Columbia Business School
Center on Global Brand Leadership

NYAMA

Marketing ROI in the Era of Big Data:

The 2012 BRITE/NYAMA Marketing in Transition Study

David Rogers
Columbia Business School

Don Sexton
Columbia Business School
New York American Marketing Association

Introduction

The *2012 BRITE-NYAMA Marketing in Transition Study* was conducted in early 2012 by Columbia Business School's Center on Global Brand Leadership and the New York American Marketing Association (NYAMA), in preparation for Columbia's annual BRITE conference on brands, innovation, and technology. The study was made possible with support from Research Now and GreenBook.

The aim of the study was to gain a better understanding of changing practices among large corporate marketers in the following areas: data collection and usage, marketing measurement and ROI, and the integration of digital and traditional marketing.

The survey found both widespread adoption of new digital tools, and support for the use of new data to drive marketing decisions and measure marketing ROI. However, significant gaps exist between desire and execution as companies strive to measure marketing ROI. The overall picture of marketing by large corporations revealed significant need for improvements in the use of data, the measurement of digital marketing, and the assessment of marketing ROI.

Sample findings:

- 91% of senior corporate marketers believe that successful brands use customer data to drive marketing decisions
- Yet, 39% say their own company's data is collected too infrequently or not real-time enough
- And 51% say that a lack of sharing customer data within their own organization is a barrier to effectively measuring their marketing ROI
- Large firms are much less likely to collect new forms of digital data like mobile data (19%), than they are to collect traditional customer survey data such as on demographics (74%) and attitude (54%)
- 85% of large corporations are now using social network accounts (e.g. brand accounts on Facebook, Twitter, Google+, Foursquare) as a marketing tool
- 65% of marketers said that comparing the effectiveness of marketing across different digital media is "a major challenge" for their business
- 37% of respondents did not include any mention of financial outcomes when asked to define what "marketing ROI" meant for their own organization
- 57% are not basing their marketing budgets on any ROI analysis
- 22% are using brand awareness as their sole measure to evaluate their marketing spend

Methodology & Survey Questions

253 corporate marketing decision makers, director-level and above, were surveyed online between January 27 and February 8, 2012. These professionals are employed at large companies (90% have a global annual revenue of over $50 million; 45% are over $1 billion). Respondents were from diverse industries: 42% were from companies that were primarily business-to-business (b2b), 28% primarily business-to-consumer (b2c), and 30% a combination of b2b and b2c.

Research Now conducted this survey on behalf of Columbia Business School and the New York American Marketing Association. Survey respondents represent a random sample of marketing professionals selected from a panel of individuals in the US who have online access to the Internet. Research Now's panel members are invited to participate in market research surveys via e-mail invitation, and are validated through a "by invitation" recruitment process.

A downloadable copy of this research report, and a complete list of the survey questions can be found online at: http://gsb.columbia.edu/globalbrands/research/brite-nyama-study

Table of Contents:

The Failure of Big Data for Marketing So Far

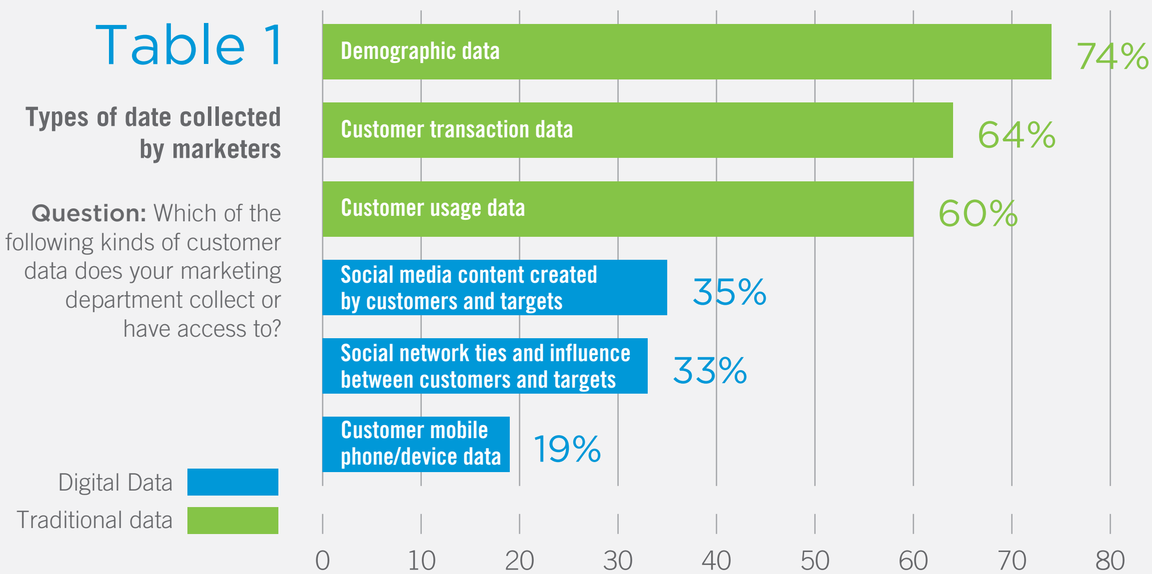
A vast and increasing volume of digital data is being generated today by customers, by businesses, by devices and processes. The growth of this "big data" has fueled the rise of analytics firms, both new startups and established technology companies. [See "The Age of Big Data," New York Times, Feb 11, 2012] These firms aim to help business harness data with new tools to mine it, analyze it, and track it in real-time. The promise of big data is to allow for better decision-making at every level of every organization – retailers, manufacturers, service providers, even governments and NGOs.

