprietary research A.T. Kearney conducted for a client found that 45% of car owners would switch from their current brand to a vehicle offered by a tech company new to the automotive industry. Data-savvy automotive start-ups that use customer-centric thinking to guide their innovative prowess could significantly undermine even the most esteemed premium brands.

In sum, a reshuffle of premium brands is near. Established premium brands who choose to go on relying exclusively or even primarily on their traditional strengths could soon lose much of their ability to attract consumers and to grow or hold market share, while new brands may be able to gain premium standing much more quickly than was ever before possible. For example, Tesla required only about a decade to establish itself as a premium brand.

How can established premium automakers best react?

Realistically assess the staying power of the qualities that made your brand premium in the past, in light of the new variables now reshaping brand premium in the automotive industry. Will what you offer today still be perceived as premium in five or 10 years? For example, superior driving experience is currently a hallmark of most premium automotive brands. However, as autonomous driving advances, the experience of being in a car will be much like being in a mobile lounge, where the occupants will expect to do almost everything they can do in the office or at home. To maintain premium brand status, OEMs need to make great leaps in providing seamless digital integration in automobiles.

Premium automotive brands also need to transform marketing and sales from today's push system to a pull system that engages customers via digital interactions that are transparent, time efficient, and pleasingly experiential.

Further, it will be impossible for OEMs to innovate at the requisite pace entirely through their company's own proprietary R&D. Rather, they will need to build and support innovation ecosystems with newly essential forms of expertise not to be found within the automotive industry, including specialists for battery cells, 2D/3D sensors, AI/algorithms, HD maps, app development, cloud computing, and communication infrastructure. One example of this trend in motion is the [Open Automotive Alliance](#) composed of a range of prestigious automotive brands and technology partners.

Automotive OEMs that are unwilling or unable to be a leader in leveraging new technologies to deliver brand premium could choose to become a more mainstream brand. The goal will then be to cost-effectively produce automobiles that can compete on the basis of affordable value. Companies that choose such a course should concentrate their investments in excellence in mass manufacturing, rather than in being among the first to embed new technologies that dazzle high-end buyers.

The choice is truly that stark. Given how radically technology is changing the definition of premium across automotive product, marketing and sales, services, and brand equity, the status quo is not viable. OEMs must dramatically diversify their investments in being a premium brand, or see their claims to premium status inevitably slip away.

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Is Your Marketing in the Right Place but at the Wrong Time?

By Laura Beaudin and Francine Gierak, Bain & Company

Time is running out on personalized marketing as a means of continually raising the return on investment of campaigns. The use of advanced data analytics to identify the right customers, while still valuable, is reaching a plateau. Proliferation of digital channels and options for customers raises the importance of another, still underappreciated, variable: message timing.

By communicating at the most opportune times based on insights into consumer behavior, companies can generate more business with fewer or more efficient ads, or expand their audience to find unexpected wins.

Timing comes into play through signals, sequence and speed. And the technology now exists for marketers to test with high confidence when to communicate and in what order—and to do so in near real time. How exactly are they doing that, and thereby realizing further gains in ROI? Bain & Company recently [surveyed nearly 1,700 marketers globally](#), in partnership with Google, and found three areas of importance.

Signals. By understanding consumer intent, marketers can identify the right moments in the customer journey where ads will be most relevant.

In the market for cold medicines, for example, a leading global brand mapped its customers' past search and purchase behavior, determining that people who take their cold medication in the first two days of symptoms are more likely to get relief and become greater brand advocates. Knowing this, the company worked with Google and WebMD to reach consumers whose search terms suggested they had common cold symptoms in that narrow period. As a result, the brand substantially increased conversion of searches to sales of its cold medication, building greater brand loyalty at the same time.

Sequence. Once a company spots the crucial signals, it should deliver a sequence of messages tailored to each customer.

A global sporting goods manufacturer used to mix brand-oriented, aspirational messages and price-focused promotional messages during the same time frame, in part because its e-commerce and brand teams did not coordinate with each other. Yet leading with a promotional message, while it might generate a short-term sales boost, sacrifices building long-term brand value. By contrast, leading with brand messages early in a campaign can have a halo effect on the subsequent promotional messages.

This company now runs campaigns jointly between the two teams, sending and testing messages in a carefully calibrated sequence. As the senior director of digital media told us, "We can sequence our ads to start with a brand message for our most inspirational product, then start promoting a different product with an offer attached if the customer doesn't bite. This saves money [on promotions] and ensures our positioning remains premium with those for whom our brand really resonates."

Speed. Timing also affects how quickly a company is able to react to a customer's behavior. Faster reaction times go a long way toward more effective marketing.

When companies get more proficient in timing their marketing activities, they often realize another benefit: freed-up time for brand building, creative development and data mining. The digital director of the Dutch cosmetics retailer Rituals noted that improving its customer prospecting gives the firm more time to "develop creative and ad messaging that is most true to our brand."

What Marketing Leaders Do Differently

Advanced marketers have already begun to master signals, sequence and speed. For these firms, [our research](#) identified improved understanding and selection of customers as being their single-greatest investment area over the next three years. But while all marketers share this goal, the leaders (defined as the top 20 percent of companies based on a composite score of revenue and market share growth), have a sharper focus.

Leaders own their digital destiny by taking control of their consumer data and by integrating their marketing and advertising technologies. For example, leaders in North America are 1.6 times more likely than laggards to [prioritize integrating their platforms](#). European marketers [rely more on outside agencies](#), but a majority still value integration, and 85 percent of [Australian marketers are looking to integrate](#).

The leaders have built a test-for-results culture, refreshing metrics and dashboards at least weekly and using data to directly inform decisions. Leaders also make decisions faster, in part by having the in-house team responsible for customer acquisition and retention take more accountability for budgets, technology and analytics. There are regional differences, of course—slower data refreshes in Europe, more budget constraints in Australia—but the trends for leaders apply globally.

Companies that take more control of their marketing and advertising data and technology will be able to respond quickly to customer insights and [send a tailored message at precisely the right moment](#). That raises the odds of seizing attention for the immediate purchase and building brand equity in the longer run.

Laura Beaudin is a partner and Francine Gierak is a principal with Bain & Company's Customer Strategy & Marketing practice. Beaudin leads Bain's Marketing Excellence practice.

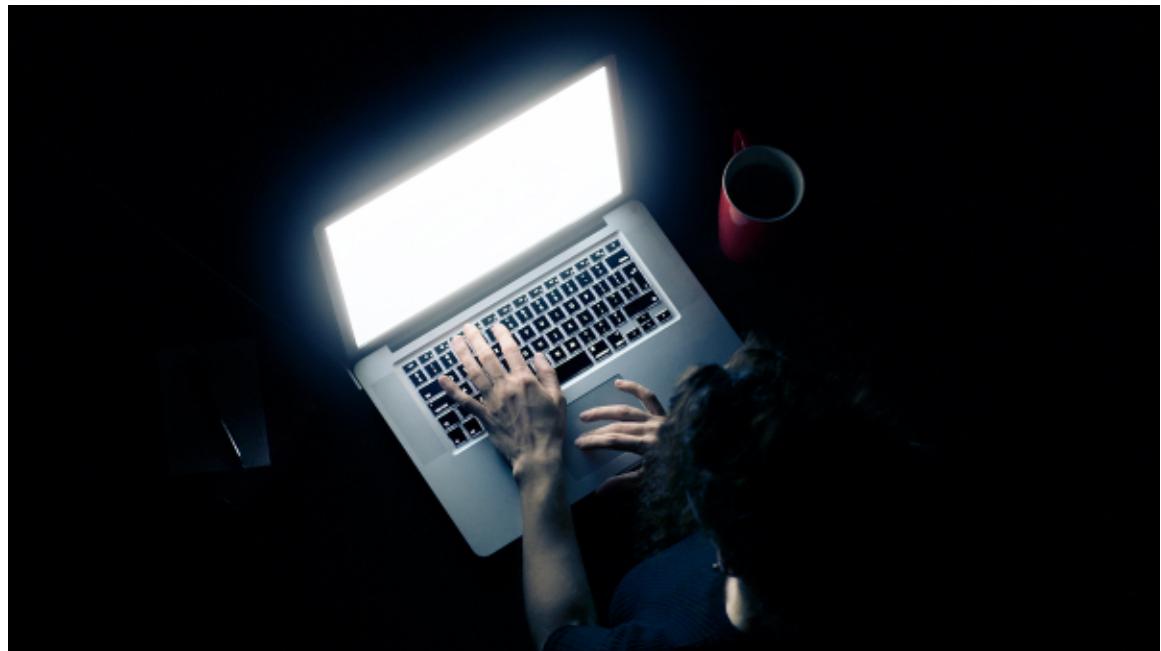
Read the [full report](#) to learn more about how leading marketers manage signals, sequence and speed.

MARKETING

How to Convince Customers to Share Data After GDPR

by Einat Weiss

MAY 25, 2018



Alex Maxim/Getty Images

In recent years, marketers have lived through the Era of Big Data, and the Era of Personalization, and now we are living through the “Era of Consent.” With the [General Data Protection Regulation \(GDPR\)](#) going into effect on May 25th, businesses will be required to protect the personal data and privacy of EU citizens. For marketers, this means updating your privacy policies, but more importantly, it

means finding innovative new ways to connect with customers and gather [consent](#) to use their data in order to continue your “marketing relationship” with them.

Marketers across the European Union (EU) have been preparing for this new regulation for months. Yet the regulation impacts *all* companies globally, including those in the United States, that collect and manage data on citizens in the EU. Many global marketers are still struggling to understand what steps they need to take to prepare for this regulation and how it will impact their marketing strategy moving forward.

Regardless of whether you are collecting and managing data on EU citizens now or plan to in the future, here are some tips for surviving this new Era of Consent.

Personalization and Customization: The Answer to Retaining Customers

The question that is top of mind for many marketers is whether or not the GDPR impacts existing customers who have already given consent to their data. The answer? It does. According to the regulation, [consent is defined](#) as “a statement or a clear affirmative action” from a customer. This could mean having your customers check a box on your website or respond to an email. Even if they have given consent in the past, [it likely won’t be recognized under the GDPR](#), so you’ll have to get consent again.

So how can you convince your customers to willingly share their information? By being as transparent as possible about how their data is being used and maintained. This means delivering personalized content and tailored products or service recommendations to your customers to ensure that they are reaping the benefits of this new regulation. Offer them the chance to update their marketing preferences, and focus on the benefits they will gain by sharing such information. If they see relevant offerings being delivered to them, they’re more likely to stay engaged with the brand.

