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2013 Teradata Data-Driven Marketing Survey, Global

Leveraging data to create a sustainable competitive advantage

WELCOME

from Lisa Arthur, CMO, Teradata Applications

An effective and sustainable data-driven marketing strategy is essential to an organization's success in today's high-tech world. With consumers in control of the brand experience, it's critical for marketers to think about how best to create meaningful, lasting customer relationships built on relevant data insights.
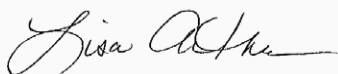
Teradata defines data-driven marketing as the process of collecting and connecting large amounts of online data with traditional offline data, rapidly analyzing and gaining cross-channel insights about customers, and then bringing that insight to market via a highly-personalized marketing campaign tailored to the customer at his/her point of need. Provide any experience less than this and I believe you are leaving too much revenue on the table; something that I don't think any business can afford in this economic climate.

So how are marketers leveraging data today? That's what we went out and asked.

In this global research study of more than 2,200 marketers, we sought to understand marketers' challenges, interests, needs, and motivations around the intersection of data and marketing.

Join us as we dig deeper into marketing and the opportunities that abound with a data-driven marketing strategy.

Sincerely,

Lisa Arthur
CMO, Teradata Applications

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TO CREATE A
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"THE NEW BLACK."

EXECUTIVE SUMMARY

CHALLENGES OF DATA-DRIVEN MARKETING

Untangling the Data Hairball
A key component of any successful data-driven marketing strategy is the ability to collect and analyze massive amounts of complicated, unstructured data – which can be described as the "data hairball."

Most marketers rely on and use common, simple, and easily accessible forms of data to drive their marketing initiatives. Three-quarters or more of those surveyed use customer service data, customer satisfaction data, digital interaction data (e.g., search, display ads, email, web browsing), and demographic data. Just more than 50% use data such as customer engagement (e.g., product usage or preference data), transactional (e.g., offline purchase behavior), or e-commerce data. This pattern means there is a gradual integration of the traditional data that companies have collected to combine with the addition of more recent forms of interaction data – the kind of data that comes

from relatively new and continually-evolving consumer behaviors (e.g., social media interactions). Just 18% of companies have a single view of the customer even though it is one of their top priorities for future improvement.

The big picture result? Marketers desire an integrated view of their customer, and that requires integration of online and offline data sources. Within the next two years, 71% of marketers plan to implement a big data analytics solution to help untangle the mass of consumer data available to them. The entire hairball, however, won't be completely untangled as just 57% of marketers plan to have a complementary real-time decisioning solution in place within the next two years.

Process is the "New Black": Operationalizing Insights to Create a Sustainable Competitive Advantage
Historically, many marketers want to implement processes as much as they welcome a budget cut. But to create a sustainable

competitive advantage--the kind that drives revenue opportunities--it's imperative that marketers put processes in place so insights can be brought to market as quickly as possible. That's why marketers are calling process "the new black."

> 71% of marketers plan to implement a Big Data Analytics solution in the next 2 years

Due to the data proliferation in today's corporate environment, almost all large companies use at least some data to drive marketing. However, only 33% of marketers believe they have a true data-driven marketing culture embedded into their standard marketing processes – an imperative for overall enterprise streamlining, consistency, and success. This is alarming because there remains a large culture gap around clearly communicating

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actionable insights across the department/company in a way that others can quickly understand and apply to their various initiatives. The problem is so widespread that 42% of marketers say that lack of process is the #1 obstacle to using data in decision making.

Less than 10% of companies use the data they currently have access to in a systematic, strategic way

Collaboration is so poor that fewer than 10% of companies use the data they currently have access to in a systematic, strategic way (i.e., interacting with business systems, serving business objectives such as new developments, etc.). Many marketers, however, recognize the importance of investing in these types of projects. According to survey responses, almost 80% of marketers will have implemented or begun projects that automate data quality, performance management, or marketing workflow processes within the next two years.

MARKETERS DISRUPTING MARKETING

Marketers and Data: A Healthy Relationship?
The advent of big data technology, the explosion of channels, as well as the new data types that can be collected—such as sensor or location data from everything from cell phones to trains—have created seemingly endless opportunities for marketers. But how prepared do marketers really feel about their ability to harness and use the data that's available to them?

To gauge this sentiment, marketers were asked to grade themselves and their department's use of data

40% of marketers gave their department an average to failing grade of C or lower for using data to drive marketing

to drive marketing using the United States grading system (i.e., A for excellent through F for failing, omitting E). Over 40% of marketers surveyed gave their department an average to failing grade of C or lower. But only 23% of marketers assigned themselves an individual average to failing grade of C or below. What does this indicate? A fundamental disconnect exists between the data analysis the individual marketer feels he/she is doing and what is actually being accomplished at the department level and shown in the market.

Marketing teams recognize there are missed opportunities from not using data to drive every marketing decision, with 45% of all marketers agreeing that data is the most underutilized asset in the marketing organization. It then comes as no surprise that 78% of marketers feel pressure to become more data-driven.

45% of marketers agree that data is the most underutilized asset in the marketing organization

Inviting the Quants to the Marketing Table and the Marketing Data Scientist
As marketing continues to undergo significant structural changes driven by the ever-increasing access to data, analytical minds within the department will be required – with rising frequency – to complement the creative talent. There's also a big new strategic new role in town:

the marketing data scientist. This particular role has a great deal of publicity surrounding it, but within most organizations, there is still a considerable amount of confusion – and lack of effective implementation. But marketers are starting to believe that by working together, this new combination of qualitative and quantitative skill sets will create the engine designed to power marketing in the new age of data.

However, the path to building out analytical talent isn't always simple or straightforward. While most organizations recognize the need to incorporate quantitatively-oriented resources into their marketing mix, many still feel understaffed in the analytics areas. Only large companies (i.e., those with over $2 billion in revenue) are most likely to be able to satisfy their staffing needs. While 70% of these organizations state they are satisfied with their analytical skills staffing levels, only 55% of companies with less than $2 billion in revenue report feeling adequately staffed with quantitatively-minded employees.

Departments with data scientists tend to get awarded an "A" by their employees for using data versus their peers who grade their departments at a "C" or lower

Departments with data scientists get higher marks from their employees. While the average department grade from individuals is in the C or lower range, departments with data scientists are awarded A's.

Executives who intend to infuse data into their departments' cultures should consider adding a data scientist to their ranks to help guide the organization's data initiatives.

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Marketers in data sciences roles are also more likely than any other marketers to think about the big picture in applying data to business outcomes. In fact, data scientists report a much higher rate (62% versus 49% overall) of making decisions that resulted in a better business outcome through data analysis.

ALIGN TO DRIVE BUSINESS OUTCOMES

Business outcomes are more than just achieving departmental goals. They are centered on creating value that extends beyond the marketing department and improves the value of the business itself.

Just ten years ago, consumer data was a trickle of disjointed information. Today, companies are integrating online and offline data to create a real-time understanding of consumer wants and needs. Responses show that marketing departments are under increased pressure to think beyond common marketing metrics that just convey activity; they're expected to prove how they've helped the business increase revenue and to measure and validate the success of all marketing activities.

Survey results show that individuals are aligned with the departmental view that proving effectiveness with business outcomes is a top two priority. It is second only to "efficiency," which is consistent across almost all companies and verticals and not too surprising given the current macroeconomic environment.

However, despite all the attention paid to collaboration and cross-functional organizational work, internal alignment still presents a challenge to marketers. Only about 50% of the marketers surveyed routinely work with other functions

as part of a regular process. There are still about 1/3 of marketers who just coordinate with other functions on an ad hoc basis. Addressing this shortcoming is important because creating an exceptional customer experience requires collaboration.

Interestingly, marketing executives are almost twice as likely to say there are no cross-functional barriers to a company-wide, data-driven culture as the individual contributors who are conducting the day-to-day work. This disconnect indicates that marketing leaders would be well-served to inquire about existing barriers and become part of the solution to eliminate them if possible.

In an age where CMO-CIO alignment is critical to success, only a quarter of marketers surveyed believe their marketing and IT departments are strategic partners in achieving marketing objectives. 50% of marketers say that marketing and IT are not strategic partners in their company.

> ## 74% of marketers say that marketing and IT are not strategic partners in their company

DATA AND THE CONSUMER EXPERIENCE

Rich Experiences Drive Revenue
With an unprecedented amount of data available across multiple channels, the potential to intimately understand each customer is an exciting new possibility. Continually improving the customer experience is one of the most common – and arguably, most important – marketing challenges. Most marketing executives cite improving the customer experience

> ## 75% of marketers who attempt to calculate ROI report some kind of problem

as a top priority. 74% of marketers say that marketing and IT are not strategic partners in their company.