In our study, we sought to measure how much progress has been made so far in efforts to use data for marketing. Has the excitement around big data presaged a shift in how marketers conduct their business? We found that so far, big data in marketing is still a work in progress. In many organizations, the effective use of data for marketing decisions lags behind the desire to do so. Following are our key findings.

Table 1

Types of date collected by marketers

Question: Which of the following kinds of customer data does your marketing department collect or have access to?



All marketers want to be data-driven…
Nearly all corporate marketing leaders today (91%) believe that successful brands use customer data to drive marketing decisions. This sentiment is extremely consistent, with no industry measured below 83%. Among respondents who are at the CMO level of their organizations, agreement rose to 100%.

But many are not collecting the data they need…
The universal desire to be data-driven is not yet matched by a consistent effort to collect the data necessary to make these real-time decisions. 29% report that their marketing departments have "too little or no customer/consumer data." This problem is particularly acute in some industries, such as consumer manufacturing, where 39% report the problem.

39% of marketers say they can't turn their data into actionable insight

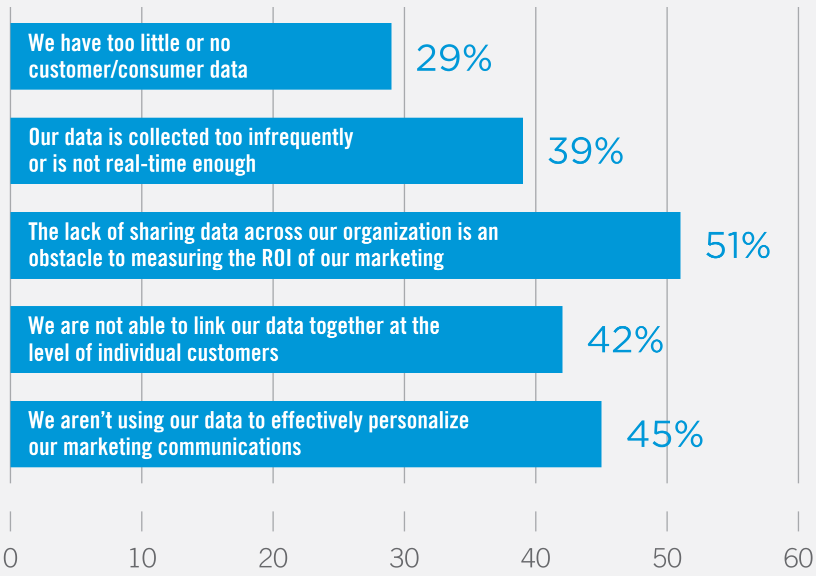
The new generation of big data analytics is predicated on access to frequent and recent data, not the quarterly omnibus survey panels of traditional market research. And yet, when data is collected by marketers, it is often not appropriate to real-time decision making. 39% of marketers say that their data is collected "too infrequently or not real-time enough."

The promise of big data is also based on integrating new types of data generated by online activity, such as mobile computing and social media. However, marketers today are still much less likely to collect new forms of digital data like customer mobile device data (19% collect it), and social media data (35%), than they are to collect traditional customer survey data on demographics (74%), usage (60%), and attitudes (54%). This gap is less pronounced in larger firms, however. Companies with over $25 billion in revenues are 40% likely to collect mobile data, and 42% likely to collect data on social media conversations.

And if they do collect the data, they may not be sharing and utilizing it effectively.
Collecting data is not the only hurdle that marketers must overcome in order to become more data-driven. Two in five marketers (39%) admit that they cannot turn their data into actionable insight. And sheer quantity of data does not appear to be the key problem: 36% report that they have "lots of customer data," but "don't know what to do with it."

Table 2

Biggest challenges to use of "big data" for marketing



One of the biggest obstacles to turning data into actionable insight may be a lack of effective data sharing across departments and divisions of the company. In the past, departments such as sales, marketing, customer service, public relations, and supply chain, might each have had their own datasets which they managed separately. But the promise of big data analytics is based on the ability to link these datasets together, in order to better understand interactions between firm, customer, and business partners. Marketers recognize this: 87% agree that capturing and sharing the right data is important to effectively measuring ROI in their own company.

For the majority of corporate marketers, though, this kind of data sharing is not yet happening. Over half (51%) say that a lack of sharing customer data across their own organization poses an obstacle to their effectively measuring marketing ROI. Interestingly, this problem is more likely to be reported by marketers below the VP level (56%), vs. more senior marketing leaders (32%). This difference may reflect that the difficulty of sharing data across departments is a problem for those "in the trenches," but less visible to CMOs and heads of marketing.

Linking shared data at the customer-level is critical for the goals of big data: effective targeting and personalization of marketing efforts where they will matter most. Unfortunately, many companies are not yet achieving these goals. 42% of marketers report that they are not able to link data at the level of an individual customer. Nearly half (45%) are not using data to personalize their marketing communications. And while most companies are able to target their high-value customers (a more longstanding goal), 28% still do not know which high-value customers to focus their marketing on.