Personalization is by no means a new concept, but GDPR is forcing both B2C and B2B marketers to truly embrace individualized communication that is tailored to customers’ unique interests if they wish to retain customer data. Brands are adopting different methods of personalization to encourage consumers to “opt-in.” One method is to deliver content that is tailored to the individual’s preferences and to a specific part of the customer journey. For example, consumers can opt-in to receive an e-book that addresses some of their unique industry challenges. Developing fun, personalized, engaging videos and interactive marketing tools like chatbots can provide a great way to show your brand’s value and get consumers to engage and opt-in during the engagement. Consumers have a fear of missing out, so make sure your consumers understand exactly what they will be missing out on. Ultimately, it boils down to knowing your audience and being attentive and flexible to their needs. Change the way you create and offer content to your customers, with the main goal being that they will want to consume more. While it may seem like a complicated task in the B2B world, consider progressive “opt-in” options to entice your customers to share more information as they move through the funnel.

Addressing the Third-Party Data Dilemma

Third-party data is likely to be the biggest headache for global marketers. Under the GDPR, it's not just your company that is liable for compliance: it's your entire vendor ecosystem that is processing this customer data. Many marketing professionals rely on third-party vendors (such as customer relationship management systems (CRMs) and email service providers) to interact with customers. As the controller, it's your responsibility to speak with any third-party partners that are processing your customer data and ensure they are taking the proper steps to remain compliant. This includes having the tools in place that will allow them to both retrieve and delete user data — a major component of the GDPR.

The New Realities of Omnichannel Marketing

One of the biggest pain points in the era of consent is the potential loss of data. Customers have the right to opt-in or out of communications and the type of data they are sharing. This will greatly impact lead generation. For example, marketers often use IP addresses to understand customer behavioral patterns. Under the GDPR, this data will be lost unless the customer consents to sharing this information. For marketers, this means losing crucial information on behavior, location, and preferences. Executing a personalized omnichannel strategy will become extremely difficult, which is why it's essential to educate your customers on how their data is being used to ultimately benefit them in the long-run.

Preparing for a Sprint — Not a Marathon — With Automation

Complying with the GDPR is no small task, and one that humans alone can't execute. IT departments are investing in compliance and security solutions to remain compliant, but marketers should also consider new investments. If a customer requests to be unsubscribed from marketing communications, businesses have a small window to ensure they are removed from the system. Investing in smart, AI-based solutions to automate these types of updates is critical to ensure that they are made in a timely fashion.

There is no doubt that the GDPR is changing the way global marketers interact with their EU customers. However, many are choosing to embrace this change and use it to create a much more personalized marketing approach that will eventually lead to more qualified and targeted leads. With the right process, people and technology in place, the era of consent and the GDPR can lead to smarter, and stronger connections between organizations and consumers.

Einat Weiss is vice president of global marketing at [NICE](#).

MARKETING

How Do Consumers Choose in a World of Automated Ordering?

by Greg Portell and Abby Klanecky

MAY 25, 2018



Image Source/Getty Images

The term “frictionless commerce” is widely used to describe how digital technologies are blending product purchases seamlessly into consumers’ daily lives. In the ultimate manifestation of frictionless commerce, purchases will be automatically initiated on behalf of consumers (with their advance consent) using real-time, integrated data from known preferences, past behaviors, sensors,

and other sources. Envision, for example, a “smart fridge” automatically ordering food items it senses are running low. That is not common yet, but ever since consumers were offered the option to shop online from home, rather than having to go to a store, technology has been rapidly removing friction from commerce.

As frictionless commerce accelerates, so will a momentous shift in the node of commerce. In the era of department stores and supermarkets, consumers selected brands from store aisles and shelves. Over the past several decades, the in-store experience has been increasingly displaced by online shopping, via home computer and mobile phone. As consumers become connected to everything, all the time, the node of commerce will be *consumers themselves*, rather than any distinguishable “channel.”

The Danger of Disintermediation

Frictionless commerce will test the emotional bonds that make consumers loyal to established brands. Already, consumers are being disintermediated from traditional brand choices via search engine and online retailer algorithms that determine which products are presented to consumers, and in what sequence. That puts all brands in danger. Most consumers are at best passively loyal. When algorithms replace consumer emotions as the prime force shaping purchase decisions, consumers could easily forego their customary brand choices in exchange for the speed and convenience of whatever is offered by the self-interested, digitally empowered parties now taking control of consumer choice.

To remain successful, established brands must give consumers a reason to interrupt the increasingly automated purchasing process and actively choose a brand, rather than passively accepting substitutes. We call this “building brand friction in a frictionless world.”

Are brands adapting to this new reality? Our [2017 survey](#) of 170 top Consumer Packaged Goods (CPG) and Retail CEOs, COOs, and CFOs revealed a conscious shift away from traditional mass production and mass marketing practices toward more personalized approaches.

This certainly makes sense. As consumers become the node of commerce, companies will be challenged as never before to accurately perceive and seamlessly deliver what *each* consumer wants with unprecedented precision. Yet when viewed in the context of rapidly advancing frictionless commerce, the envisioned shift toward personalization appears modest. Do leaders grasp just how much adaptation will be required to build brand friction in a frictionless world?

To begin, even the most capable and sophisticated marketing organizations will need to fundamentally change their mission and shape. Traditionally, marketing’s most important task was to *broadcast* the company’s brands to consumers. In contrast, as consumers become the true node of commerce, marketing must first and foremost become a *listening* post. Analytics — which in many companies is still isolated from the core business — will be foundational to this listening mission, and

so must be made central to the marketing function, rather than serving as marketing's internal supplier.

The most vital leap for marketing will be evolving into an exponentially more effective *translator* of consumers' needs, preferences, and desires. Most companies have no shortage of consumer data. What many still lack is the insight required to use that data to decisively win market share. The best marketing organizations will effectively fill that void through an advanced synthesis of brain and heart.

If this envisioned evolution proves accurate, marketing's most important audience will be the rest of the company, as marketing becomes less an external advocate for the company and brand, and more an internal advocate for the consumer, guiding the formulation of myriad nuanced offers.

Even greater adaptation will be required of the larger organization. Leaders of major CPG and retail enterprises readily acknowledge the difficulty of initiating fast action across silos. P&L and brand groupings that optimized efficiency in the age of mass production and mass marketing often make it impossible for companies to nimbly react to consumer desires.

Influence vs. Affluence

We see [peer influence](#) as a growing force in determining where consumers spend money and what attracts them to brands. Affluence, the traditional source of consumer power, is being supplanted by consumer communities, shaped by shared interests and self-selected demographics. Persuasive individuals can now change the fate of brands with relative ease — underscoring the need to focus on how consumers think and what they value.

In sum, the changing world in which CPG and retail companies compete offers clear imperatives to evolve from today's omnichannel obsession to more consumer-centric models. It is time to rethink everything you do from the consumer's perspective. Stop resting on comfortable assumptions about the strength of your brands, your customer loyalty scores, or current success. Right now, complacency is your worst enemy.

Here are a few ways to start adapting to the realities of frictionless commerce:

- **Use data to understand customers on *their terms*.** Be prepared to offer consumers meaningful value in exchange for their proprietary data. Demonstrably use their data to enhance their lives.
- **Redefine your target market.** Traditional demographics are no longer sufficient. They will be increasingly replaced by “personographics” — the use of psychographics, anthropology, and sociology to identify individual needs and desires across crisply defined consumer cohorts, around which future consumer decision models will be built.

- **Rely on listening and translating more than on broadcasting.** Challenge the complacency that stems from having an abundance of consumer data. Build markedly more sophisticated ability to identify and anticipate the new keys to brand loyalty in a frictionless world.
- **Shift focus from channel strategies to consumer centricity.** Digital connectivity appears destined to make channels all but indistinguishable. Strategically redirect resources away from understanding channels toward deeper understanding of consumers.
- **Tap influence.** As the mass marketing age fades, create brand friction via increased use of membership models and event-driven marketing. Build a sense of community within target cohorts by facilitating a network effect for influencers.

For the past century or more, technology has greatly empowered brands by connecting them with consumers on a mass scale. Now technology threatens to have the opposite effect, as the automation and algorithms of frictionless commerce distintermediate brands from the consumers they seek to serve. This crucial trend compels established CPG and retail brands to let go of much that is familiar and comforting. It is time to boldly experiment with new approaches, expressly aimed at building brand friction in a frictionless world.

Greg Portell is Lead Partner, Consumer Industries & Retail Practice – Americas Region at A.T. Kearney, the global management consulting firm.

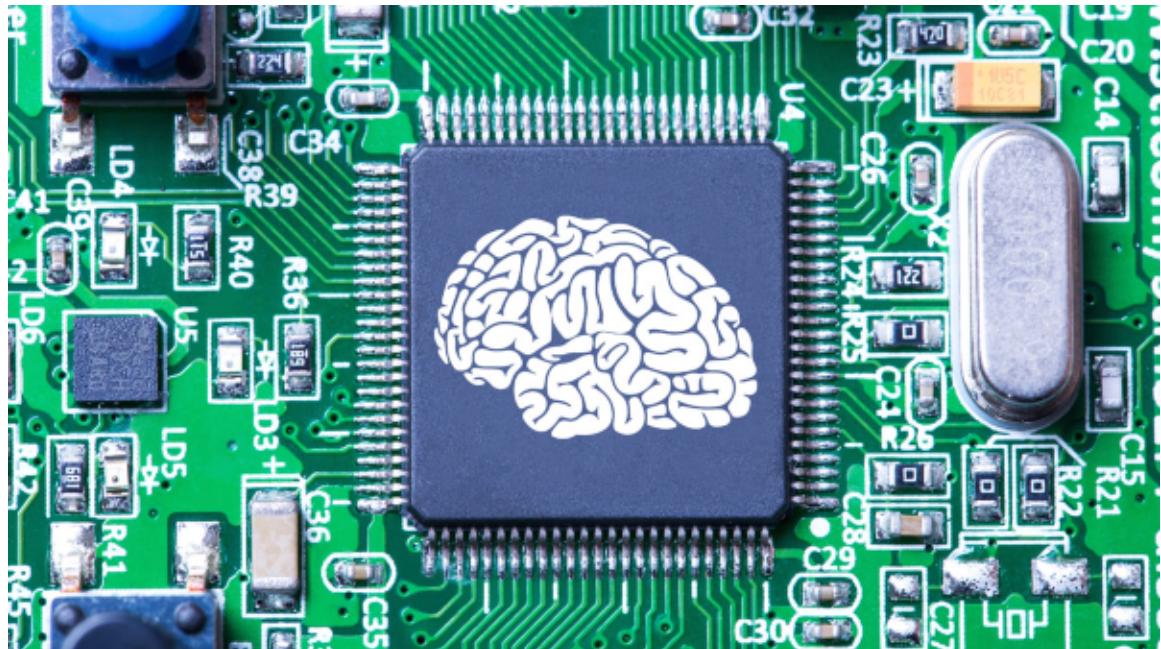
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MARKETING

How AI Helped One Retailer Reach New Customers

by Dave Sutton

MAY 28, 2018



YUICHIRO CHINO/GETTY IMAGES

When Naomi Simson founded RedBalloon, an online gift retailer that sells personal experiences, she was pioneering the category in Australia. With a \$25,000 personal investment and a small office in her home, she began aggregating sales leads and aggressively acquiring customers through very traditional marketing means — like yellow page advertisements. It was 2001, and online advertising was at its nascent stage. [Internet Explorer was the leading Internet browser](#) and Google AdWords [had only just recently launched](#). With a cost of customer acquisition of just 5 cents, Simson's traditional

approach to advertising was generating an impressive return on investment. RedBalloon was setting the pace for gifting experiences like outdoor adventures, wine tastings, concert tickets, and spa treatments.