Unfortunately, marketers' perceptions of their own priorities and the priorities of their department differ in a major way: the customer. Most marketers in non-executive roles believe their companies talk about placing a high priority on both preventing customers from defecting from the brand and identifying cross-sell opportunities. However, almost all agree this does not trickle down to other marketing positions and the focus is solely on gaining new customers. Therefore, there is a perception that some executives are merely giving lip service to the importance of customer satisfaction rather than creating an environment where delighting the customer is a top priority.

PROVE MARKETING WORKS WITH DATA-DRIVEN MARKETING

Prove ROI or Improve ROI?
Proving ROI can not only be a moving target in marketing, but also a major burden due to the time required to accurately report results. Many marketing leaders struggle to accurately link results back to marketing investments. In fact, 75% of marketers who attempt to calculate return on investment report some kind of problem or challenge. The question then becomes: should marketers focus on pure ROI or on ROI improvement?
Ultimately, a successful marketing ROI transformation comes down

to proving your organization can increase the value of its investments. The marketing ROI discipline can generate significant credibility, and the results can instill confidence in marketing's ability to contribute to the financial well-being of the company. However, a singular focus on proving ROI can be risky because some marketing initiatives may be effective while others may fall short—and those will carry a stigma as campaign result data is spread to other areas of the business. To counter this, marketers appear to be changing their focus to *improving* ROI, of which the analysis is likely to be more rapid and insightful. But the overall target is clear: marketers must use data to determine which campaigns are driving revenue and

which ones need to be ended before they cost too much money.

Making the Necessary Connections
As mentioned earlier, most marketers struggle with calculating ROI. The #1 reason cited by marketers as a barrier to ROI calculation is lack of data integration. To be precise, they lack the ability to manage and consolidate the data necessary to link results to investment. Marketers are more challenged connecting revenue to marketing activities (i.e. marketing attribution—the practice of assigning weighted value to each touch point that contributed to a sale) than connecting costs to marketing activity.

About 1/2 of marketers surveyed cited proving the effectiveness of the

marketing department's activities as one of their top challenges. About 1/3 of marketers regularly conducts analysis at the tactical campaign level and ties those results back to overall marketing expenses. They struggle, however, to connect their department level results to what is shown on the balance sheet.

> Marketers' #1 barrier to ROI calculation is lack of data integration

IN THIS EVOLVING WORLD OF BIG DATA, CONSUMER CONTROL, AND AN EVER-EXPANDING TANGLE OF CHANNELS, MARKETERS HAVE HAD THEIR APPROACH TO MARKETING DISRUPTED AS INNOVATORS EMBRACE NEW QUANTITATIVE CAPABILITIES TO COMPLEMENT THE CREATIVES.

OVERVIEW OF THE CURRENT STATE OF DATA-DRIVEN MARKETING

IS DATA-DRIVEN MARKETING ON THE RADAR SCREEN?

Most marketers in large enterprises say they are doing *something* with data to power marketing now. Currently, most have begun using data on an ad hoc basis, and a majority expects that within a year, applying data insights will be a routine part of their standard processes.

The biggest enterprises are more likely to be using data in a routine way—built into their processes and a part of the regular way they do business. Smaller enterprises are as likely to be using data-driven marketing for specific projects on an ad hoc, trial basis.

With regards to the benefits of using data to make decisions, most marketers believe data allows them to make more accurate decisions. Almost 50% of marketers believe that using data to make decisions results in a better business outcome like increased revenue, profit, decreased costs, etc.

Within the next several years, the smaller companies plan to have moved from a more ad hoc experience with data to having data analysis and application be part of regular processes. As a result, small enterprises likely won't be small much longer as they reap the benefits of a data-driven marketing approach.

Fig 1. Benefit of Using Data in Making Decisions
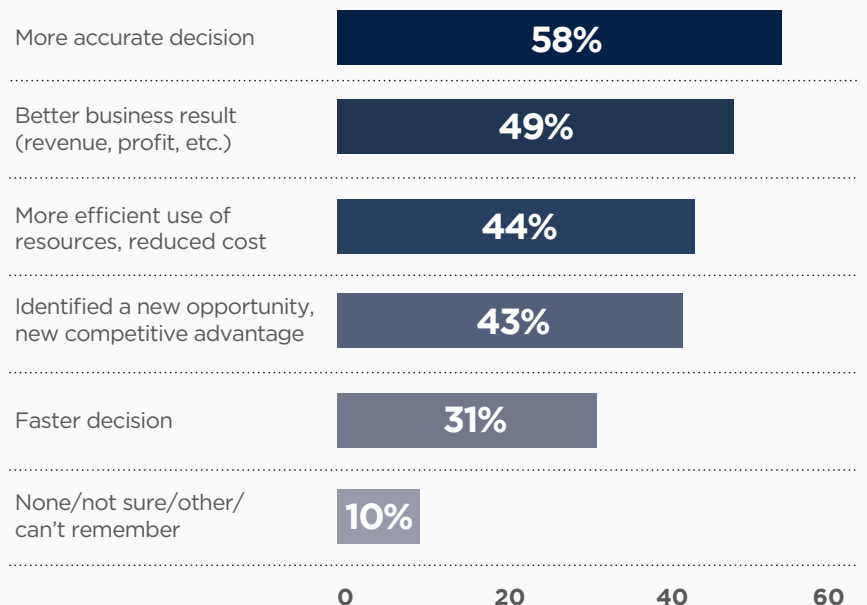
Benefit	Percentage
More accurate decision	58%
Better business result (revenue, profit, etc.)	49%
More efficient use of resources, reduced cost	44%
Identified a new opportunity, new competitive advantage	43%
Faster decision	31%
None/not sure/other/ can't remember	10%

0   20   40   60

MARKETERS DO RECOGNIZE THE VALUE THAT FULLY LEVERAGING THE DATA CAN PROVIDE THEIR COMPANY. YET MANY ARE STRUGGLING TO REACH THAT GOAL. A STAGGERING REALITY EMERGED—50% OF MARKETERS AGREE THAT DATA IS THE MOST UNDERUTILIZED ASSET IN THEIR ORGANIZATIONS.

CHALLENGES OF DATA-DRIVEN MARKETING

UNTANGLING THE MESS OF DATA

A key component of any successful data-driven marketing strategy is the ability to leverage the ever-growing amount of data a company is able to access. Marketing departments must be able to collect massive amounts of complicated, unstructured data and integrate it with the more traditional sources of data the company collects. It is from the analysis of these combined data sources that the truly impactful insights are derived. And although this process is often a challenging one, companies and marketing departments now understand the immense opportunities it provides. However, marketers still aren't fully leveraging the data available to them.

Most marketers rely on and use common, simple, and easily accessible forms of data to drive their marketing initiatives. The most common forms of data collected are demographic, customer service, customer satisfaction data, digital marketing interaction data (e.g., search, display ads, email, web browsing). However, consistent for all data types, the number of marketers actually using the data is significantly less than those that collect.

This pattern, though, suggests there is a gradual integration of the traditional data that companies have collected combined with the addition of more recent forms of interaction data – the kind of data that comes from relatively new and continually-evolving consumer behaviors (e.g., social media interactions).

Fig 2. Types of Data Companies Collect and Use to Drive Marketing

	Demographic	Customer service	Digital marketing interaction	Customer satisfaction	Customer engagement	Social media interactions	E-commerce	Transactional
Data companies currently collect	80%	72%	71%	62%	54%	53%	49%	43%
Data companies currently use	73%	58%	64%	53%	47%	47%	45%	38%

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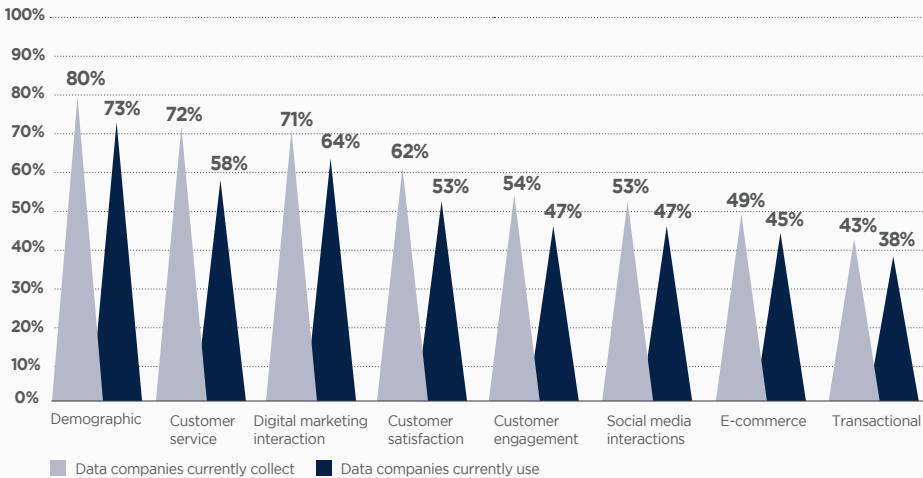
Most companies collect demographic data, and that propensity does not appear related to size. Social media interaction data, likely because it is new and easy to get, is as likely to be collected by small and large enterprises. For other forms of data, the larger companies (>$1 billion in revenue) are more likely to be leveraging them than the smaller ones. This is especially true for data that is likely to feed advanced behavior models, such as transactional data, e-commerce data, and digital marketing interaction data. Fewer organizations currently collect these emerging data types more than they collect more traditional data types, but marketers report this will change rapidly as these newer data sources mature.