Recommendations:

In order to leverage the opportunities of big data, marketers need to improve their ability to:

- Collect meaningful customer data from a variety of sources, including real-time data
- Link that data to metrics developed for measuring marketing ROI
- Share data across the organization, linking datasets together at the customer level
- Utilize this shared data to effectively target and personalize marketing efforts to customers

51% of all marketers say that a lack of sharing customer data across their organization is an obstacle to effectively measuring their ROI

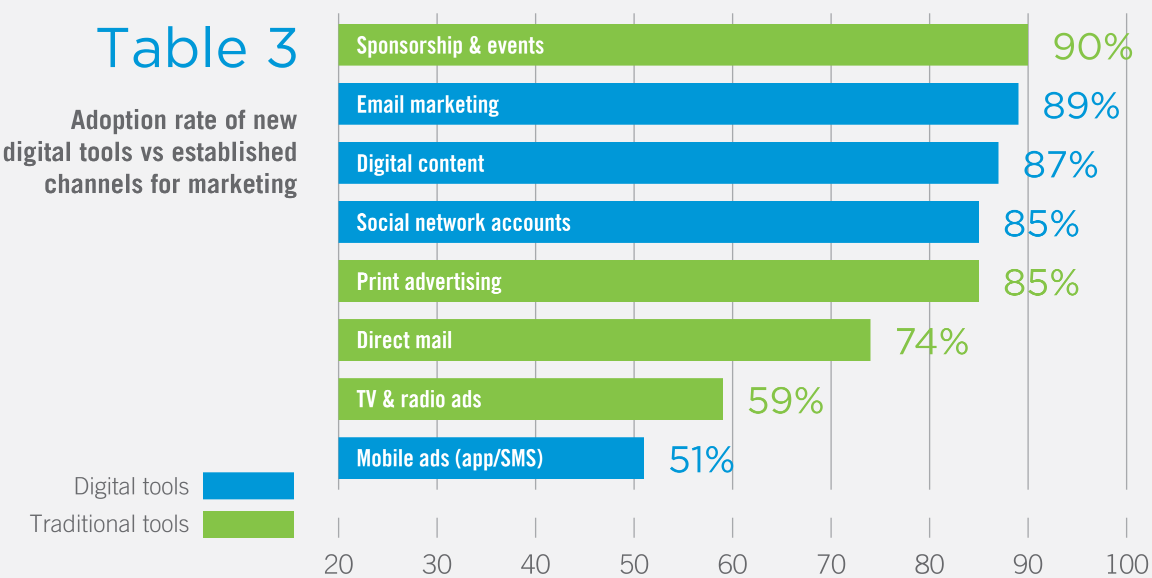
Marketers Adopt New Digital Tools, But Struggle to Measure Them

The global adoption of mobile computing, social media, and digital content (from YouTube to blogs to ebooks) has transformed consumer behaviors and opened up new opportunities for marketing in every industry. Marketers today face an array of new digital tools that can be harnessed for marketing purposes, from branded apps for smartphones, to online video channels, to their own branded presence on social networks like Facebook. All of these digital tools produce data, often as a tantalizingly public "digital footprint" by customers. That fact raises the prospect of much more accurate marketing measurement in an increasingly digital world. However, digital data does not necessarily make it easier to link digital marketing to clear business objectives or to measurements of marketing ROI.

In our study, we sought to measure how marketers are using the latest digital tools, and how effectively are they being measured. How widely have the newest digital media been adopted by corporate marketers? And are new datasets making it easier for firms to measure marketing ROI, or not? We found that digital media are, indeed, being adopted quite rapidly for marketing purposes, but developing metrics for them is posing challenges for marketers seeking to integrate their traditional and digital marketing efforts. Following are our key findings.

Table 3

Adoption rate of new digital tools vs established channels for marketing



Getting traditional and digital marketing to work better together remains a major goal for 77% of marketing departments

The newest digital marketing tools are catching up quickly in widespread corporate adoption…

Marketers across industries are rapidly adopting many of the latest digital tools for marketing. The vast majority (85%) are now marketing via their own brand accounts on social networks like Facebook, Twitter, Google+, and Foursquare. This is evident across industries, and even 78% of b2b companies reported using social network marketing. Retail and travel/leisure are among the highest adopting industries. Among the lowest are industrial manufacturing and the healthcare/pharmaceutical industry, which was slow to adopt social networks due to its regulatory environment. Still, no industry reported less than 70% adoption.

87% of firms now create marketing-purposed digital content in various forms: white papers, blogs, videos, podcasts, as well as branded phone apps and games. Adoption is higher, not surprisingly, in the communications & publishing industries, but also in technology/electronics, and financial services. B2B firms are slightly more likely than b2c firms to use such content (90% vs 82%). Retail is among the lowest users of digital content for marketing, despite notable cases of success among some brick-and-mortar retailers.

Even mobile advertising (ads within mobile apps, or via SMS message) has been adopted by 51% of marketers. Financial services and travel/leisure were among the industries most likely to use it. Although still newer and less standardized than some other digital marketing tools, mobile-only ads have been adopted by 76% of the largest firms, with revenues over $100 billion annually.

But… these tools are among the least likely to be measured for ROI (despite their profusion of data)

Marketing measurement, however, has not kept up with the rapid pace of adoption for new digital media. In particular, measurement of digital marketing with financial metrics (such as market share, revenue, profit, or lifetime customer value) is lagging. Only 14% of those companies using social network marketing are tying these efforts to financial metrics. And only 17% of companies using mobile advertising are tying it to financial metrics. By contrast, firms use financial metrics to measure 41% of their email marketing (a longer-established digital tool), and 47% of traditional direct mail marketing.

… and marketers are struggling to compare their efforts across their various digital media.