By 2015, RedBalloon was delivering more than four million customers to businesses across Australia and New Zealand that offered “experiences.” Simson wasn’t overconfident, but at this point, she felt like she knew every audience for experiential gifts that existed in the market, along with the most efficient ways to reach them.

Fast forward to 2016, and almost all of RedBalloon’s brand advertising was invested in traditional media outlets like radio, print, billboards, and pop-up retail stores. The company’s cost of new customer acquisition had ballooned from 5 cents to \$50. Despite the fact that the company enjoyed massive brand awareness, escalating acquisition costs were destroying margins. Furthermore, the traditional audience for experiential gifts was no longer connecting emotionally with the RedBalloon brand. The marketing team was getting lost in attribution, pulling the same search engine marketing levers, talking to the same audiences, and creating the same campaigns with diminishing returns. The situation was untenable. Simson knew that the company had to transform marketing to find previously unexplored audiences and to make media buying decisions more autonomous and efficient.

Enter “Albert”, a digital marketing platform powered by artificial intelligence (AI). Working across Facebook, Google, YouTube and other paid and earned media channels, Albert autonomously targets audiences, mixes and matches creative assets, buys media, runs campaigns, measures performance, applies insights from one channel to another, and then makes adjustments based on what “he” learns to optimize the return on marketing investment. I met the team at Albert (formerly known as Adgorithms) while I was doing research into artificial intelligence, machine learning, and data-driven marketing technologies for my book, *Marketing, Interrupted*. As part of my research, I interviewed several of Albert’s customers, including Simson.

In 2017, Simson and her marketing team put Albert to work immediately, processing the company’s large database of customer interactions and transaction history. After digesting all of this data, Albert identified and bought more than 6,400 keywords to improve performance across RedBalloon campaigns in the first 24 hours of operation. Most marketers use last year’s attribution models as a baseline to inform decisions for this year’s media buys. Not Albert. He retests in real-time to try and disprove existing models and find a different and more efficient way to reach the target. With Albert’s help, the total cost of acquisition across channels for RedBalloon was reduced by 25% in less than one month. He also relieved the marketing team of many of the manual and process-driven tasks they’d been doing. The time they were spending manually executing search campaigns, researching keywords, or altering social media audiences was redirected to more strategic activities, such as devising campaigns that targeted niche, high value, and previously ignored audiences uncovered by Albert.

Despite Simson's conviction that she knew every buying audience in Australia and New Zealand, Albert was finding new audiences that the company had never even considered. For example, Albert identified an audience cluster of "men over 65 years old in Melbourne who love to skydive." Albert also revealed pockets of ex-pat communities in the United States and Europe who wanted to buy experiential gifts for their friends and families back home, but were unaware of RedBalloon.

Albert identified these new high-value audiences by trying thousands of text-image combinations on small "micro-segments," observing which audiences responded along with the specific combinations that triggered their response. Once he identified the highest-performing micro-segments, he scaled his efforts to larger audiences and served them hyper-personalized messages based on what worked with the smaller groups.

Albert acts on these types of insights as he goes, rather than stopping to ask for approval, which can present a learning curve to new adopters of AI, but he also shares what he's learning along the way. Using large, rapid scale, multi-variant testing, Albert confirmed his initial learnings and insights and expanded upon them, all while autonomously analyzing and revising his decisions based on changing customer behaviors and patterns over time.

Albert debunked many of the long-held beliefs RedBalloon had about their audiences and the effectiveness of their campaigns. Previously, RedBalloon had only been engaging with about 1% of their reachable base on social media and those campaigns focused primarily on driving conversion at the bottom of the sales funnel. Albert started running campaigns to engage the other 99% of the reachable audience. By not just focusing on "closing the deal," Albert increased brand relevance and consideration, nurtured the audience, and importantly, plugged leaks in the top and middle of the funnel. As a result, the conversion rate from Facebook campaigns managed by Albert increased by 750% in Albert's first year of operation.

Albert's results have been so impressive to date that Simson is now encouraging RedBalloon's CFO to think in a very different way about the marketing budget. In fact, she's challenging the notion of a "budget" altogether. Albert is now generating \$15 of return for every \$1 of marketing investment. If you have a finite, bounded marketing budget, that implies that you must stop investing when the budget is exhausted. But if you can get a 15x return, why would you stop? Simson's argument is that the brand should continue to invest until it sees diminishing returns on that investment. Whether or not she wins that argument, you can bet that Albert will have a bigger slice of the RedBalloon marketing budget to work with going forward.

The adoption of AI in the marketing department will only continue to increase as businesses enjoy the benefits of real-time segmentation of customers, personalized messaging, predictable customer value, and optimized media buys. By eliminating the tedious manual tasks of tweaking business rules each time new customer information is captured, AI will liberate marketers to focus on more strategic and creative activities like campaign planning. Without AI, it will be too difficult for a marketer to compile and process the huge amounts of data coming from multiple sources like

website visits, mobile app interactions, purchase transactions, and product reviews. Those who are slow to adopt AI will find themselves at a competitive disadvantage because they won't be able to make timely, accurate, and profitable predictions about their customers.

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DATA

How Marketers Can Start Integrating AI in Their Work

by Dan Rosenberg

MAY 29, 2018



STEPHEN SWINTEK/GETTY IMAGES

According to [Constellation Research](#), businesses across all sectors will spend more than \$100 billion per year on Artificial Intelligence (AI) technologies by 2025, up from a mere \$2 billion in 2015. The marketing industry will be no exception.

AI holds great promise for making marketing more intelligent, efficient, consumer-friendly, and, ultimately, more effective. Perhaps more pointedly, though, AI will soon move from being a “nice-to-

have” capability to a “have-to-have.” AI is simply a requirement for making sense of the vast arrays of data — both structured and unstructured — being generated from an explosion of digital touchpoints to extract actionable insights at speeds no human could ever replicate in order to deliver the personalized service consumers now demand.

Interestingly, in many cases, the sophistication of AI technologies has already advanced further and faster than most marketers’ ability to actually make use of them. On the one hand, there are the technical challenges of gathering and normalizing data inputs — the act of making different types of data comparable — connecting them to a unified view of the customer, and then aligning the AI-driven decisions to real-world actions. On the other hand, there are also real philosophical, ethical, or at least *policy* decisions to be made on the value exchange between marketers and consumers when data is shared and used to optimize marketing experiences.

The good news is that, as an industry, we are starting to see meaningful progress on both fronts. For businesses looking to keep pace with innovation and leverage AI, there are steps they can take *today*. But first, what are some examples of how AI can help make marketing more effective?

Using AI in Marketing

Smart marketers are developing, partnering to build, or integrating AI into their tech stacks to get better at what they do. AI is already being used in ad targeting and customer segmentation, but there are more possibilities in store such as:

- AI-powered chatbots use all the customer data at their disposal to answer questions and give advice to customers considering making a purchase. Take [Sephora’s Kik bot](#), which quizzes customers about their makeup preferences and then follows up with specific product information.
- AI-enhanced image search allows users to upload pictures of products they are interested in, to find relevant shopping ideas. For example, companies such as [CamFind](#) let you snap a picture of something in the physical world, and get information related to it. Say you see a poster for a movie you’d like to see. Snap a photo, and CamFind will show you movie recommendations, times, and locations.
- Personalized training routines and nutrition information can be created based on data from other consumers with similar lifestyles. For example, UnderArmour leveraged IBM Watson’s AI to create a “[personal health consultant](#)” that provides users with timely, evidence-based coaching around sleep, fitness, activity, and nutrition.
- Optimized advertising uses AI to make decisions based on the full range of data available — including unstructured data such as sentiment and mood. For example, IBM, this time as a corporate marketer, teamed up with MediaMath (where I am the CMO/CSO) to activate [true AI-driven programmatic marketing](#) using its Watson Cognitive Bidder, to extract predictive signals from exposure to large amounts of data.

How to Put AI Into Practice

There are three key areas of consideration to help you get started leveraging AI for marketing today: affirm your consumer data policies, make your data actionable, and select the right AI partner. Let's look at each in more detail:

Affirm your consumer data policies: Before getting started, it is important to confirm your policies regarding the handling of consumer data, transparency, and control. Your company needs to make sure that you're complying with the EU's new [General Data Protection Regulation \(GDPR\)](#). Consumers should be able to interact with connected devices — from web browsers to mobile phones to voice assistants — knowing that their data is being used in transparent ways, in a manner consistent with their preferences and expectations, to which they have explicitly consented.

Make your data actionable: There are three pillars here to consider:

1. **Common identifier:** With the explosion of devices, digital identity today is deeply fragmented, leading to head-scratching experiences where, for example, a gym franchise might roll out a great new membership offer...to someone who is already a member. The first step is to establish a common identifier, usually an alpha-numeric string, across various touch points and data sets to help create a unified view of the customer. Emerging solutions such as [DigiTrust](#) are helping marketers tie together their various touchpoints in a safe, respectful, and scalable way.
2. **Data gathering:** AI can make sense of all your data and extract insights from it, but only if you can collect and normalize it before activating it. Choose a data management platform (DMP) that incorporates the identity solution selected above and can handle data from a wide range of sources, so you can collect, organize, and centrally manage all your data, segment it into granular audiences, and activate it for marketing in real-time.
3. **Data end points:** The best customer experiences cut across touchpoints, whether they are “paid” (online, Connected TV, or digital audio ads), “owned” (your stores, websites, call centers) or “earned” (PR, blog posts, social media). Although there are as yet few platforms that can deliver marketing across all of these touchpoints, technology such as IBM’s cloud-based Universal Business Exchange can build upon the common identifier and data gathered to drive consistent execution across a range of platforms and tools.