Marketers do recognize the value that fully leveraging the data can provide their company. Yet many are struggling to reach that goal. A staggering reality emerged—50% of marketers agree that data is the most underutilized asset in their organizations.

Clearly there is an imbalance in marketers' data usage aspirations and the current reality of marketing departments. An example of this underutilization is that only 18% of marketers routinely have an integrated view of the customer, even though this is one of their top priorities for future improvement.

In addition to the overwhelming amount of data available, there are a handful of challenges marketers run up against when trying to bring more data-driven

analysis and decision making into their processes: data control and access, data collection, and data integration. Challenges associated with these three aspects of data management have led to less than 10% of companies using the data they currently have access to in a systematic, strategic way.

CHALLENGES AND IMPLICATIONS OF DATA CONTROL

Some of the challenges rooted in organizational structure are related to data control. A lot of marketers—

nearly 70% —do not control the data they use for their marketing initiatives.

Typical organizational structure has perpetuated the trend that the majority of marketers access data through IT. This may be something of a process challenge, but it may not be an insurmountable obstacle. To become more data-driven, marketing will need to demand greater cooperation and changes in how marketing and IT work together.

Fig 3. Department with Primary Responsibility for Marketing Data

32%
Marketing owns/controls most customer data

17%
Marketing accesses data through external vendors

51%
Marketing accesses data from internal IT

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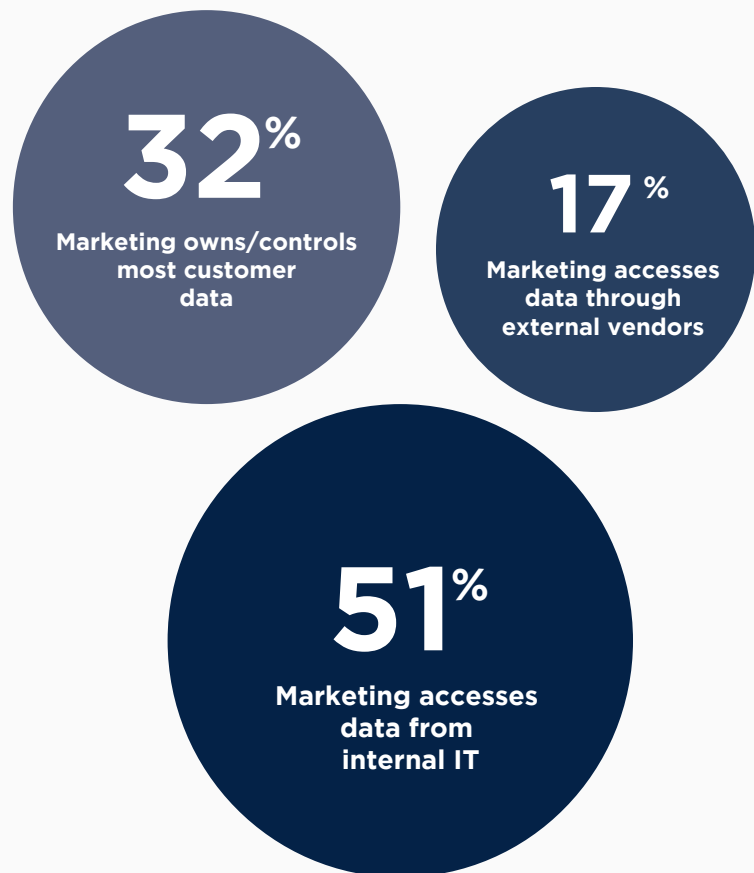
So what does this mean?

Marketers with direct access to their data are further along in embedding a complete data-driven marketing solution into their regular processes than marketers who have to go through internal IT or an external vendor. The access issue seems to slow down the marketers who have to contend with IT—they are moving toward a data-driven marketing approach, but they are at an earlier stage (e.g., trying it out, using it for ad hoc projects, etc.).

Fig 4. Control of Data and Implementation of a Data-Driven Marketing Strategy to Drive Marketing Performance

Current

Marketing Controls: Routine 46%, Ad hoc 41%, No Progress 12%
IT Controls: Routine 29%, Ad hoc 52%, No Progress 19%
External Vendor: Routine 34%, Ad hoc 50%, No Progress 15%

- Routine
- Ad hoc
- No Progress

Fig 5. Control of Data and Expected Implementation of a Data-Driven Marketing Strategy to Drive Marketing Performance in 1 Year

In 1 Year

Marketing Controls: Routine 66%, Ad hoc 29%, No Progress 6%
IT Controls: Routine 57%, Ad hoc 35%, No Progress 8%
External Vendor: Routine 55%, Ad hoc 38%, No Progress 7%

- Routine
- Ad hoc
- No Progress

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LEVERAGING THE RIGHT TECHNOLOGY TO MAKE DATA-DRIVEN MARKETING WORK
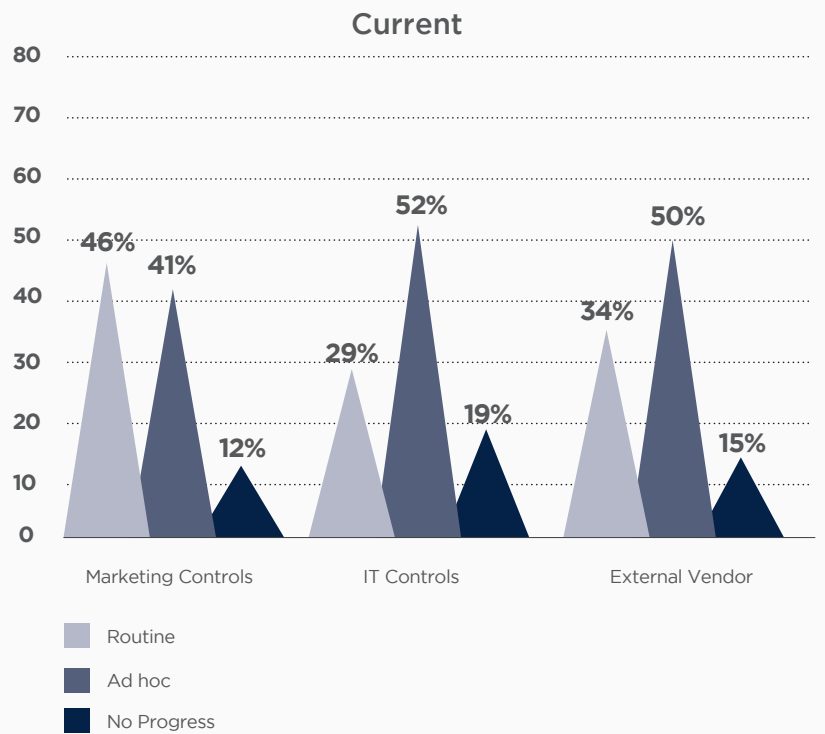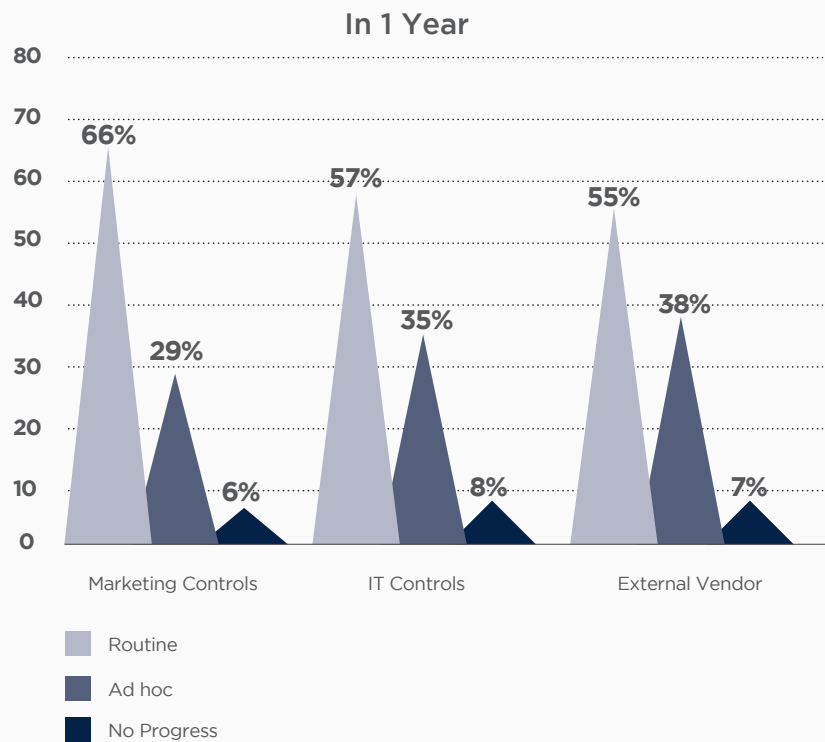
Marketers aiming to implement data-driven marketing solutions desire an integrated view of their customer, and that requires integration of offline and online data sources. Yet data on its own is not valuable. The real value is in the actionable insights gleaned from the data. Marketing departments are well aware of how critical this step is and are committed to purchasing the technology solutions that will enable the identification of these insights. Within the next two years, 71% of marketers plan to implement a big data analytics solution to help tease out the insights from the mass of consumer data available to them.