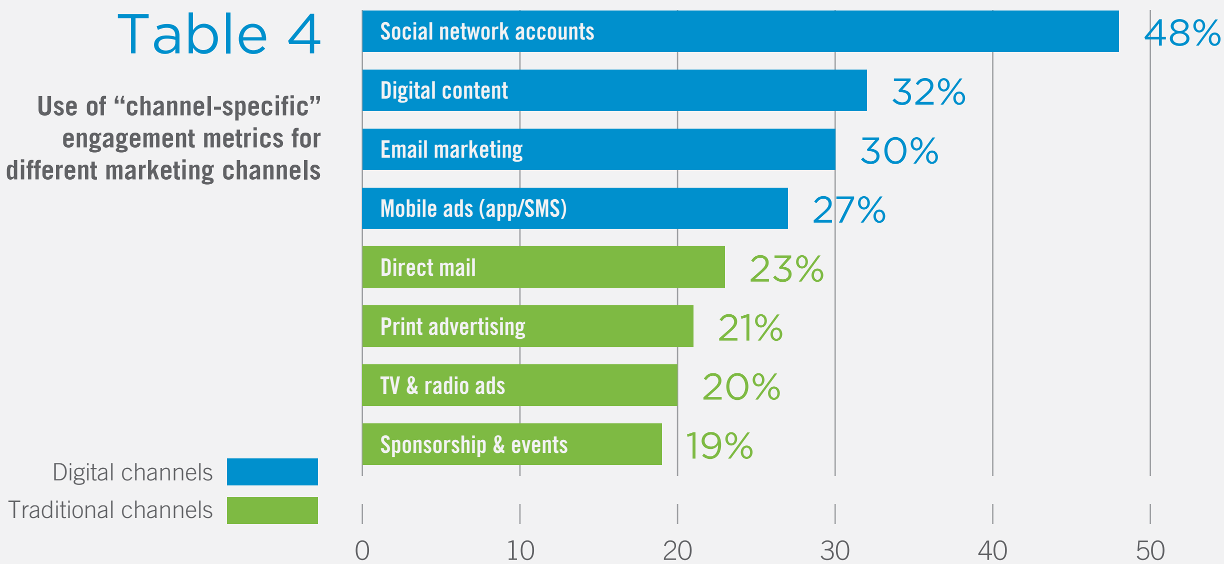
As the number of marketing tools expands, the challenge of measuring and comparing them grows. 70% of CMOs report that a “cross-platform model for ROI” is a major goal for their business. But companies adopting digital marketing find this goal difficult to reach. 60% of companies report that comparing the effectiveness of marketing across their different digital media is “a major challenge.”

Some of this is because digital marketing tools are often measured with metrics that are unique to them – e.g. "retweets" measure customer engagement on Twitter, whereas "likes" and "shares" measure it on Facebook. These channel-specific metrics create a particular measurement problem: comparing digital marketing efforts is often like "comparing apples to oranges." As shown in Table 4, digital marketing channels are much more likely (vs. traditional marketing channels) to be measured with metrics that cannot be easily compared with other channels.

These channel-specific metrics pose an obstacle to the integration of digital and traditional marketing in a single measurement model. Unsurprisingly, 77% of marketers report that getting their traditional and digital marketing to work better together is still a major goal for their business. The issue is being considered at the organizational level as well: 50% of companies report that they have recently, or soon will, re-organize their marketing departments to improve the integration of traditional and digital.

Table 4

Use of "channel-specific" engagement metrics for different marketing channels



Recommendations:

In order to effectively harness the capabilities of new digital tools, marketers need to:

- Set clear business objectives for any digital marketing effort
- Develop a variety of metrics for new digital tools—from audience metrics, to engagement metrics, to financial metrics
- Develop models that link channel-specific digital metrics (like retweets or Facebook interactions) to universal metrics, including your key performance indicators (KPIs)
- Continuously innovate new measurement models, as new digital tools and marketing rapidly evolve

ROI – Marketers Know They All Need It, But Can't Even Agree What It Is

In this study, we tried to learn which organizations believe that they are doing well with respect to measuring marketing ROI. What are they doing that allows them to succeed in measuring marketing ROI? What are some of the barriers organizations face in measuring marketing ROI? How does knowing their marketing ROI affect how they view and use metrics?

We found that some organizations are satisfied with their ability to measure marketing ROI. They have achieved that success through leadership and persistence. In turn, their knowledge of their marketing ROI allows them to base their marketing spending decisions on a financial foundation.

Marketers think that they should be measuring their marketing ROI …
Marketers know that they need to justify their decisions financially. 70% say that their marketing efforts are under greater scrutiny than ever. 39% go so far as to say that they consider it important to spend only on marketing activities where the financial effects can be measured.

…but many managers aren't measuring marketing ROI either consistently or effectively.
Only 43% of organizations are establishing their marketing budgets based on marketing ROI analysis. By contrast, 68% base their marketing budgets in part on "historical spending," and 28% on "gut instincts." When it comes to specific marketing spending decisions, 21% are using financial metrics for little or none of those specific decisions, and 7% are making all or most of those spending decisions with no metrics at all.

Instead of marketing ROI, managers continue to use many traditional metrics such as recall, brand favorability, purchase intention, and willingness to recommend. Of those using some kind of universal metric, 22% make all or most of their marketing decisions with brand awareness alone.