Select the right AI partner: With the policies, data assets, and pipes in place, the stage is set for AI to make optimal decisions and drive real business performance. For best results and fastest time to real return on your investment, be sure to choose a partner that has true AI, not simply rules-based decisioning, which is impossible to scale for the volume of data and combinations of interactions that marketers are managing today. In addition, be sure to choose partners with real experience addressing your particular use cases and working with your existing technology partners. Finally, as with any vendor relationship, be sure to check on your partner’s ethical and philosophical approach to AI, as this is still an [emerging technology that demands thoughtful guardrails](#) to produce effective results in a responsible manner.

AI is no longer just hype — it's a “have to have” that you can start integrating into your marketing today with the steps outlined above.

Dan Rosenberg is CMO/CSO at MediaMath.

How Consumer Insights and Digital Have Led to Adidas' Growth

In today's connected world, it's essential for brands to think consumer-first. But how does a brand get to the point where that thinking is not only embraced, but also put into action across the company?

At Adidas, it all starts with digital.

"Digital is one of our core strategic priorities. We have ambitious goals that we've set until 2020," says Joseph Godsey, Global Head of Digital Brand Commerce at Adidas. "We want to create a consumer experience that is premium, connected and personalized. We will measure ourselves rigorously in how the various digital touchpoints come to life across those three dimensions, and we believe they will be core to reaching our overarching targets for sales, consumer experience net promoter score, and ultimately engagement and lifetime value."

Data-Driven Growth in a Digital World

That digital focus helped Adidas reshape its [strategy for today's mobile, more empowered consumer](#). The brand embraces data and technology as a way to be faster and smarter in a world where marketers are competing for consumer attention in the moment. And as consumer behavior evolves and new devices and channels come into play, Adidas is ready to flex to stay in the game.

"With the right approach to data and technology, you can continuously monitor the pulse of the consumer and how they respond," Godsey says. "This could be through testing new ideas to launching campaigns and experiences through rigorous A/B testing frameworks and using data to decide how you proceed."

"Data and tech are helping us grow at our current pace," Godsey says. "We're using data to better understand our consumer and their wants and needs. And we're using technology to enable our end-to-end business to create the best experience for our consumers—and ultimately build a relationship we can grow in the long term."

Making Consumer Connections

Digital information also helps Adidas [tell more relevant stories](#). "The best stories come from consumer insights. And these insights often come from data," says Kelly Olmstead, VP Brand Activation for North America at Adidas. "We're constantly working to understand our consumers better, and data leads us to insights that deliver stories that are richer and more relevant to our consumers."

"I think that's the key; the more info we have, the more likely we are to be relevant and meaningful," Olmstead says. More than that, the brand uses digital insights to know which stories work when it matters most. "We use data to ensure that the stories we're telling are resonating—in real time."

And if the digital information shows that something is not connecting with consumers, the brand can react appropriately and adapt its plans. "More than ever before, data is fueling our marketing efforts," she adds.

Connecting Teams

Part of Adidas' investment in a digital transformation was the brand's use of extensive consumer research not only to inform its marketing strategy and storytelling, but also to uncover new, efficient ways of working so it could continue to build better experiences and products—faster. That led to creating the right environment for teams.

Now brand, media and digital teams are organized to center around creating a better consumer experience. This consumer-first thinking allows Adidas to use consumer insights as the starting point for creating new processes and models of working that help Adidas bring capabilities to consumers faster.

One example of this consumer-centric model was the launch of the new Adidas app. “We used extensive consumer testing throughout the iterations of app development, but we also intentionally launched it in the U.S. before every feature and capability was developed,” Godsey says. “We wanted to get it in the hands of the consumers and use their feedback to prioritize what we did next. They were very powerful in what they shared back, and it greatly shaped how we’ve evolved the app experience since then.”

Follow the Insights

You can't be relevant and timely without insights into what your consumers care about and where they spend their time. And you can't achieve growth if you don't take risks or adapt to our changing world. “As an organization, we openly talk about the importance of taking risks and the important role innovation plays in everyday work,” Godsey says. “We’re better at both when we’re using data and insights. Taking risks, testing new ideas and innovation require data—early and often.”

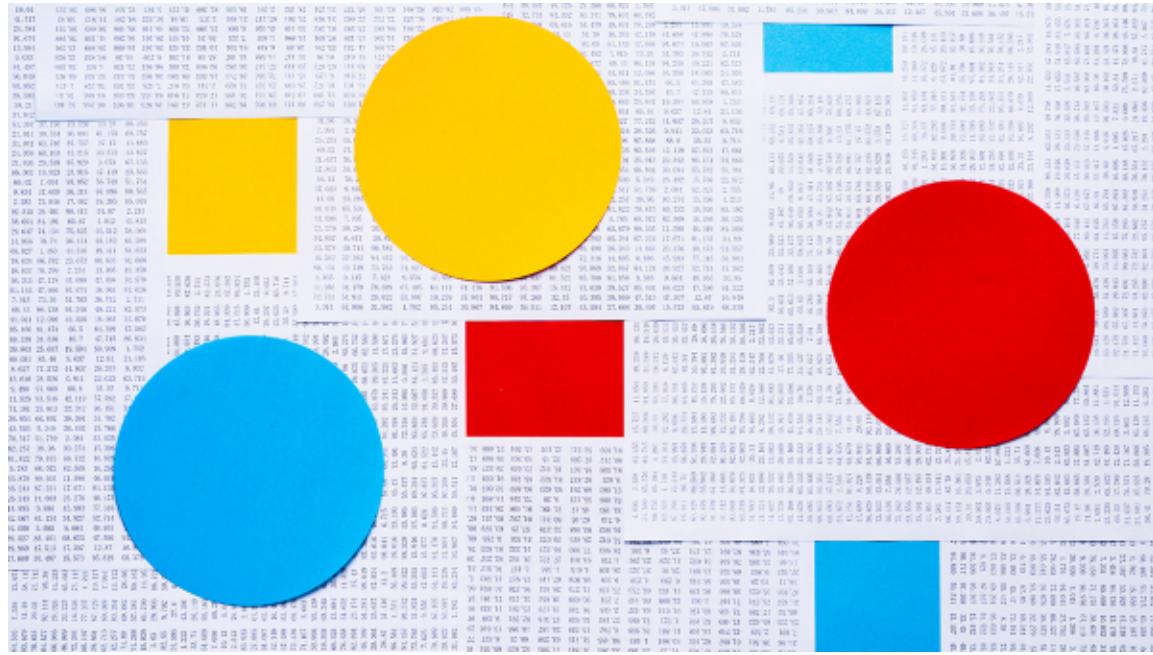
To read more about [how leading brands use consumer insights to improve marketing](#), download research from Bain & Company in partnership with Google.

MARKETING

Why Marketing Analytics Hasn't Lived Up to Its Promise

by Carl F. Mela and Christine Moorman

MAY 30, 2018



MIRAGEC/GETTY IMAGES

We see a paradox in two important analytics trends. The most recent results from The CMO Survey conducted by Duke University's Fuqua School of Business and sponsored by Deloitte LLP and the American Marketing Association reports that the percentage of marketing budgets companies plan to allocate to analytics over the next three years will increase from 5.8% to 17.3%—a whopping 198% increase. These increases are expected despite the fact that top marketers report that the effect of analytics on company-wide performance remains modest, with an average performance score of

4.1 on a seven-point scale, where 1=not at all effective and 7=highly effective. More importantly, this performance impact has shown little increase over the last five years, when it was rated 3.8 on the same scale.

How can it be that firms have not seen any increase in how analytics contribute to company performance, but are nonetheless planning to increase spending so dramatically? Based on our work with member companies at the Marketing Science Institute, two competing forces explain this discrepancy—the data used in analytics and the analyst talent producing it. We discuss how each force has inhibited organizations from realizing the full potential of marketing analytics and offer specific prescriptions to better align analytics outcomes with increased spending.

The Data Challenge

Data are becoming ubiquitous, so at first blush it would appear that analytics should be able to deliver on its promise of value creation. However, data grows on its own terms, and this growth is often driven by IT investments, rather than by coherent marketing goals. As a result, data libraries often look like the proverbial cluttered closet, where it is hard to separate the insights from the junk.

In most companies, data is not integrated. Data collected by different systems is disjointed, lacking variables to match the data, and using different coding schemes. For example, data from mobile devices and data from PCs might indicate similar browsing paths, but if the consumer data and the data on pages browsed cannot be matched, it is hard to determine browsing behavior. That's why understanding how data will ultimately be integrated and measured should be considered *prior* to collecting the data, precisely because it will lower the cost of matching.

What's more, most companies have huge amounts of data, making it hard to process in a timely manner. Merging data across a vast number of customers and interactions involves “translating” code, systems, and dictionaries. Once cohered, vast amounts of information can overwhelm processing power and algorithms. Many approaches exist to scale analytics, but collecting data that cannot be analyzed is inefficient.

An irony of having too much data is that you often have too little *information*. The more data and fields collected, the less they overlap, creating “holes” in the data. For example, two customers with the same level of transactions could have very different shares of wallet. While one represents a selling opportunity, the other might offer little potential gain. Data should be designed with an eye towards imputation — so the holes in the data can filled as needed to drive strategy.

Perhaps worst of all, data is often not causal. For example, while it is true that search advertising can be correlated with purchase because customers are in a motivated state to buy, it does not follow that ads caused sales. Even if the firm did not advertise, consumers are motivated to buy, so how does one know whether the ads were effective? Worse, as data grows, these problems compound. Without the right analytic approach, no amount of investment will translate to insights.

Companies should do two things to harness the power of analytics in their marketing functions. First, rather than create data and then decide what to do with it, firms should decide what to do first, and then which data they need to do it. This means better integrating marketing and IT, and developing systems around the information needs of the senior management team instead of creating a culture of “capture data and pray.”

Second, companies should create an integrated 360-degree view of the customer that considers every customer behavior from the time the alarm rings in the morning until they go to bed in the evening. Every potential engagement point, for both communication and purchase, should be captured. Only then can firms completely understand their customers via analytics, and develop customized experiences to delight them. The CMO Survey we referenced above shows that firms’ performance on this type of integration has not improved over the last five years, challenging companies’ ability to answer the most important questions about their customers.

The Data Analyst Challenge

The CMO Survey also found that only 1.9% of marketing leaders reported that their companies have the right talent to leverage marketing analytics. Good data analysts, like good data, are hard to find. Sadly, the overall rating on a seven-point scale, where 1 is “does not have the right talent” and 7 is “has the right talent,” has not changed between the first time the question was asked in 2013 (Mean 3.4, SD =1.7) and 2017 (Mean 3.7, SD =1.7).