But companies cannot stop there. Marketing departments must apply those insights to create more relevant messaging, take advantage of new ways their customers want to interact, and optimize all of their marketing initiatives. To truly leverage a data-driven marketing approach, a company must have the processes in place that systematically operationalize the insights discovered from the ever-growing mess of data.

What's missing is a real time decisioning solution; only 57% of marketers plan to have a complementary real-time decisioning solution in place within the next two years to act on the insights derived from data.

Fig 6. Marketers with a Big Data Analytics Solution by Company Revenue (Current)
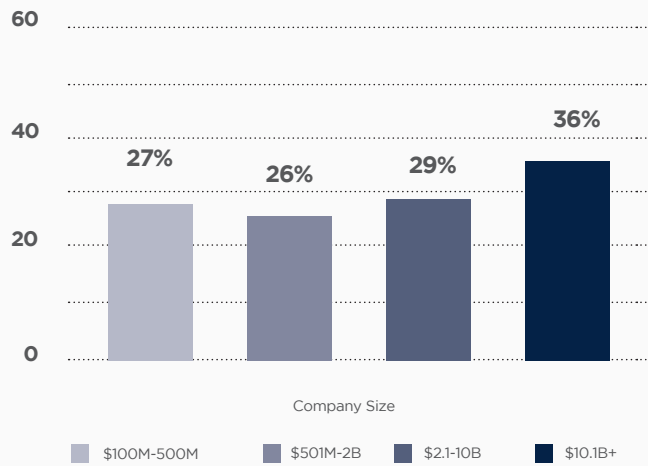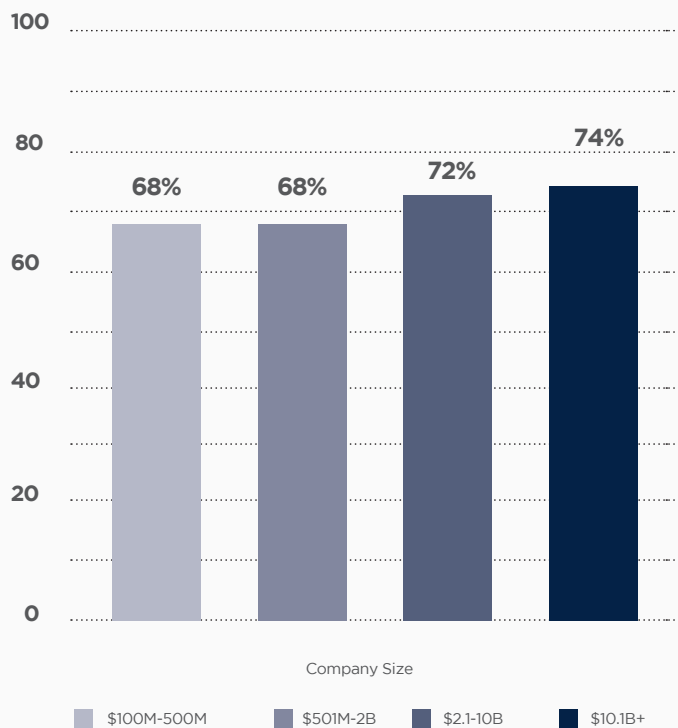

Company Size
- $100M-500M
- $501M-2B
- $2.1-10B
- $10.1B+

Fig 7. Marketers with a Big Data Analytics Solution by Company Revenue (Future)

Company Size
- $100M-500M
- $501M-2B
- $2.1-10B
- $10.1B+

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PROCESS IS THE "NEW BLACK": OPERATIONALIZING INSIGHTS TO CREATE A SUSTAINABLE COMPETITIVE ADVANTAGE

Historically, marketers have been wary of implementing processes for fear of ruining the creative atmosphere. But to create a sustainable competitive advantage—the kind that drives revenue opportunities—it's imperative that marketers are able to scale their production and marketing. This means putting processes in place so insights can be brought to market as quickly as possible. That's why for marketers process is "the new black."

Due to the data proliferation in today's corporate environment, almost all large companies use some form of data-driven marketing. However, in order to truly embrace a data-driven marketing strategy, departments must find a way to operationalize and the insights that are discovered from the data analysis. This step is often the hardest part in the effort to become a data-driven marketing organization.

Our research findings show that only 33% of marketing departments have embedded a data-driven marketing culture into their standard marketing processes – an imperative for overall enterprise streamlining, consistency, and success. This is alarming because there is a large culture gap around clearly communicating actionable insights in a way that others can quickly understand and apply to their various initiatives. This lack of standardized, repeatable processes is a large reason that fewer than 10% of companies use the data they currently have access to in a systematic, strategic way (e.g., ., interacting with business systems, serving business objectives such as new developments, etc.)

However, the first step to fixing any issue is acknowledging it is a problem. Marketers do understand that the lack of processes to facilitate leveraging insights is causing a lot of lost opportunities for marketing to add value to the business. In fact, 42% of marketers said that lack of processes is the #1 obstacle to using insights from data in decision-making.

Many marketers, however, recognize the importance of investing in projects to resolve process problems. According to survey responses, almost 80% of marketers will have implemented or begun projects that automate data quality, performance management, or marketing workflow processes within the next two years.

There is not a lot of variation in how marketers in different roles see these skills being added to their organizations current process. Implementation is generally linear with respect to company size: bigger companies are more likely to have the processes they need in place than smaller companies.

> 42% of marketers say that lack of process is the #1 obstacle to using data in decision making.

Fig 8. Top Obstacles to Data-Driven Marketing

- 42% — Lack of process to bring insights into decision making
- 39% — Technology inadequate, outdated
- 35% — Financial — not a high funding priority
- 31% — Team skills/talent
- 27% — Lack of knowledge/consensus around importance
- 25% — Inability to show measurable benefit, ROI
- 22% — Lack of needed data
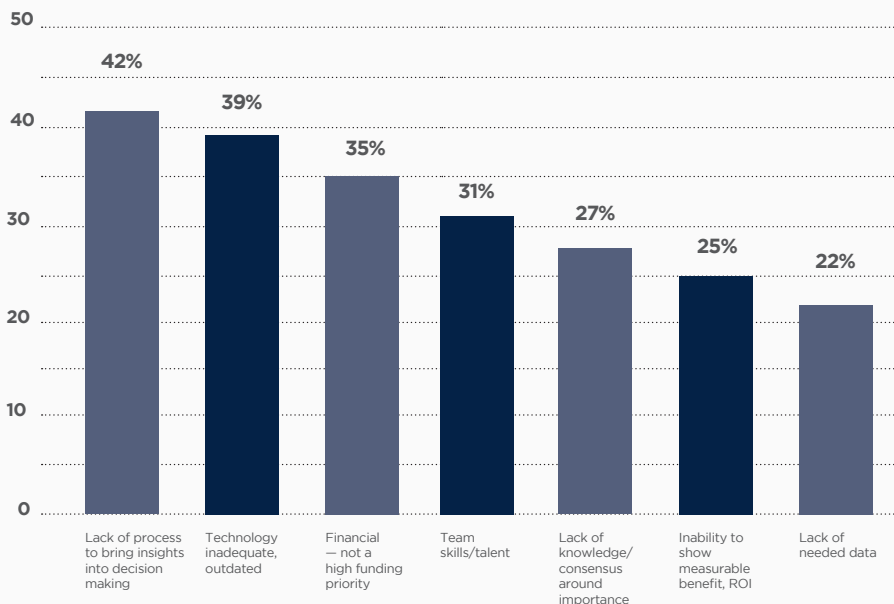
Almost half of companies have the processes in place now (e.g., data quality, measurement, workflow) for data-driven marketing, and most of the rest say they will add these capabilities within the next two years. That will leave 15% or fewer companies lacking the capability to implement data-driven marketing from a process perspective.