What organizations are satisfied with their measurement of marketing ROI?
Overall, 45% of the organizations surveyed are satisfied with their ability to measure marketing ROI. Those most likely to be satisfied with their ability to measure marketing ROI are large organizations (55.5%) - sales of $25 billion or more - and service organizations (48.8%). Only 33.1% of consumer product organizations and only 26.1% of industrial product organizations are satisfied with how they measure marketing ROI.

Satisfaction depends on your viewpoint: 54% of CMO's are satisfied with their ability to measure marketing ROI, but only 43% of those below the vice president level are satisfied – perhaps because they are closer to the problem of determining how to most effectively measure marketing ROI.

57% are not basing their marketing budgets on any ROI analysis

37% of respondents did not include any mention of financial outcomes when asked to define what "marketing ROI" meant for their own organization

To what extent is marketing ROI used for decision-making?

Among the roughly half of marketers that are very or somewhat satisfied with their ability to measure marketing ROI, 57% use marketing ROI for their budget decisions and 59% use financial metrics to evaluate their marketing spend. 54% go as far as to say they consider it important to try to spend only when they have financial metrics.

Understanding what marketing ROI is

In the organizations surveyed, however, managers do not appear to have a consistent understanding of what marketing ROI is. When asked to define marketing ROI, 37% of the respondents did not mention financial effects and 82% did not mention that ROI consists of both financial return and spending. 31% think that just measuring the audience you reach is "marketing ROI." Even when prompted, 19% do not think that "measuring the financial impact of our marketing" is marketing ROI.

In place of marketing ROI, many traditional measures are used. 37% of the respondents claimed that they used brand awareness as a universal metric to make marketing decisions. More troubling, of those using brand awareness, more than 60% said it was their *only* marketing ROI measure. To be useful, brand awareness must be coupled with some measure of brand perception. Brand awareness by itself is a lagging indicator of brand strength. Using it as the sole or main measure to make marketing decisions is truly managing by looking in the rear view mirror.

How can an organization improve its ability to measure marketing ROI?

Specific actions appear to improve the ability to measure marketing ROI (Table 5). Companies are much more likely to be satisfied with their marketing ROI measurement if they provide incentives to both their employees and to their research vendors. Compensation is the most effective incentive for employees while setting objectives is most effective for vendors – most likely because if the vendors achieve objectives, they might expect repeat business.

Table 5

Incentives and satisfaction with ability to measure marketing ROI

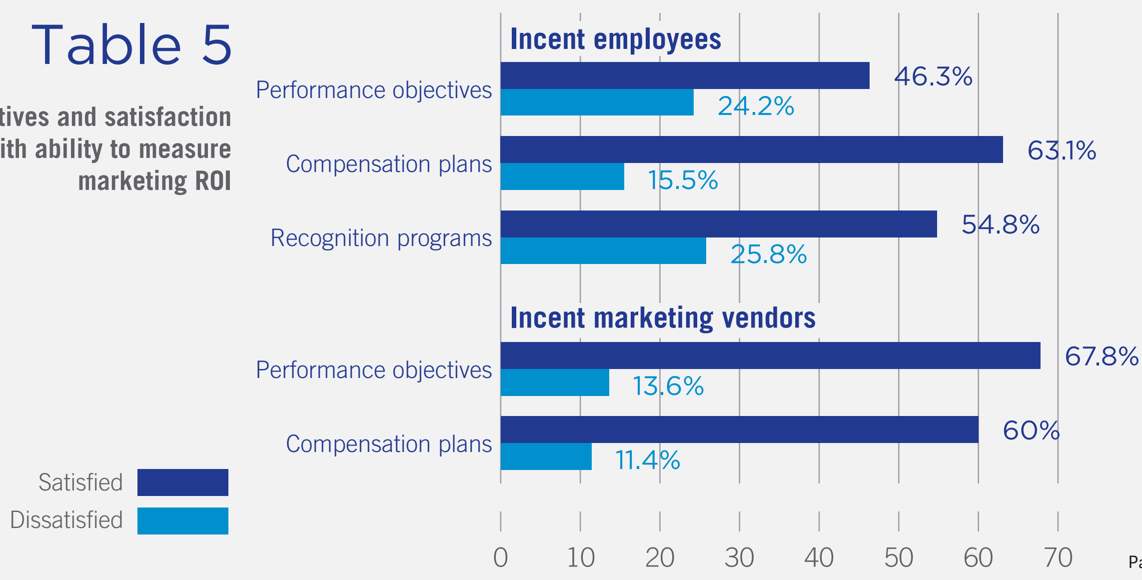
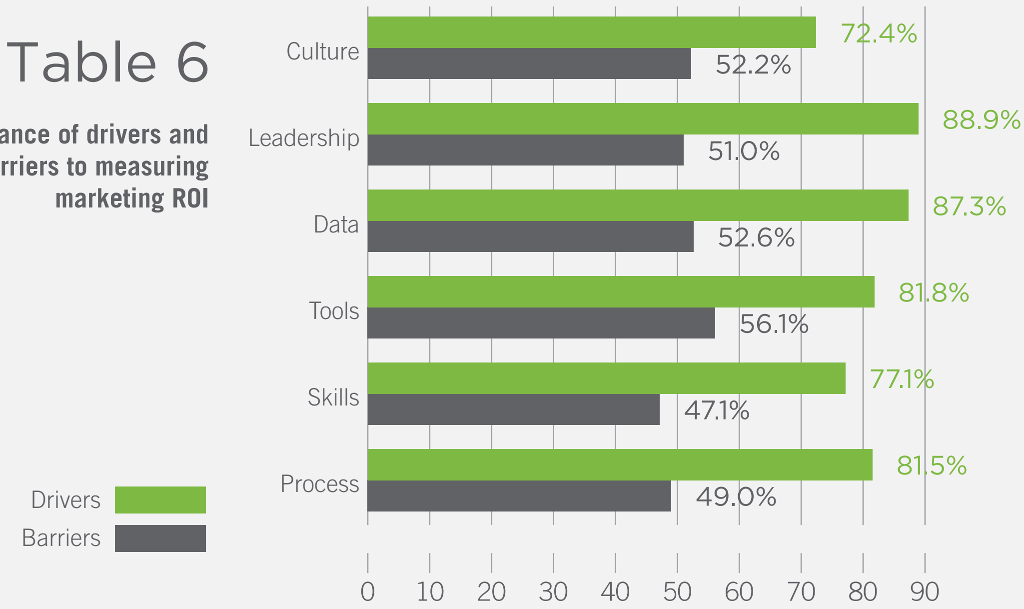