The gap between the promise and the reality of analytics points to a disconnect that needs resolution. Companies need to better align their data strategy and data analyst talent to realize the potential that analytics can bring to marketing managers. In the absence of talent, even great data can lie fallow and prevent a firm from harnessing the full potential of the data. What are some of the characteristics that companies should look for in good data scientists? They should:

Clearly define the business problem. Managers who rely on data scientists to know what might be possible to do with the data often find great value in simply having that person help define the problem. For example, a marketer coming to a data analyst asking questions about driving conversions might not realize that there’s also data at the top of the purchase funnel that might be even more germane to driving long-term sales. Rather than taking requests as they are stated, data analysts should take requests as they *should* be asked, integrating advice tightly with the needs of the company. For example, a request to assess how marketing promotions affect sales should also account for the effect of promotions on brand equity.

Understand how algorithms and data map to business problems. Companies will see more effective data analytics if teams are clear on firm objectives, informed of the strategy, sensitive to organizational structure, and exposed to customers. To enable this understanding, data analysts should spend physical time outside of data analytics, perhaps visiting customers to give them an

understanding of market requirements, attending market planning meetings to better appreciate the company's goals, and helping to ensure data (IT), data analytics, and marketing are all aligned.

Understand the company's goals. Data analytics is beset by multiple requests, like a waiter serving too many customers. A clear recognition of a firm's goals enables data analysts to prioritize projects and allocate time to those that are the most important (those that have the highest marginal value to a firm). Requests should be centralized, and then prioritized by a) whether the findings have the potential to change the way things are done and b) the economic consequences of such changes. Several companies develop standardized forms to ensure requests are assessed on an equal footing. An attendant benefit of this process is that it mitigates the potential for opportunistic research clients to approach analysts asking them to conduct a study to support a preconceived strategy for political reasons, instead of deciding between strategies that are in the best interests of the firm.

Communicate insights, not facts. Communication theory tells us that the transmitter and receiver of information must share a common domain of knowledge for information to be transmitted. This means analysts need to understand what the firm's managers can understand. Small font sizes, complex figures and equations, the use of jargon, and an emphasis on the modeling process instead of insights and explanations are common errors when presenting analyses. Why should one use a complicated model to present information when a simple infographic would suffice? Presentations should be organized around insights, rather than analytic approaches. This is another reason it is critical for analysts to connect externally with customers and internally with the managers using their work. Plus, instead of reporting a "parameter estimate," an analyst should communicate how results point to tangible strategic actions. This requires analysts to structure their analysis in a decision framework that helps managers assess best and worst case scenarios.

Develop an instinct for mapping the variation in the data to the business questions. That means two things. First, analysts need a comprehensive understanding of all the relevant drivers (e.g., marketing and environmental factors) and outcomes (e.g., purchase funnel metrics). For example, to ascertain the effect of advertising on sales, one would need to recognize that concurrent changes in product design can affect sales, lest one misattribute the effect of product changes to the advertising that announces them. Second, analysts must have a means to ensure that drivers lead to outcomes instead of outcomes leading to drivers. Once again, this requires the analyst to understand the nature of the markets being analyzed. Regarding the latter, no complicated model that purports to control for missing information can ever compensate fully for lack of causal variation. Likes drive sales and sales drive likes. However, disentangling the two means having some factor that can independently manipulate one and not the other.

Identify the best tool for the problem. On the analytics side, it goes without saying that years of training and practice are necessary. One cannot play an instrument without learning it, and the same is true for analysts. Most important is knowing which tool, of the many available, is best for which problem. At a very granular level, experimental methods are especially adept at assessing causality; supervised machine learning excels at prediction where non-supervised machine learning can

decompose non-numerical stimuli into tags or attributes for further analysis. Economics and psychology afford deep insights into the nature of consumer behavior, and statistics can help us excel at inference. A strong understanding of marketing grounds all of these tools and disciplines in the business context necessary to produce effective advice.

Span skill boundaries. Some marketing analysts excel at math and coding, and some excel at framing issues, developing explanations, and connecting to business implications. A far smaller set excel at both. Companies either need to wrap these variegated skills into one person through training and accumulating different types of experiences, or, more likely, assemble a team that is sufficiently facile with the techniques that they can interact productively, ensuring that there is some mechanism to match the approach (and the analyst) to the problem. This match requires senior talent, with the breadth of perspective to align analytical resources and business problems.

In light of the exponential growth in customer, competitor, and marketplace information, companies face an unprecedented opportunity to delight their customers by delivering the right products and services to the right people at the right time and the right format, location, devices, and channels. Realizing that potential, however, requires a proactive and strategic approach to marketing analytics. Companies need to invest in the right mix of data, systems, and people to realize these gains.

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MARKETING

Using Analytics to Prevent Customer Problems Before They Arise

by Paul D. Berger and Bruce D. Weinberg

MAY 31, 2018



JEKATERINA NIKITINA/GETTY IMAGES

A non-negligible percentage of customers who buy a new smartphone return it within the “free return” window. Many of these returners claim that the phone does not work correctly. However, the data clearly indicates that this is often not the real issue. The reality is that these customers simply don’t know how to use the smartphone well enough, and either do not realize it, or are not willing to admit it. So they return it — which makes a major profit difference for both the smartphone

manufacturer and the service provider. For the latter, it could be on the order of thousands of dollars in lifetime value per customer (CLV).

Being able to foresee a return, and develop an intervention that can preempt it, can prevent these kinds of problems from occurring. This might be an “expert” (like a BestBuy Geek Squad member or an Apple Genius) calling the customer a few days after a purchase, asking about the new-smartphone experience, operation, and performance, and letting it be known that help is available 24/7 for any questions or assistance. This proactive engagement with the customer is substantively different from the salesperson letting the customer know at the time of purchase that help is available. Of course, it is not profitable to arrange this intervention with *all* new-smartphone-buying customers. Thus, a key issue is *with whom* to implement an intervention.

Analytics to the rescue.

We helped a client dealing with exactly this problem using a [predictive model](#) to rank-order each customer over a given period of time from high to low probability that a member is a “returner” (without an intervention). In a real-world test, the model worked very well. The people the model ranked in the top 10% in terms of likelihood to return a phone contained about 40% of all actual returners on the list. In other words, the group that the model thought was highest risk included a relatively large percent of the high-risk people.

It’s easy see how it might be cost effective to intervene with these 10%, because if future results mirror the results based on the past data, it will potentially impact 40% of the potential returners, not just 10% of the potential returners, even though we are paying for an intervention with only 10% of the new-smartphone-buying customers. Exactly what (top) percentage of the rank-ordered list should receive the intervention, to be most profitable, can be easily determined by the economics of the situation; it would simply be a tradeoff among the cost of providing the intervention, the benefit of converting a returner into a non-returner if the intervention is implemented, and how well the predictive model can, indeed, predict who would be more likely to be a returner. The optimal percentage of customers with whom to intervene may be, for example, the top 8%, or the top 13%, or even the top 30%. (In many cases of which we are aware, interventions more than pay for themselves.)

Briefly consider another “intervention” example. A healthcare provider considers an intervention for members who, without an intervention, are reasonably likely to have a hospital stay in the near future. (Smartphone returns are certainly different from hospital stays; however, the intervention-related analytical process involved is extremely similar.) To cut down on unnecessary hospital stays, the intervention program can take on many forms, such as a weekly phone call to remind members to take their medications. In this real-world illustration, “stayers” are members who will need to be hospitalized for at least 15 days within a one-year time period. We used a [predictive model](#) to rank-order each member from high to low by the probability that a member is a stayer (without an intervention.) The top 10% of the rank-ordered list captured a very high value of 53% of all actual

stayers. Of course, here also, one needs to weigh the cost of the interventions versus the cost-savings in reduced hospital stays that result from the intervention, to determine with whom to intervene.

There is a side to the overall intervention-decision-process that does not attract as much analytical attention: the issue of optimizing *which intervention works best* — i.e., which intervention is most cost effective. The key reason that this side of things is not often implemented is simple — lack of data. One would have to try different interventions on different populations and record the results of those different intervention strategies over a potentially long period of time. Usually, different intervention strategies would have to be implemented on mutually exclusive groups of people. Companies do not want to invest several years of paying for different interventions, knowing that many or most may not be sufficiently profitable. However, the same attitude was put forth “way back when,” when data to determine customer lifetime value (CLV) was being discussed at many companies. The data were not available at most companies and the prospect of collecting such data for many years was viewed as too daunting. However, nowadays, nearly all large- and mid-sized companies have sufficient data to develop a CLV model. One might make the case that when it comes to data for intervention decisions, short-sightedness is alive and well. However, advances in machine learning may help change this perspective when it comes to selecting an optimal intervention.

There are many marketing and business problems where customers take undesirable actions that can negatively impact organizations and providers. Fortunately, marketers can effectively disrupt these actions with an intervention. Optimizing, at least for a given intervention, is now being recognized as a useful implementation in many situations. We wouldn’t be surprised if the term “intervention analytics” becomes a well-known phrase, given the mushrooming of the field of marketing analytics, and the potential upside for companies.

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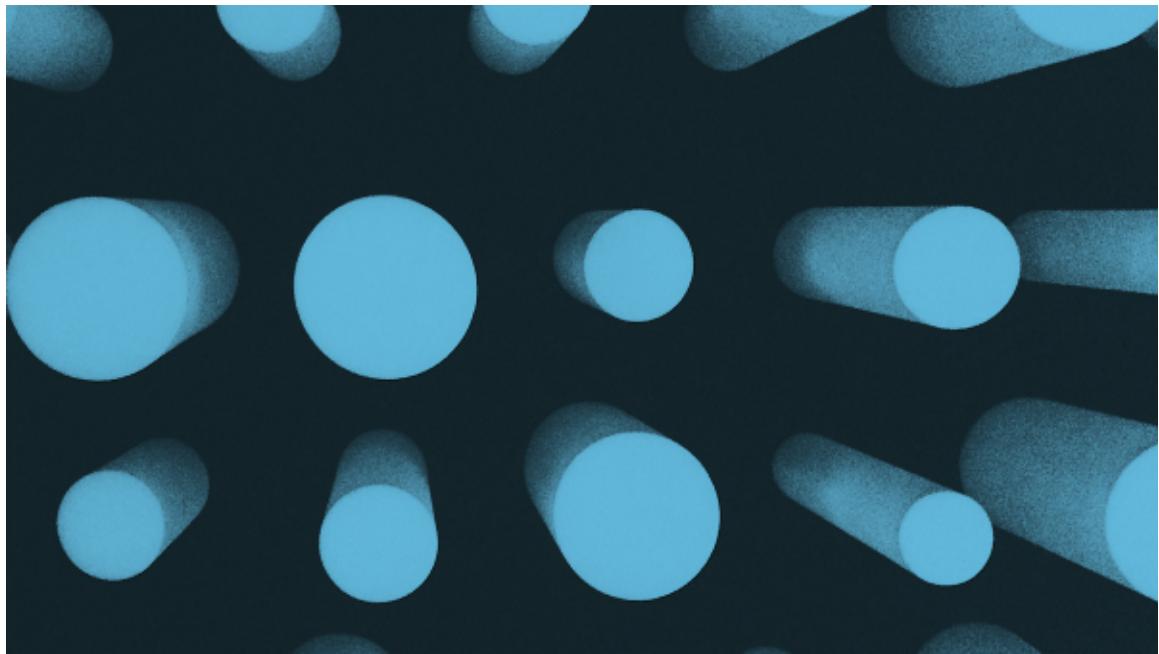
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SECURITY & PRIVACY

Protecting Customers' Privacy Requires More than Anonymizing Their Data

by Sachin Gupta and Matthew Schneider

JUNE 01, 2018



BECKY HAYES/EYEEM/GETTY IMAGES

Today, good marketing relies on having detailed and accurate customer data. And companies, not surprisingly, are eager to collect vast troves of it. For instance, Amazon continuously tracks the behaviors of its [100 million Prime members](#), an example of “first-party” data. And many companies have found that sharing their own customer information with other companies creates synergies for

both parties, especially with the increasing availability of “internet of things” data (GPS sensors, smart utility meters, fitness devices, etc.). These are examples of “second-party” data. Finally, many companies supplement their first-party data with “third-party” data from companies like Acxiom, which collects up to 1,500 data points on 700 million consumers worldwide.