Fig 9. Marketers with Automation Solutions Implemented (Current)

Legend: ■ $100M - 500M ■ $501M - 2B ■ $2.1-10B ■ $10.1 B+

	Workflow processes	Measurement processes	Data quality processes
$100M - 500M	34%	40%	41%
$501M - 2B	38%	42%	45%
$2.1-10B	43%	52%	50%
$10.1 B+	49%	52%	53%
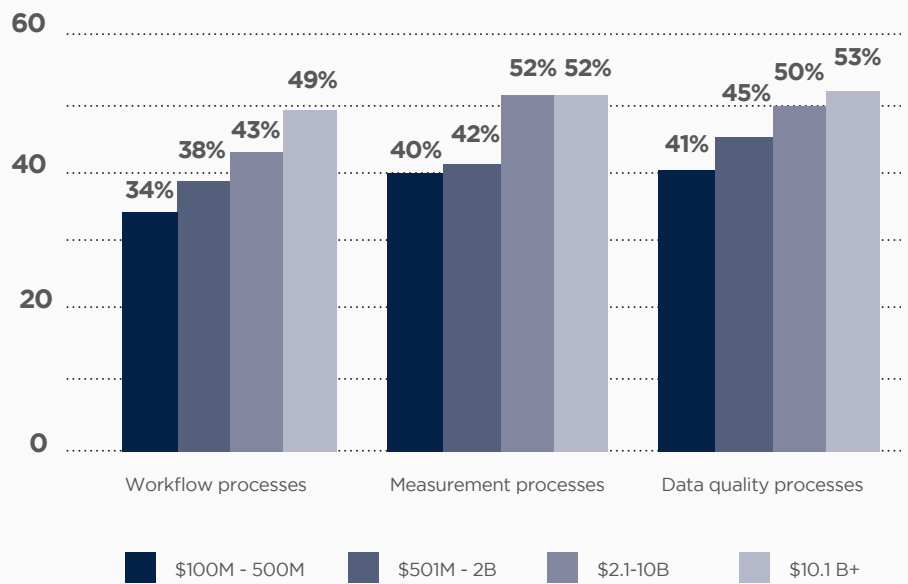
Fig 10. Marketers with Automation Solutions Implemented (In 2 Years)
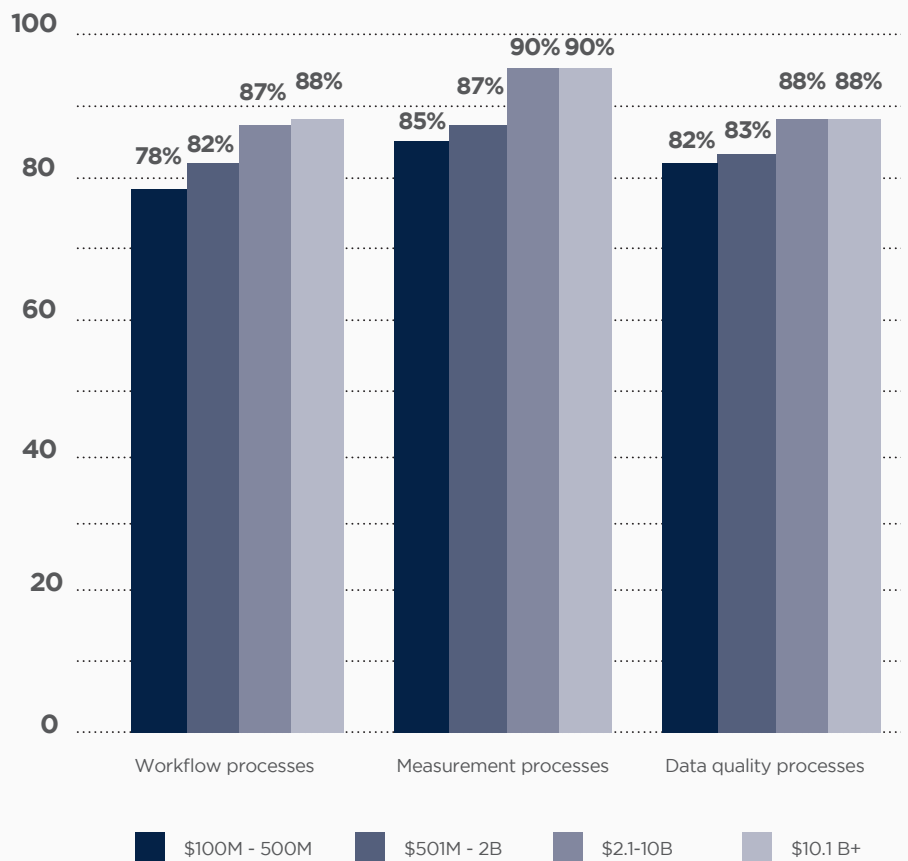
Legend: ■ $100M - 500M ■ $501M - 2B ■ $2.1-10B ■ $10.1 B+

	Workflow processes	Measurement processes	Data quality processes
$100M - 500M	78%	85%	82%
$501M - 2B	82%	87%	83%
$2.1-10B	87%	90%	88%
$10.1 B+	88%	90%	88%

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AS MARKETING CONTINUES
TO UNDERGO SIGNIFICANT
STRUCTURAL CHANGES THAT ARE
DRIVEN BY THE EVER-INCREASING
ACCESS TO DATA, COMPANIES
WILL REQUIRE ANALYTICAL
MINDS WITHIN THE DEPARTMENT
TO COMPLEMENT THE CREATIVE
TALENT.

MARKETERS DISRUPTING MARKETING

MARKETERS AND DATA: A HEALTHY RELATIONSHIP?

The advent of big data technology, the explosion of channels, as well as the new data types that can be collected like sensor or location data from everything from cell phones to trains has created seemingly endless opportunities for marketers. But how prepared do marketers really feel about their ability to harness and use the data that's available to them?

To gauge this sentiment, marketers were asked to grade their and their department's use of data to drive marketing using the United States grading system (i.e., A for excellent through F for failing, omitting E).

Over 40% of marketers surveyed gave their department an average to failing grade of C or lower. But only 23% of marketers assigned themselves an individual average to failing grade of C or below. This indicates a fundamental disconnect exists between the data analysis that the individual marketer

feels they are doing and what is actually being accomplished at the department level.

There wasn't a significant difference in the grades marketers gave themselves and their departments across the globe. However, by looking at specific industries, you can see in figure 12 that certain B2C verticals (CPG and Retail in particular) believe they are more data-driven than their peers.

Perhaps not surprisingly, marketers in data science roles are most apt to give A's to their departments and to themselves. (33% of data scientists gave themselves an A compared to an average of 21% of all other roles.)

Marketing executives are as likely as other marketers to give themselves an A. However, it is very important to note that executives are the least likely to give their department an A.

Fig 11. Self-Assessment Grade Curve

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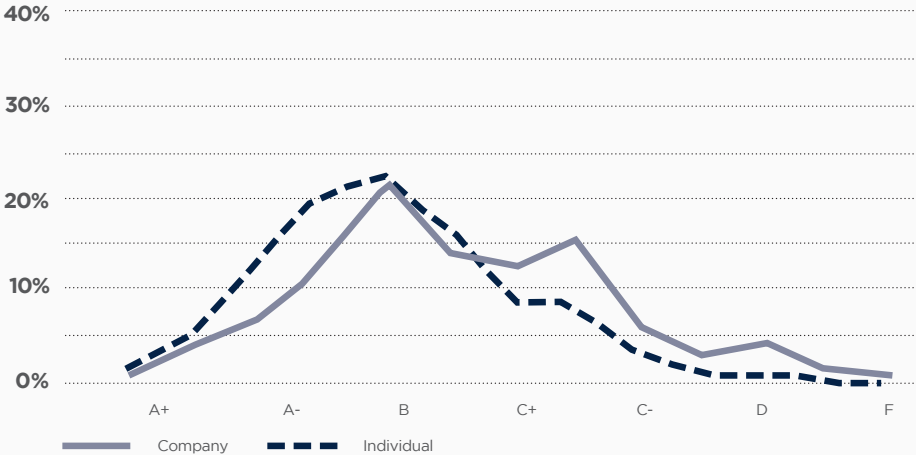
They tend to give their own departments middling grades: mostly B's and C's. This is indicative of the increasing expectations for being data-driven that marketing executives are expecting their employees to demonstrate. One important distinction is that marketers in the more B2C verticals (e.g., retail, consumer products) are more likely to give themselves A's than the marketers in other verticals.

SATISFACTION WITH MARKETING PROGRAMS & RECOGNITION OF MISSED OPPORTUNITIES

Most marketers are generally satisfied with what their marketing department has achieved—just about half (49%) of marketers are very satisfied and very few (11%) are dissatisfied. These ratings are more similar across verticals than different. Likewise, the differences based on marketing role, company size, and a marketer's level within his/her organization is negligible.