Table 6

Importance of drivers and barriers to measuring marketing ROI



All the respondents considered leadership and data the most important drivers of success in measuring marketing ROI (Table 6). While little difference was found in the use of data by those satisfied and not satisfied with their ability to measure marketing ROI, there appear to be differences in leadership. Organizations satisfied with measuring marketing ROI tend to use more metrics in general than organizations that are less satisfied (Table 7) and their leaders set measurable objectives for marketing actions (Table 8).

Table 7

Use of metrics and satisfaction with ability to measure marketing ROI

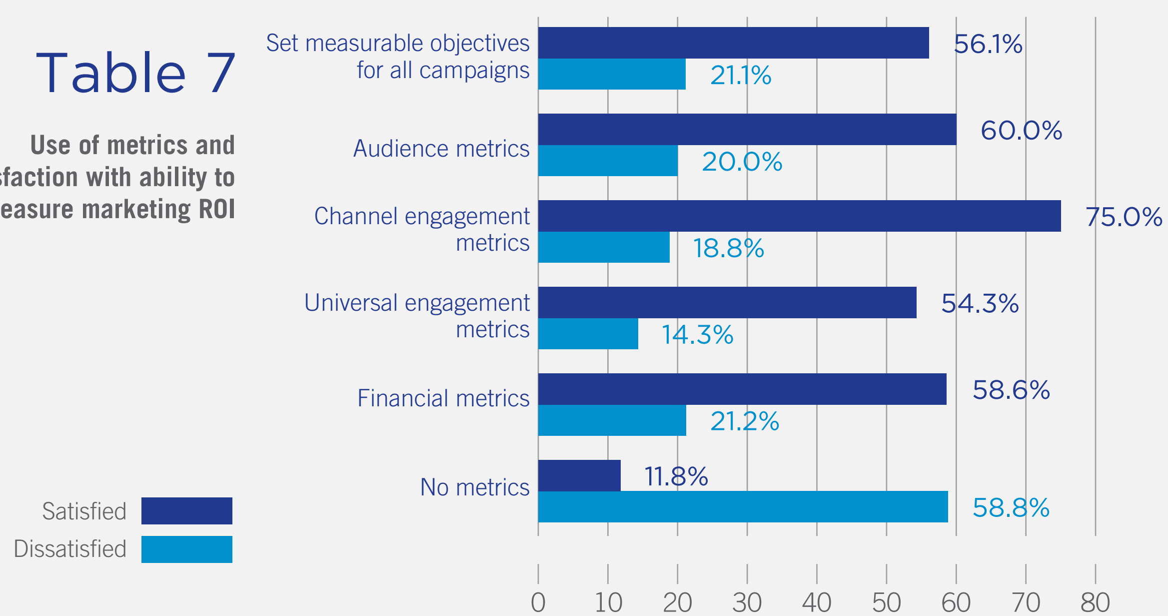
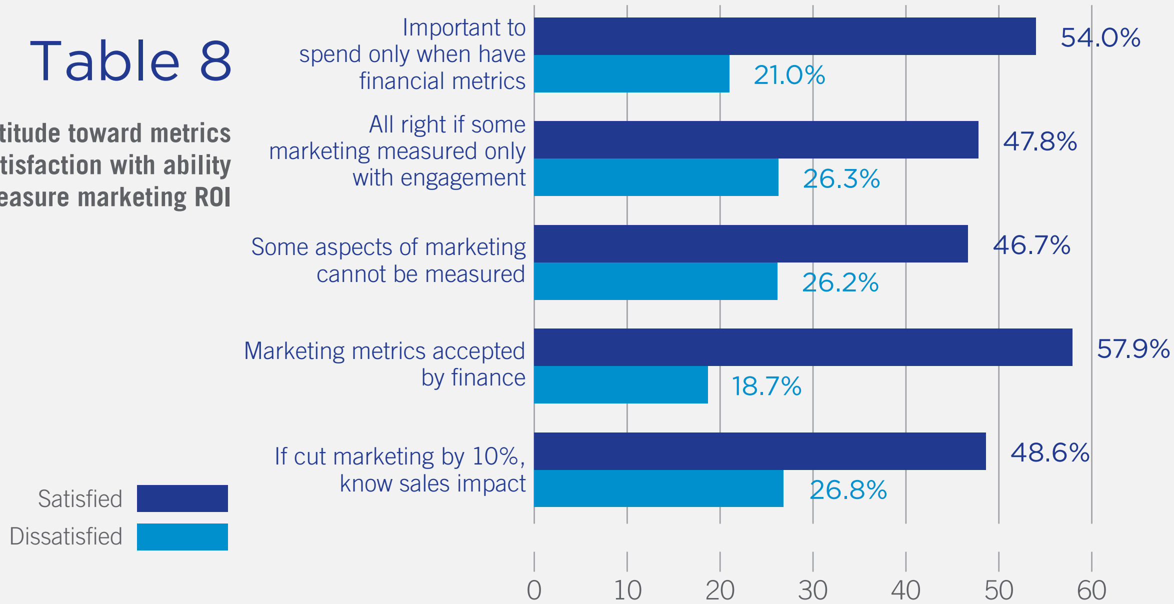