The potential to conduct effective data-driven marketing with these augmented databases is enormous. At the same time, concerns about customer privacy have never been higher because of numerous, widely-publicized privacy hacks such as the recent Facebook-Cambridge Analytica scandal. Consumer responses to these privacy breaches range from increasing reluctance to share their data, to massive erosion of trust in the brand. For instance, when Yahoo’s three billion user accounts were hacked, Verizon lowered its purchase price for the company by \$350 million.

Studies have shown that consumers are willing to share information with a brand that they trust will protect their information. Greater regulation is being enacted to ensure that businesses are accountable, and that consumers have the right to delete, transfer, or obtain a copy of their data. For instance, the General Data Protection Regulation (GDPR) took effect in the European Union on May 25th, and is being closely watched in the U.S.

The trillion-dollar question is whether it is possible for businesses to reap the promised benefits of data-driven marketing while maintaining the privacy of customers’ data.

Current approaches to protecting data

The most common data protection approach currently being followed by businesses is to control access to the data after it’s been gathered. This *access control* approach is woefully inadequate for multiple reasons. First, as soon as a company shares data either internally or externally, its ability to control access deteriorates rapidly. Further, practices like pseudonymization (which will be required by GDPR) — defined as “the processing of personal data in such a manner that the personal data can no longer be attributed to a specific data subject without the use of additional information” — are not sufficient, as we explain below.

Consider the example shown in the exhibit below, where two retailers enter a second-party data sharing partnership. Although Retailer B’s data was pseudonymized by removing all personally identifiable information, it is not really anonymous because the combination of age range, timestamp, gender, and zip code creates a unique population record which can be linked to the additional information from Retailer A. Although these retailers may comply with the law, there is a significant privacy risk to consumers.

When Pseudonymizing Customer Data Falls Short

In this example of two retailers entering a second-party data-sharing partnership, the identity of a particular customer is readily apparent.

RETAILER A

Spend	No. of purchases	Age	Time stamp	Gender	ZIP code	Real name
\$1,000	1	43	11:05 AM May 5, 2018	Female	94208	Susan Smith
\$2,500	7	21	11:15 AM May 5, 2018	Male	94208	John Smith
\$20	1	79	11:30 AM May 5, 2018	Male	94204	Ryan McCully

John Smith is unique with high probability

RETAILER B (PSEUDONYMIZED DATA)

Product purchase	Age	Time stamp	Gender	ZIP code	
Birth control	21	11:25 AM May 5, 2018	Male	94208	
Soda	33	11:30 AM May 5, 2018	Male	94208	

SOURCE SACHIN GUPTA AND MATTHEW SCHNEIDER

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Synthetic data as protection

Public agencies like the U.S. Census Bureau and the Department of Agriculture that collect sensitive data (e.g., typical purchases by Supplemental Nutrition Assistance Program beneficiaries) are *required by law* to share the data publicly. These agencies follow an approach of transforming the original data to protected data, [which are then released](#). In this approach, the sensitive variables that need to be protected in the original data are systematically perturbed using methods like the following (to illustrate, we use the example of protecting weekly sales of retail stores in point-of-sale data):

- **Adding random noise.** For example, observations are grouped into deciles based on sales, and a random number is added to the sales in each decile.
- **Rounding.** For example, sales are rounded to the nearest hundred.
- **Top coding.** For example, all sales above a threshold value, such as 100, are set equal to 100.
- **Swapping.** For example, observations are divided into groups and their sales data are exchanged.
- **Aggregating.** For example, weekly sales are summed and prices and promotions are averaged across stores within a market.
- **Creating synthetic data.** For example, sales are simulated from a probability distribution.

These agencies use the process of perturbation to manage the trade-off between preserving the useful information in the original data, while reducing the opportunity for an intruder to violate privacy. The original data are kept in secure access environments unless deletion is required. We

believe that businesses should consider taking a page out of the playbook of these agencies to strengthen their own data protection practices.

We have shown in two published articles ([here](#) and [here](#)) how a statistical model can be used to convert original marketing data to synthetic data for the protection of consumers. A key idea in this approach is that the marketing goals for which the data are being gathered are taken into account in the process of synthesizing, thereby carefully trading off the loss of information with the gain in protection.

For instance, consider a very widely used form of data — retail point-of-sale data — which is gathered by marketing research companies like ACNielsen and SymphonyIRI from retail stores. The data is then aggregated across the retail stores within a market in order to prevent the stores from being identified, and is purchased by almost all major consumer packaged goods companies, like Procter & Gamble and Unilever. Brand managers use the data to monitor how their brands are performing, as well as to compute marketing metrics like price elasticities and promotion lift factors. However, the aggregation can severely distort the metrics that brand managers use to make important decisions, like how much to spend on trade promotions. An alternative approach to protect the stores' identities is to convert the original data to synthetic data using a statistical model. Our [research](#) has demonstrated that this approach provides dramatically more accurate metrics than aggregate data, yet protects the stores' identities very well.

The promised benefits of data-driven marketing are at grave risk unless businesses can do a better job of protecting against unwanted data disclosures. The current approach of controlling access to the data or removing personally identifiable information does not control the risk of disclosure adequately. Other approaches, such as aggregation, lead to severe degradation of information. It's time for businesses to consider using statistical approaches to convert the original data to synthetic data so they remain valuable for data-driven marketing, yet adequately protected.

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Trust, Transparency and Value—How Google Is Working to Improve Online Advertising for Everyone

By Sridhar Ramaswamy, Senior Vice President of Ads & Commerce, Google

Digital advertising has played an important role in making the internet the free, open, vital place it is today. Many of the things we all enjoy—websites, blogs, social networks, apps and videos—are funded by ads. Advertising helps reduce the digital divide, empowers creative voices and spurs global economic opportunity.

Yet, it's no revelation that the ads ecosystem has had its share of challenges over the past few years. We've all seen the signs: consumers who are frustrated with slow experiences and a rise in disruptive and deceptive ads; advertisers that felt the ads ecosystem was increasingly complex and sometimes not brand-safe; publishers struggling to balance financial pressures and the consumer experience.

In recent years, Google has redoubled its efforts to improve the ads ecosystem. And we aren't alone. We're also working with publishers, agencies, advertisers and industry bodies that are committed to working together to improve global standards for online advertising.

In our eyes, a healthy ads ecosystem—one that works for consumers, advertisers and publishers—must be:

Transparent. Everyone involved should know what's happening and be able to make meaningful choices about it. Consumers should expect to know what information is collected, and have tools available to secure and control their privacy online.

Trustworthy. Everyone should be able to trust their ads experiences. Advertisers, in particular, should be able to see where ads are shown and control the types of placements that are appropriate for their brand.

Valuable. Everyone should feel they receive a fair value exchange. Consumers should get relevant and useful ad experiences; publishers should be rewarded for quality content; and advertisers should be seen by real people, with impactful placements on appropriate sites and apps.

Together, these characteristics create an ads ecosystem that everyone contributes to and everyone benefits from. Here are a few highlights of the steps we've taken over the past year to help strengthen the ecosystem:

- Google is now working with [more than 150 expert groups](#)—including NGOs, government organizations and academics—to help us better understand and identify questionable or sensitive content.
- Google ad products now use over 180 filters to detect and remove invalid and fraudulent traffic.
- We've significantly improved and retrained our machine learning systems. [Ninety-eight percent of content taken down](#) for violent extremism is now flagged to human reviewers by machine learning.
- We now automatically remove policy violations across the Google Display Network for hate, violence and porn content, filtering 700 million ad queries each day.

- On YouTube, we've implemented new thresholds for advertising; channels now must meet a minimum of 1,000 subscribers and 4,000 hours of watch time within the past 12 months to be eligible for advertising. YouTube also features several other improvements; for instance, automated detection of predatory comments on YouTube has improved by 4X just since November 2017.
- We're on pace to hit our target of 10,000 employees working on content review and enforcement across Google by the end of 2018.

Does this mean the job is complete? Of course not. But we believe these efforts are making a material, positive difference. We're committed to a continuous, open dialogue, and a partnership with all our stakeholders and users that includes greater visibility into our priorities and our progress.

We'll continue to work hard to ensure that consumers, advertisers and publishers can thrive in an ecosystem built on transparency, trust and value—one that continues to make the internet the vital place we all want it to be.

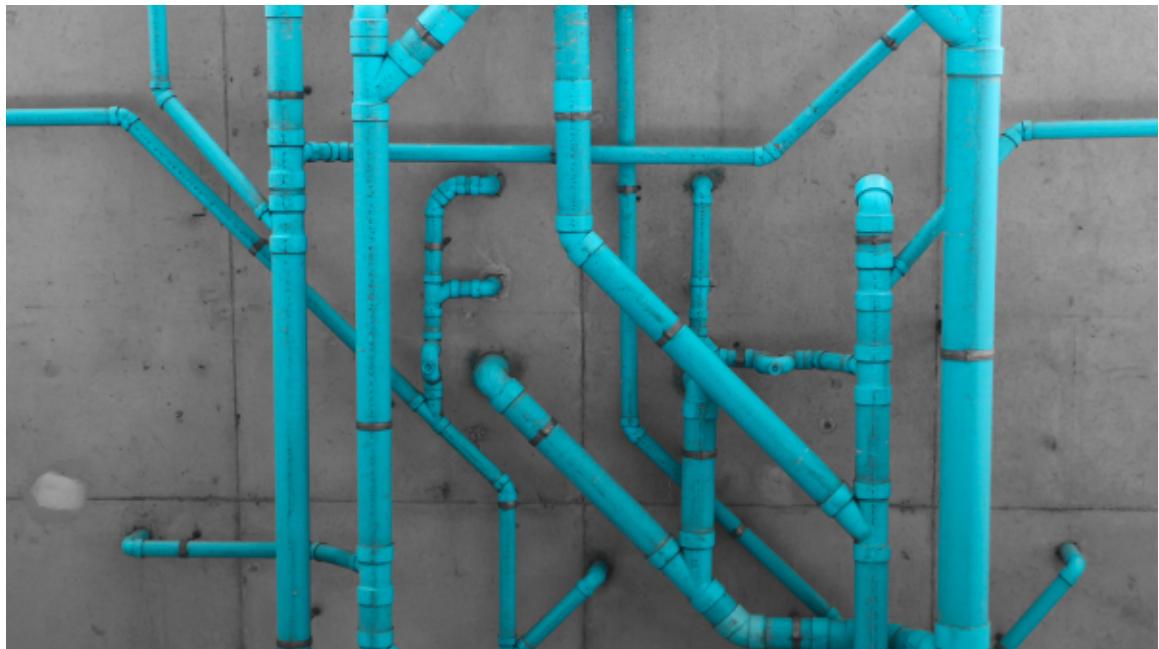
Visit [Think with Google](#) for more insights and updates on marketing and advertising.