Marketing teams recognize there are missed opportunities from not using data to drive every marketing decision, with 45% of all marketers agreeing that data is the most underutilized asset in the marketing organization. This sentiment does not vary with the size of the company.

So given that marketers recognize the company is not leveraging data to its fullest extent, it comes as no surprise that marketers are feeling the need to become more data-driven. A full 78% of marketers feel pressure to become more data-driven.

Marketers in areas where data is currently the focus see themselves as under more pressure than their less quant-focused colleagues.

Fig 12. Marketer Self-Assessment by Industry Vertical
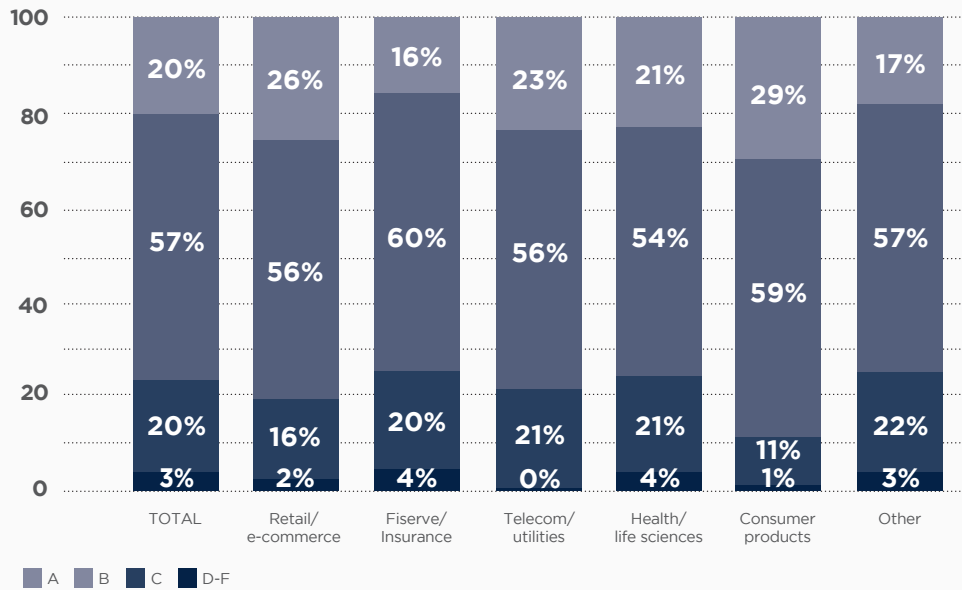
The marketers who say they are feeling significant pressure to become more data-driven are in campaign management (39%) and data sciences (40%). This is not too surprising given most of the focus by the media and case studies has been on the benefits that data-driven marketing can provide for campaign management and the customer experience sides. However, this just means there is an opportunity for those on the campaign management side to improve the value of data through collaboration and education of the benefits of a robust data-driven marketing strategy to marketing operations team members.

INVITING THE QUANTS TO THE MARKETING TABLE

Marketers are starting to believe that by working together, a new combination of qualitative and quantitative skill sets can be created within the department. This will create the engine designed to power marketing in the new age of data.

However, the path to building out analytical talent isn't always simple or straightforward. While most organizations recognize the need to incorporate quantitatively-oriented resources into their marketing mix, many still feel understaffed in the analytics areas. Only large companies (i.e., those with over $2 billion in revenue) are most likely to be able to satisfy their staffing needs. While 70% of these organizations state they are satisfied with their analytical skills staffing levels, only 55% of companies with less than $2 billion in revenue report feeling adequately staffed with quantitatively-minded employees. However, companies of every size are planning to increase their analytical talent, their managers' skills for using data insights to drive decisions, and the marketing data scientist role.

Fig 13. Percentage of Marketers Satisfied with their Analytics Staffing Needs (Current)

Analytical skill-sets: 54%, 57%, 70%, 64%
Managerial analytical skill-sets: 60%, 69%, 65%, 68%

Legend: $100M - 500M | $501M - 2B | $2.1-10B | $10.1 B+
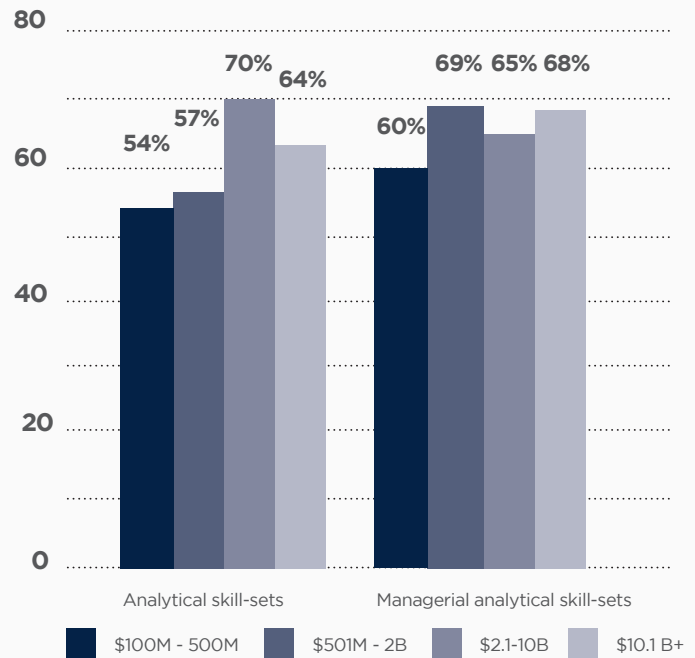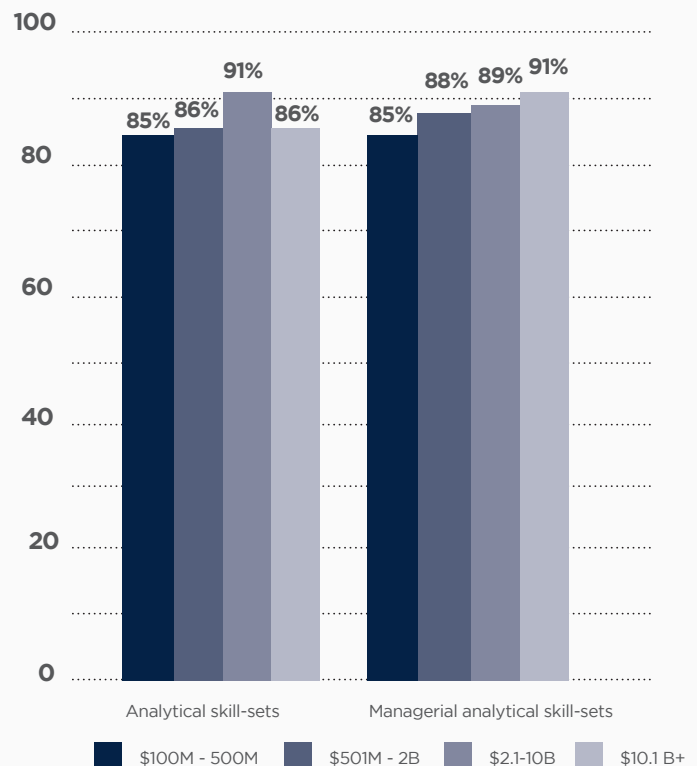
Fig 14. Percentage of Marketers Expecting to be Satisfied with their Analytics Staffing Needs 2 Years from now

Analytical skill-sets: 85%, 86%, 91%, 86%
Managerial analytical skill-sets: 85%, 88%, 89%, 91%

Legend: $100M - 500M | $501M - 2B | $2.1-10B | $10.1 B+

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THE MARKETING DATA SCIENTIST

As marketing continues to undergo significant structural changes that are driven by the ever-increasing access to data, companies will require analytical minds within the department to complement the creative talent. One way that companies are boosting their quantitative talent is by creating a new role with marketing—the marketing data scientist.

Sparked by early adopters' successes in every business function, marketers and company executives are gaining confidence in the value a data scientist can provide a marketing organization. Our survey found that marketing departments having team members in data scientist roles tend to get awarded an "A" by their employees for using data versus departments without marketing scientists who are graded at a "C" or lower. Furthermore, in marketing environments where there is already someone in the data scientist role, there is a stronger sense that skill-sets generally are up-to-speed for data-driven marketing.

It should not be a surprise that the data scientists are the marketers most likely to use data-driven marketing today. They are most likely to have made it a regular part of their processes and the ones most likely to think they will be pursuing it in a year. In companies where there is someone in the marketing data scientist role, the workflow, data quality, and measurement processes are more likely to be in place. Furthermore, data scientists are 10% more likely than all other roles to report that their marketing department controls its own data.