Table 8

Attitude toward metrics and satisfaction with ability to measure marketing ROI



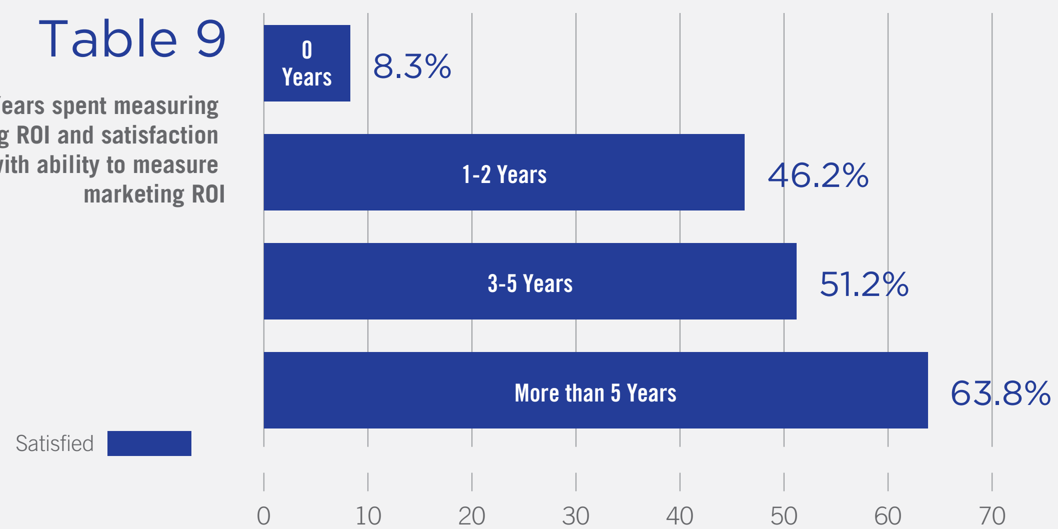
Achieving success in measuring marketing ROI

Measuring marketing ROI for most organizations is a work in progress. The factor most highly associated with satisfaction with measuring marketing ROI is time spent working on it (Table 9).

There appears to be a clear learning curve for understanding how to measure marketing ROI. Continuing to work on measuring marketing ROI does move the organization forward. In addition, organizations satisfied with their ability to measure marketing ROI tend to stay there, while other organizations can move from dissatisfaction to satisfaction, even over two years. Among organizations surveyed, 22% of those dissatisfied became satisfied after two years, while only 3% of those who were satisfied became dissatisfied over the same period.

Table 9

Years spent measuring marketing ROI and satisfaction with ability to measure marketing ROI



22% are using brand awareness as their sole measure to evaluate their marketing spend

Outcomes
Organizations that report satisfaction in their ability to measure marketing ROI utilize it in their decisions, but they also understand that all decisions need not be made with marketing ROI (Table 8). As one would expect, they are savvier with respect to the financial effects of their marketing decisions and, for example, are more likely to be able estimate the financial impact of any cuts in their marketing budgets.

Recommendations
Above all, get started. Start with the basics of determining marketing ROI so you will create the largest impact on your organization:

- Make sure you're using some kind of metrics on most of your marketing.
- Be ready to invest in getting some kind of data relevant to your measures.
- Make coordinating your traditional and digital media campaigns a goal.
- Set specific measurable objectives for all your campaigns.
- Put ROI in stated objectives for all your vendors (so they know your expectations to retain them or to cut them loose).
- Link marketing ROI to employee compensation, perhaps a bonus.
- Start today… as the pay off and learning curve will likely take a few years.

Then, move on to ROI best practices:

- Make sure your marketing metrics are accepted by finance.
- Make sure your data is: timely, actionable, linked at the customer-level, used to personalize marketing and target customers.
- Share your data across your organization.

Conclusions

Chief Marketing Officers face a dynamic and challenging environment for marketing today. They will find no simple answers to effectively measuring marketing ROI amidst the growth of big data and new digital marketing tools. Innovative marketing and effective measurement will both be works in progress that require leadership, agility, and constant learning.