MARKETING

How Marketers Can Get More Value from Their Recommendation Engines

by Michael Schrage

JUNE 04, 2018



KANT SANTI NU TA NNTH/EYEEM/GETTY IMAGES

“Almost everything we do is a recommendation.” That’s the essential [design philosophy](#) articulated by then-Netflix engineering director Xavier Amatriain five years ago, where personalizing and customizing choice is the coin of the realm. “I was at eBay last week,” [he said at the time](#), “and they told me that 90% of what people buy there comes from search. We’re the opposite. Recommendation is huge, and our search feature is what people do when we’re not able to show them what to watch.”

Unlike search, recommendation systems seek to predict the “rating” or “preference” a user would give to an item, action, or opportunity. Thoughtfully managed, recommendations can prove far more valuable to marketers than for the customers they ostensibly serve. Recommendation engines not only generate useful data for analyzing customer desires; they can be harnessed to make tactical and strategic recommendations for marketers. Think of an enterprise Netflix, Amazon, or Spotify for marketers; the same technology enhancing customer choice now empowers managerial decision. The “Netflixization of analytics” will increasingly shape how serious marketers make up their minds.

That means digital dashboards won’t merely measure and monitor marketing KPIs, but will offer data-driven suggestions, options, and advice, as well. Optimization will defer to recommendation; “the right answer” will matter less than “really good choices.” Gmail, for example, can already draft professional correspondence based on past e-mail exchanges. LinkedIn proactively prompts value-added introductions. Salesforce software computationally qualifies and ranks leads. Calendar managers visually and acoustically suggest scheduling options and priorities. Practically everything a digitally-dependent knowledge worker sees, hears, or swipes can become a recommendation. That makes simple and engaging user experience design for management key.

For Chief Marketing Officers to brand managers alike, the experience of identifying actionable analytic insight will come to resemble binge-watching on Netflix, shopping on Amazon, or swiping left (or right) on Tinder — an exercise in selecting customized and contextualized options determined by data-enriched algorithms.

Analytics-oriented marketing leaderships must recognize that their best people, just like their best customers, want intelligent exposure to meaningful choice. That’s the design goal. Marketer recommendation systems will fuel customer recommendation engines; customer recommendation analytics will inform and inspire marketing’s recommendations. We see here the power and opportunity for network effects.

Empowered by supervised and unsupervised machine learning, that virtuous recommendation cycle will drive customer insight and growth. Marketing’s machine-mediated role will be striking a profitable balance between optimizing recommendations and recommending optimizations. Whether managing sales funnel conversions or customer journey touch-points, marketers will spend less time searching for answers than weighing recommended alternatives. In an “almost everything we do is a recommendation” analytics environment, suggested alternatives could range from segmentation advice to possible hypotheses for A/B and multivariate experimentation. Marketers planning mobile promotional campaigns, for example, would spend less time data mining than exploring Amazon/Netflix-type suggestions, such as: *Prospects who clicked on this advertisement also responded to that advertisement; 2-for-the-price-of-1 seasonal promotions attract more repeat purchases from gift buyers than 50% discounts*, and so forth. At larger firms with broader product and service offers, enterprise marketing recommendations might be framed as, *Brand managers like you seeking to appeal to X customers used Y campaigns and Marketers who launched these kinds of promotions also used those kinds of advertisements*.

Many digital marketing agencies develop search engine optimization recommendation engines designed to correlate with user profile themes and characteristics. Their goal is not to sell more, but to learn more about prospects. Recommendation then becomes a catalytic precursor to insight.

Even more provocative, perhaps, are nascent recommenders that suggest marketing hypotheses to test and experiment. These “automated hypothesis recommenders” identify correlations that might merit real-world exploration. For example, at one ecommerce company, data suggested that customers who constantly checked their order arrivals gave higher Net Promoter Score ratings when they saw photos of their purchase, not just estimated delivery dates. The recommender proposed testing whether including purchase photos with delivery notifications would lead to better ratings. (It did, but just for women.)

Marketing recommenders also have roles to play in everyday “explore vs exploit” (EvE) decisions. To wit, what’s more valuable to marketing efforts: running additional experiments or profitably exploiting what one’s just learned? EvE recommendations explicitly highlight trade-offs between optimizing for the moment versus investing in future knowledge.

As marketing KPIs become more sophisticated, understanding those trade-offs becomes more important. Context matters. That’s what makes recommenders so cognitively appealing: they invite agency; they enable choice. In data-rich, artificially intelligent markets, one of the most challenging design decisions organizations make is how best to inform and empower their people. Should analytics emphasize prescriptive, directive, and comprehensive compliance? Or will organizations enjoy better morale and results when technology delivers smarter, better, and bespoke recommendations? These are as much questions of culture and values as business process.

It is no secret or surprise that technological advances will effectively automate many marketing tasks previously handled by humans. That appears inevitable. Consequently, much of the marketing challenge going forward will be determining — recommending — when and where human agency adds more value than machine autonomy. This will come down to managerial discretion.

But make no mistake: at least some of that human agency will be illusory. After all, Netflix, Amazon, Alibaba, and Facebook ruthlessly and relentlessly track which of their recommendations “win” and which ones are ignored. Again, the benefits reaped from consumer analytics map to workplace analytics, as well. Identifying decision biases, for example, becomes easier and clearer. Assessing which recommendations most influence marketing decisions will prove at least as revelatory as determining which ones most impact consumer choice. These insights will be immensely useful for top management.

As technologies that generate data, enhance analytics, and empower choice, recommendation systems enjoy both an excellent reputation and great success. The irony is that marketers have done a better job deploying recommendations for their customers than for themselves. Going forward, the

most successful marketing organizations will be ones that find innovative ways of aligning recommendations inside the enterprise and out.

Michael Schrage, a research fellow at MIT Sloan School's Center for Digital Business, is the author of the books *Serious Play* (HBR Press), *Who Do You Want Your Customers to Become?* (HBR Press) and *The Innovator's Hypothesis* (MIT Press).

MARKETING

5 Surprising Findings About How People Actually Buy Clothes and Shoes

by Jeremy Sporn and Stephanie Tuttle

JUNE 06, 2018



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Retail has been constantly reinventing itself, and participants race to keep up with what feels like a series of epic shifts in consumer preferences. Apparel brands are investing especially heavily in online shopping capabilities and introducing interactive features that complement apps and

Websites. Retailers and manufacturers are rushing out new products to keep pace with the leaders of fast fashion such as Zara, H&M, and Forever 21, which launch new fashions every week or so.

But do consumers actually crave all of these changes? And which approaches can generate growth in this changing environment? Many manufacturers try to answer these questions using point-of-sale data, which often comes filtered by the retailers that gather the information; media coverage, which tends to focus on the new; and previous sales of their products, which reflect the past.

To get a clearer, more-complete picture, we [studied](#) actual decisions made by 1,500 apparel and footwear shoppers in the United States. We asked them about everything from their initial motivation to shop, to the shopping journey itself, to how they felt after making their purchases.

The results showed that retailers need to look beyond the buzz surrounding retail and instead focus on specific aspects of consumer behavior if they hope to improve their businesses and drive growth. According to our research, many assumptions about the ongoing revolution in retail are, in fact, myths.

Below are five of our most surprising findings.

Myth: Shopping has become truly omnichannel.

Fact: Most journeys are still overwhelmingly single-channel, though this is changing.

The buzzword of recent years has been omnichannel, meaning that consumers are thought to combine store visits and online interactions during their shopping journeys. However, while omnichannel is growing in importance, our study suggests that 83% of shopping journeys still happen within a single channel — overwhelmingly in traditional stores, which account for almost 80% of apparel purchases today.

Apparel companies and independent retailers need to continue to focus on making their physical stores attractive to visit so that they ultimately become more-effective contributors to brands' financial results. One area where they trail is knowledge of the customer. Online sites have a wealth of data on shoppers — from their tastes, as indicated by previous purchases, to demographic information and preferences. In a store, however, a sales associate tries to guess a shopper's tastes in real time. As a solution, technology could be used to customize the in-store experience by encouraging customers to swipe their smartphones as they enter, so that their profile could then be used to tailor the experience and offers. Stores should also make shopping memorable — through drinks and other hospitality services, for example — and encourage customers to complete their transactions online.

Myth: The sales channel doesn't matter.

Fact: When consumers purchase online, they tend to buy more.

Shopping journeys concluding in online purchases have baskets that are 25% larger, on average.

When someone first visits a physical store and then purchases online, the effect is even more pronounced: Baskets are 64% larger.

One reason why is that free shipping often comes with a minimum basket size, so customers often select extra items to reach this threshold. Another is the greater product range available online without the need to carry inventory in a prime-location store. Moreover, it is relatively easy to create impulse purchases online from information gathered about the shopper and to incentivize larger basket sizes.

To benefit, retailers with physical stores should make a concerted effort to drive in-store customers to their website to make their purchases. This is what Bonobos does: It encourages shoppers to experience a product in its “no-inventory” stores and then complete the order online.

Myth: Online shopping is about instant gratification.

Fact: Online journeys tend to be longer than in-store.

Shopping with clicks sounds like a speedy process. But consumers actually take more time online than when shopping in physical stores, and they make more stops. In fact, 57% of shopping journeys that conclude with an online purchase begin with a consumer either first looking at another website (29%), visiting a brick-and-mortar store (15%), or both (13%) before ultimately transacting online through any particular retailer. The other 43% of journeys that conclude with an online purchase are one-stop journeys that begin and end with the same online retailer.