Therefore, organizations that have someone in the marketing data scientist role are more likely to have the technology in place to be ready for data-driven marketing. This is especially true of big data analytics capabilities and campaign management software.

The data scientist is still an emerging role within marketing departments. Therefore, as companies mature in their data-driven marketing strategy, there will likely be an increase in the percentage of companies with a specialized marketing data scientist. Over the next few years, companies will begin to see the enormous value that is created by the data scientist aspect of their employees' work, and they will most likely decide this added value warrants hiring a full-time marketing data scientist position.

Larger companies are much more likely than smaller ones to have marketing data scientist resources.

Companies with annual revenue of over $10B are nearly twice as likely to currently employ a marketing data scientist as companies with annual revenues of less than $500M. However, the smaller enterprises plan to close half of this gap within the next two years.

An extremely valuable benefit of a data scientist is his or her unique perspective which tends to differ from every other role in the marketing department. Marketers in data sciences roles are more likely than any other marketers to think about the big picture in applying data to business outcomes. In fact, data scientists report making decisions that resulted in a better business outcome through data analysis at a much higher rate (62% versus 49% overall).

Executives who intend to create fast corporate forward momentum should consider adding a data scientist to their ranks to help guide the organization's data initiatives.

Fig 15. Presence of a Marketing Data Scientist by Company Revenue
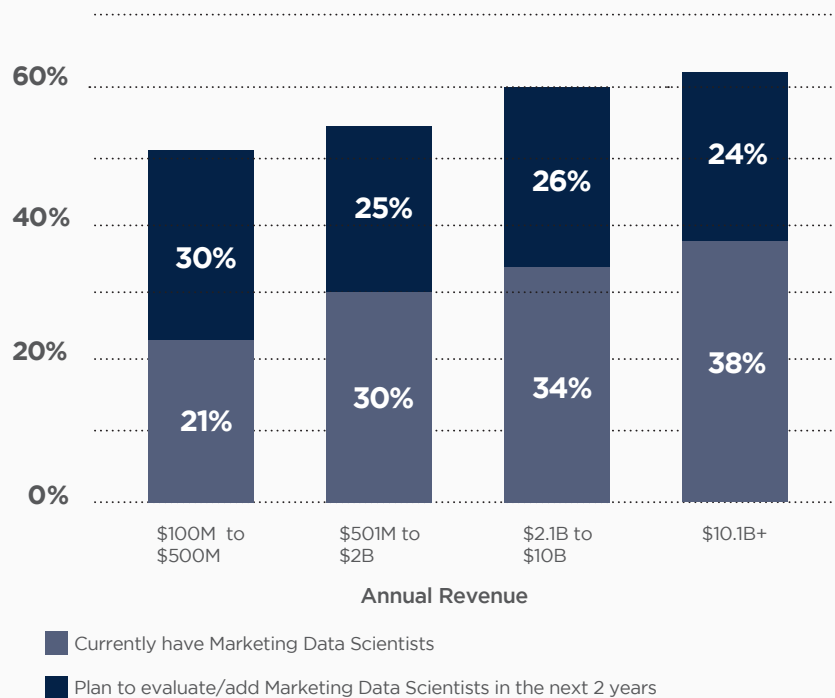
Chart data — Annual Revenue (stacked bars):

Annual Revenue	Currently have Marketing Data Scientists	Plan to evaluate/add Marketing Data Scientists in the next 2 years
$100M to $500M	21%	30%
$501M to $2B	30%	25%
$2.1B to $10B	34%	26%
$10.1B+	38%	24%

■ Currently have Marketing Data Scientists
■ Plan to evaluate/add Marketing Data Scientists in the next 2 years

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BUSINESS OUTCOMES ARE MORE THAN JUST ACHIEVING DEPARTMENTAL GOALS. THEY ARE CENTERED ON CREATING VALUE THAT EXTENDS BEYOND THE MARKETING DEPARTMENT AND IMPROVES THE VALUE OF THE BUSINESS ITSELF.

ALIGN WITH BUSINESS OUTCOMES

ALIGNMENT WITHIN MARKETING

The first step to gaining alignment must always be to verify that your internal team is completely aware of and working toward the marketing department's goals. One of the most common places for this departmental alignment to break down is between the leadership and the rest of the team. The results show that executives an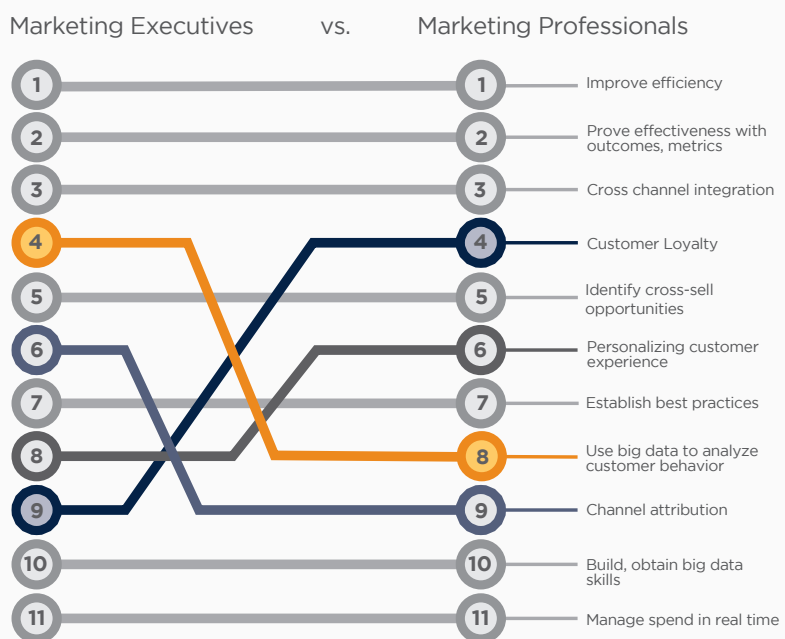d marketing professionals are in alignment for the highest level objectives, but key differences arise when you look at the second-tier objectives.

Marketers in all position levels are aligned on the top three objectives of: improving efficiency, proving effectiveness of marketing with outcomes and metrics, and the need for cross-channel integration. However, one can see there is still some confusion caused by marketing leadership not effectively communicating what the second-tier priorities are for the department. For example, marketing professionals reported the fourth marketing objective is to increase

customer loyalty, while the executives are more interested in using big data to analyze customer behavior. This does not come as a surprise since executives tend to be thinking about the largest trends in the market (like the use of big data) and not dealing with the everyday

tasks handled by the members of the department. Still, marketing leadership needs to be aware of this lack of alignment so they can do a better job of communicating the second-tier priorities in addition to the top three.

Fig 16. Top Marketing Priorities According to Marketing Executives vs. Marketing Professionals

Marketing Executives   vs.   Marketing Professionals

	Marketing Professionals
1	Improve efficiency
2	Prove effectiveness with outcomes, metrics
3	Cross channel integration
4	Customer Loyalty
5	Identify cross-sell opportunities
6	Personalizing customer experience
7	Establish best practices
8	Use big data to analyze customer behavior
9	Channel attribution
10	Build, obtain big data skills
11	Manage spend in real time

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Another large alignment and integration challenge marketers face is the issue of siloed data, technology, and teams within the marketing function. Sixty-five percent of marketers say silos within their marketing department prevent them from having a holistic view of a campaign or initiative. This is a serious problem that marketers will need to fix before they can truly embrace a data-driven marketing culture.

ALIGNMENT OF MARKETING WITH OTHER DEPARTMENTS

Cross-functional alignment as a topic of leadership discussions is nothing new. Most companies have likely been talking about the cooperation and alignment between their departments for many years. However, despite all the attention paid to collaboration and cross-functional organizational work, our research found that inter-departmental alignment still presents a challenge to marketers.

Only about 56% of the marketers surveyed routinely work with other functions as part of a regular process. A sizable group of marketers—about a third—just coordinate with other functions on an ad hoc, project- by-project basis.

And only about one in ten marketers now characterizes him/her self as operating in a functional silo.

When the results were examined by role, the data shows that marketing operations and marketers with executive responsibility are more likely to be working regularly with other functions, and marketing communications and campaign management are least likely to. In fact, marketing executives are much less likely to think marketers are in a functional silo and a lot more likely (74% vs. 55%) to think marketers routinely work with other functions.

Fig 17. Collaboration of Marketing and Other Business Divisions

33%
Coordinates on an ad hoc or project basis

20%
Cross-department collaboration linked to business outcomes

11%
In a silo and functions independently

36%
Routinely works with other functions

So what is preventing marketers from being more integrated with other functions? And what can companies do to boost collaboration?

There is no consensus among marketers about what the barriers are that prevent marketing from becoming more integrated with other functions—marketers point to technology, system or process incompatibility, general resistance to change, and lack of senior leadership in driving change. In addition, some marketers say the benefits of the integration are not clear, which is very likely related to a lack of vision or leadership.