To lead effectively, CMOs should focus on five key leadership imperatives:

1. **Set objectives first.** It is critical that all marketing efforts be focused on delivering on key business objectives, or KPIs (key performance indicators). Even with new technologies like social networks and mobile advertising, experimentation needs to quickly give way to focused strategies linked to clear objectives that are set in advance.
2. **Design metrics to ensure marketing is linked to those objectives.** Once objectives are set, marketers need to develop appropriate metrics for any marketing effort that will be able to measure whether and how it is succeeding. Last year's metrics should not determine what this year's objectives can be. ("I know how to measure it, so that must be my goal.") Rather, marketers must be prepared to develop new metrics and new measurement models as they develop innovative marketing programs, in order to clearly tie these to their intended objectives.
3. **Gather the right data for those metrics.** Once metrics are set, they should be used to identify what types of data are required. Marketers must avoid the temptation to analyze or purchase data simply because it is available, brand new, or being promoted by a vendor. By starting from defined marketing objectives, and from the metrics chosen to measure them, marketers can clearly identify which data they need, and which they do not.
4. **Communicate to the entire organization what your objectives are, and how they are being measured.** With a process for effective marketing measurement in place, it is essential that all relevant staff be aligned. That includes knowing what the firm's key marketing objectives are, knowing how they are being measured, and responding to incoming data in order to continuously improve marketing efforts, and innovate new ones.
5. **Evaluate and reward employees in part on how well objectives are achieved.** Once employees understand the organization's marketing objectives and the metrics being used to measure them, evaluation and compensation should be linked in part to their measurable success. By demonstrating that measurable results matter to everyone in the marketing department, CMOs give all employees the initiative to show leadership of their own at every stage of the marketing process.

About the Authors

David Rogers is the Executive Director of BRITE at Columbia Business School and the faculty director of the school's Executive Education program on Digital Marketing Strategy. He is the founder and host of the Center on Global Brand Leadership's acclaimed BRITE conference on brands, innovation and technology. Rogers is a widely recognized leader on digital strategy and brands, known for his unique insights into customer networks. His latest book is *The Network Is Your Customer: 5 Strategies to Thrive in a Digital Age*, published by Yale University Press.

Rogers speaks at conferences worldwide on the ways that digital technologies are transforming business strategy. He received the award for Brand Leadership at the 2009 World Brand Congress and has appeared on CNN, CNBC, Marketplace, Reuters, MSN Money, and Channel NewsAsia. David has advised and consulted on marketing and digital strategies for leading companies in the consumer packaged goods, technology, pharmaceutical, food & beverage, telecom, hospitality, non-profit, and media industries. **Contact**: contact@davidrogers.biz

Don Sexton is Professor of Marketing and Professor of Decisions, Risk, and Operations, and Faculty Director, Center for International Business Education and Research, Columbia University. His articles have appeared in numerous journals such as the Harvard Business Review, Journal of Marketing, Journal of Marketing Research, and Management Science. His best-selling books, *Marketing 101* and *Branding 101*, have been translated into several languages including Chinese, Turkish, Russian, Vietnamese, Polish, Romanian, and Indonesian. Don's most recent book, *Value Above Cost: Driving Superior Financial Performance with CVA®, the Most Important Metric You've Never Used* (Wharton), explains how marketing drives financial performance and is also available in Chinese.

He serves on the board of the NY-AMA, is President-Elect of the Association for International Business Education and Research (a consortium of 33 universities), and is an advisor to the Marketing Accountability Standards Board. He received the 2011 Marketing Trends Award for his work on marketing and branding strategy. Don is the founder of The Arrow Group, Ltd.®, a company that has provided consulting and training services to such companies as GE, IBM, Unilever, Pepsi, Sony, DuPont, Pfizer, Volkswagen, Citibank, Boeing, and Verizon. **Contact:** donsexton@mindspring.com

Acknowledgements

Special thanks are due to Randall Ringer, President of the New York American Marketing Association, for proposing this project, championing it, assembling the necessary partners, and guiding our efforts with expert advice and insight. The study would not have been possible without the critical support of Leonard Murphy (GreenBook), Morgan Buckley (Research Now), and Matthew Quint (Columbia Business School Center on Global Brand Leadership). Special thanks to Kartik Pashupati and Melanie Courtright (Research Now) for the survey programming and fielding, and to Sylvia Chu and Michael Dudley (Verse Group) for the visual design of this report.

About the Research Partners

The Center on Global Brand Leadership was founded at Columbia Business School in 1999 and has grown into the leading global forum on brands. The mission of the center is to turn the research and intellectual capital of academia's foremost thinkers on branding into practical tools and insights for real-world application. The Center has worked with a wide range of sponsor companies to develop a variety of thought leadership including: conferences, case studies, videos and webinars, and sponsored research. More details at http://globalbrands.org. The Center's flagship BRITE conference on brands, innovation, and technology presented was founded in 2008 and is presented each spring at Columbia University. BRITE '12 included John Hayes (CMO, American Express), Marc Speichert (CMO, L'Oreal USA), and Bob Garfield (host of On the Media, editor for Ad Age). More details at: http://www.BRITEconference.com

The New York American Marketing Association (NYAMA) helps marketing professionals navigate to success in today's dynamic business environment. We serve the marketing community by giving members opportunities to push the boundaries of marketing, expand their skills and exchange ideas with other experienced professionals. The BRITE/NYAMA study is one example of how we are contributing to the advancement of marketing. More details at: http://nyama.org

Research Now is the leading global online sampling and online data collection company. With over 6 million panelists in 38 countries worldwide, Research Now enables companies to listen to and interact with real consumers and business decision makers in order to make key business decisions. Research Now offers a full suite of data collection services, including social media sampling, and operates the Valued Opinions™ Panel and e-Rewards® Opinion Panels. The company has a multilingual staff located in 24 offices around the globe and has been recognized for four consecutive years as the industry leader in client satisfaction. Visit www.researchnow.com to learn more.

GreenBook® brings stimulating, practical, and timely resources to marketers and market researchers on both sides of the table. Through its targeted multi-media platform, GreenBook offers effective marketing and lead generation opportunities to businesses that communicate with buyers and users of market research. More details at: http://www.greenbook.org