This means that online shoppers are doing a lot of comparison, so online retailers should work harder to close sales quickly while they have the attention of the consumer. They can do this by actively sending cart recovery messages or creating loyalty programs for a particular site. Removing hassles could help: More than 10% of consumers indicated that they had abandoned a cart on a website and then bought the items elsewhere simply because they didn’t like the first site’s shipping or return policy.

Myth: The retailer doesn’t matter.

Fact: Spend is dramatically higher at brand stores and websites than in multibrand stores.

Direct-to-consumer brand stores and websites generate revenues 86% higher than purchases of those same brands elsewhere — and, of course, better margins. A specific store or site may make a brand feel more valuable and differentiated to customers, inducing them to spend more than they would otherwise. Direct-to-consumer channels also help to develop (or maintain) a brand’s image.

This means brands could benefit from driving consumers toward their own sales channels, though of course in a way that does not jeopardize their relationships with retail channel partners such as department stores. One important strategy is stocking unique products available only from a brand’s

website or store. Nike has had some success with this strategy, and has gone one step further by allowing people to customize their products on its website. Other apparel brands might seek to attract customers through differentiated and personalized products.

Myth: Consumers always want something new.

Fact: Very often, they are happy to rebuy the same or a similar item.

Fast fashion has become a buzzword for apparel makers, but many consumers are simply looking to replace an item they already have. This is especially true in intimates and basics, but also in fashion, where the aim of 83% of shopping journeys is repeat purchases, and athletic products (87%).

Brands should, to some extent, change their mindsets: Success could mean finding consumers that like a product and reselling it to them, and not always trying to reinvent the wheel. The customer, not the product, should come first. Repurchasing of products previously bought could be made easier through promotions on similar items, tailored advertising for new versions, reminders when a product likely needs to be replaced, and even subscription services. To get to know customers better, brands might encourage them to go online during trips to physical stores and to comment on products through apps. Manufacturers can then follow up and encourage repeat purchases.

Acting on these findings implies going beyond technology fixes and making changes to a company's organizational structure. At a minimum, physical stores and e-commerce operations would benefit from better links. For example, internal financial systems need to accurately reflect a customer's buying an item online and later returning it to a physical store. Eventually, brands and retailers should integrate their e-commerce units into the rest of their commercial organizations, replacing channels that compete for sales from the same customer with a structure that puts the customer first. In the future, customers will decide where and how they shop, and the apparel business must make this as smooth — and profitable — as possible.

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PRICING

A Survey of 1,700 Companies Reveals Common B2B Pricing Mistakes

by Ron Kermisch and David Burns

JUNE 07, 2018



GLASSHOUSE IMAGES/GETTY IMAGES

Poor pricing practices are insidious — they damage a company's economics but can go unnoticed for years. Consider the case of a major industrial goods manufacturer that was struggling with low profit margins, relative both to competitors and to its own historical performance. It traced much of the cause to a mismatch between its sales incentives and pricing strategy. The manufacturer was

compensating sales representatives based solely on how much revenue they generated. Reps thus had little motivation to hit or exceed price targets on any given deal, and most were closing deals at the lowest permissible margin.

Like this manufacturer, many business-to-business (B2B) companies have a major opportunity to improve their standing on price. To help companies understand the state of pricing capabilities and how they figure into performance, Bain & Company conducted a [global survey](#) of sales leaders, vice presidents of pricing, CEOs, CMOs, and other executives at more than 1,700 B2B companies. We gathered their self-rating of 42 pricing capabilities and outcomes.

Roughly 85% of respondents believe their pricing decisions could improve. On average, large capability gaps exist in price and discount structure, sales incentives, use of tools and tracking, and structure of cross-functional pricing teams and forums.

What Pricing Leaders Do Differently

To understand which capabilities matter most, we studied a subset of top-performing companies, as defined by increased market share, self-described excellent pricing decisions, and execution of regular price increases. While different pricing capabilities may be important for a particular situation, the analysis showed that top performers exceed their peers primarily in three areas. Top performers are more likely to:

- employ truly tailored pricing at the individual customer and product level
- align the incentives for frontline sales staff with the pricing strategy, encouraging prudent pricing through an appropriate balance of fixed and variable compensation
- invest in ongoing development of capabilities among the sales and pricing teams through training and tools

Our analysis also revealed just how much excelling across multiple pricing capabilities pays off. Among the companies that excel in all three areas, 78% are top performers, versus just 18% of companies that excel in none of the three. Let's explore why these three areas have such a strong effect on pricing effectiveness.

Pricing to the Average Is Always Wrong

One-size-fits-all pricing actually fits no one. Yet it is not unusual for sales executives to admit that their ability to tailor prices at the customer and transaction level is rudimentary, or that they are not even aware of how much margin they make on deals.

By contrast, more-advanced companies tailor their pricing carefully for each combination of customer and product, continually working to maximize total margin. They bring data and business intelligence to bear on three variables for setting target prices:

- the attributes and benefits that each customer truly values, and how much value is created for them
- the alternatives and competitive intensity in the industry
- the true profitability of the transaction after accounting for leakage in areas such as rebates, freight, terms, and inventory holding

One North American manufacturer with margins that were highly dependent on raw material pricing suffered from an undisciplined approach to pricing. A diagnosis allocated costs at the product and customer level to determine true profitability. That diagnosis, which showed the manufacturer was undercharging in many cases, provided the support needed to raise prices where appropriate in subsequent contract negotiations, leading to an average 4% increase from that opportunity alone. The company designated an executive to be accountable for related profit margin opportunities and to track the status and effect of each price increase. As a result, the company improved earnings before interest, taxes, depreciation, and amortization by 7 percentage points.

Bad Incentives Undercut the Best Pricing Strategies

Managers often criticize sales reps for losing a deal, but rarely for pricing a deal too low, so reps learn to concede on price in order to close the deal. Moreover, companies rarely reward sales reps for exceeding price targets, which means few reps take risks to push for a higher price. Misaligned incentives push deals down to the minimum allowed price.

The antidote is to align compensation with strategic goals. Incentive plans benefit from following a few principles:

- Clarify the objectives — be they revenue growth, share gains, margin gains, or others — and the behaviors that will help meet the objectives.
- Make it foolproof. Help sales reps understand the payout calculation, simplify the quota structures and supplemental incentives, and make the upside for outperformance meaningful.
- Ensure transparency. Sales reps should easily see the effect of a deal's price on their personal compensation.
- Track the results through regular reviews that flag areas where frontline staff might game the system.

Returning to the case of the industrial goods manufacturer described earlier, the company also overhauled its incentive program to balance revenue and profit. It created a pricing tool to make the commission on each deal visible to sales reps — for instance, “If I raise the price by \$2,000, I earn an extra \$700.” Sure enough, reps began to close higher-margin sales. These changes led to a 7% increase in prices, which added almost 1 percentage point as part of a 3.5-percentage-point improvement in margin overall.

Training and Tools — Often Afterthoughts — Can Have a Big Payoff

Top-performing firms invest in building the capabilities of the pricing team through training and forums to share best practices. This runs counter to the norm at many B2B sales organizations, which give little or no formal training on price realization.

Further, most companies can raise their game by adopting pricing software tools. Based on the performance of historical deals, software solutions — whether in-house or from a provider such as Vendavo or Price f(x) — can provide frontline reps with real-time pricing feedback based on the characteristics of a deal under way. Using dedicated pricing software is associated with much stronger pricing decision making, our survey analysis shows. Yet despite the proven value of pricing software, only 26% of survey companies use it.

The value of developing capabilities became evident to a specialty chemical producer with lackluster margins. The company had hundreds of different products, each with different competitors, substitutes, and customer bases. Product and sales staff could not explain their pricing decisions, and often resorted to a rule of thumb summed up by one product manager as, “I estimate I can raise the price by four cents per pound.” Not surprisingly, she had raised prices by four cents per pound for four straight years, leaving money on the table.

By analyzing the various products and their markets, the chemical producer found pricing opportunities that enabled it to increase earnings before interest and taxes by 35% within two years. Just as important, the company set out to raise its game on pricing capabilities. It created forums for sharing best practices, trained product managers in doing fundamental pricing analysis, and trained salespeople on how to have better pricing discussions with their customers. New dashboards monitored progress toward pricing goals and flagged places where sales reps might be getting too aggressive, or weren’t getting aggressive enough. Finally, the CEO reinforced these measures by demanding that the product and sales teams report on pricing actions taken, as well as results, so that effective pricing remained a high priority. The company established itself as a pricing leader in its markets and continued to optimize margins, both by raising prices and, in selective cases, by lowering prices to drive the right balance of price versus volume gains.

Regardless of a company’s starting point in pricing, there is significant value in building out the capabilities highlighted by our survey analysis. The three areas discussed here have proved to be the most important for upgrading tools, resources, and behaviors. That said, companies in almost all industries have underinvested generally across pricing. The episodic “pricing project” approach leaves companies well short of full potential. With meaningful margin upside at stake, managers cannot afford to continue pricing by rules of thumb or by taking a one-size-fits-all approach to pricing across entire segments of their business.

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FROM OUR SPONSOR

Time is of the essence. Time flies. There's no time like the present.

No matter what you say about it, time has always been an important concept in everyday life. The same can be said in marketing. We've always tried to reach buyers when they were ready to buy, after all.

But there really is something new about time when it comes to digital marketing today. We live in a mobile world where consumers are [curious](#), [demanding](#), and [impatient](#). They have so many technologies at their fingertips that they've come to expect they'll get perfectly relevant messages—at the exact moment they need them, no matter where they are in their journey. That means that it's no longer the day or hour, but a matter of minutes (seconds even), that can mean the difference between a message that strikes home, and the same message being utterly ignored.

The gateway to this new kind of time is digital insights. The more marketers can grasp and understand the customer journey, the better chance we have to be there in the precise [moment of assistance](#) with the most helpful possible message. Marketers around the world have this challenge top of mind. In fact, 39% of global marketers said that improved understanding and reaching the right customers was most important for achieving their marketing goals in the next three years, [according to a Bain study](#), in partnership with Google, that you'll find discussed in [this interview](#).

There's good news for marketers: Just as consumers benefit from new technology, new capabilities in marketing and advertising technology make it possible for us to meet consumers in the moment, just as they wish. New platforms are helping marketers gain a deeper customer understanding, share insights across teams, and act on them in timely fashion by everyone—not just by a few.

Our research with Bain shows that marketing leaders—those in the top 20% based on revenue and market share growth—[prioritize integrating technology](#) to help them get their timing right. What's more, platforms with built-in machine learning are helping us get smarter and faster about how we not only uncover those audience insights, but how we use them to deliver and adjust our messages and media investments at each stage of the customer journey, in near-real time.

Because after all, time stands still for no one.



Matt Lawson
Vice President, Ads Marketing

Google