The one marketing specialty that varied from the rest is marketing leadership. Marketers with executive responsibilities are almost twice as likely as others to believe there aren't any barriers to inter-departmental integration (34% vs. 18%).

Marketers say the best way for marketing to become more integrated with other functions is to set up integrated processes that force functions to work together. These could be business planning or managing customer touch points, which together represent nearly half of marketers' recommendations for improving cross-functional integration.

STRATEGIC PARTNERS: MARKETING AND IT?

Marketers' increased use of data is one factor driving increased collaboration with other departments as the majority of marketing departments still do not have control over data management and strategy. But, most marketers still have to rely on IT to get access to pertinent data. This is just one example of how in this data-driven world, marketing departments benefit by forming a strategic partnership with their IT departments.

Despite these benefits, relatively few marketers agree that marketing and IT are strategic partners in achieving marketing objectives—74% of marketers don't think marketing and IT are strategic partners. Data scientists are the most likely to see marketing and IT in partnership (35% think this describes their company). This is likely because, in companies with marketing data scientists, these men and women act as a type of bridge between the marketing and IT organizations.

In summary, while marketers do not see themselves in a silo anymore, they also are not yet integrated fully into the business of the organization, and they do not work as seamlessly with other functions as they ideally might. Marketers see the solution to this mainly in changing the way organizations work: although it's not a new idea, marketers think cross-functional processes are the way forward, and this requires executive support. However, it is imperative that marketers forge a strategic partnership with the IT department in order to be able to fully engage in data-driven marketing.

74% of marketers say that marketing and IT are not strategic partners in their company.

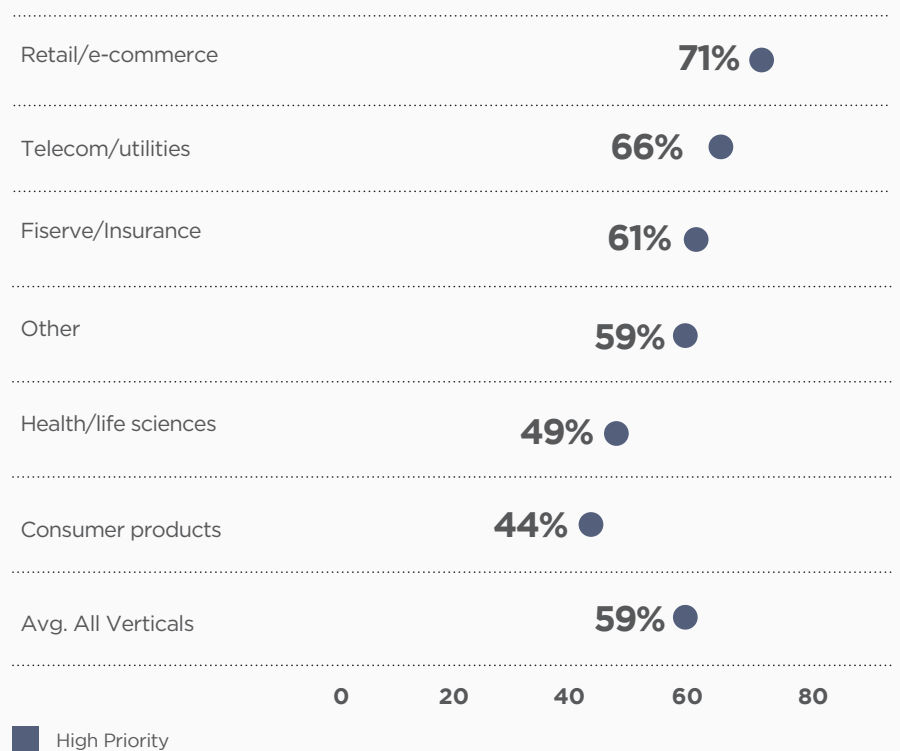TERADATA

RICH EXPERIENCES DRIVE REVENUE

Combining new digital data with legacy offline data is one of the most exciting trends in marketing today. With an unprecedented amount of data available across multiple channels, the potential to intimately understand each customer is an exciting new possibility. In this radically changed world of consumer-control, the demand for personalization and a memorable customer experience are just two of the demands almost all marketers agree they are asked to solve. However, while most marketing executives cite improving the customer experience as a top priority an equal majority of their subordinates report that this does not make it into corporate or personal objectives. Only a little more than 33% of companies surveyed say they routinely use data to drive marketing to improve their customer interactions.

When looking at how leveraging data can most benefit decision making, marketers believe that data is most effective in ensuring an optimal customer response. This is because personalization is now possible to get the right message to the right customer at the right time via their preferred channel. Every vertical surveyed agreed that personalizing marketing is a high priority. Retailers--who typically have strong direct contact with customers--are most apt to give this a high priority (71%). On the other end of the scale, consumer products companies--which do not typically deal directly with their ultimate end-user customers--are least likely to prioritize this; however, when looking at revenue size, respondents from large CPG companies overwhelmingly responded that it was a high priority. In all, about 60% of marketers say that personalizing marketing is a top priority for the future.

Fig 18. Benefit of Using Data in Making Decisions

40% Prove/measure success of multi-channel marketing campaigns

30% Create sustainable competitive advantages

26% Optimize the channel mix

19% Avoid over-communicating

30% Deliver next-best option to customers based on real-time and historic data

53% Achieve optimal customer response

23% Trigger the customers who need contact today

35% Fully integrate initiatives and create synergies across all channels

8% Identify the role of e-commerce in the multi-channel structure

Fig 19. Percent of Marketers who Believe Personalizing Marketing is a High Priority for the Future

Retail/e-commerce	**71%** ●
Telecom/utilities	**66%** ●
Fiserve/Insurance	**61%** ●
Other	**59%** ●
Health/life sciences	**49%** ●
Consumer products	**44%** ●
Avg. All Verticals	**59%** ●

0   20   40   60   80

■ High Priority

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PROVING ROI CAN NOT
ONLY BE A MOVING TARGET
IN MARKETING, BUT ALSO
A MAJOR BURDEN DUE
TO THE TIME REQUIRED
TO ACCURATELY REPORT
RESULTS. MANY MARKETING
LEADERS STRUGGLE TO
ACCURATELY LINK RESULTS
BACK TO MARKETING
INVESTMENTS. IN FACT, 75% OF
MARKETERS WHO ATTEMPT
TO CALCULATE ROI REPORT
SOME KIND OF PROBLEM OR
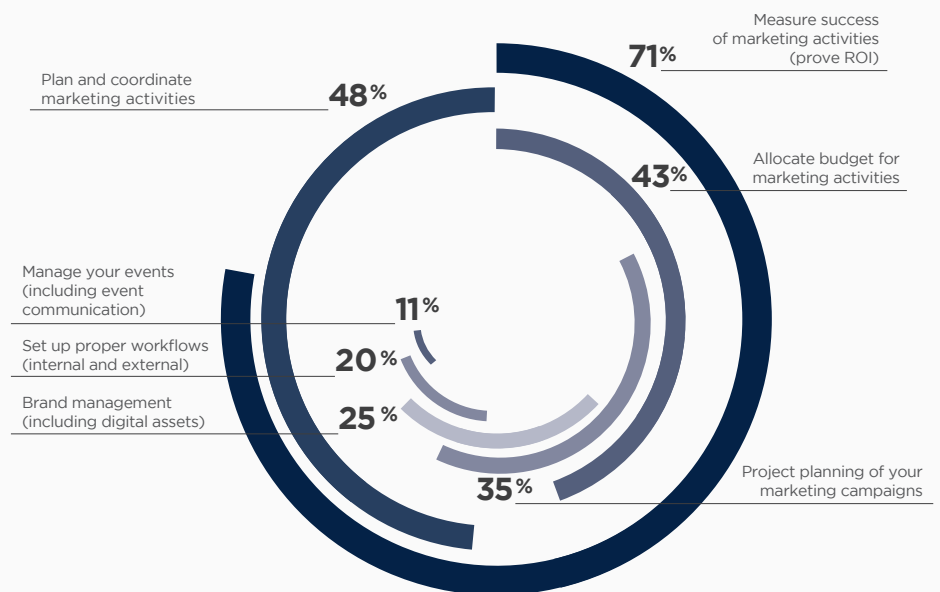CHALLENGE.

PROVE MARKETING WORKS

GETTING THE RIGHT DATA TO GET THE JOB DONE

Proving the effectiveness of marketing is still a struggle for many marketers. But despite the challenges, most marketers understand what they need to get the job done. Marketing Operations is typically tasked with executing the analysis around the value of marketing. These roles can be found in most marketing divisions.

A strong majority of respondents in marketing operations roles say insights from data would be most useful in measuring the success of marketing activities (e.g., proving ROI). This is mentioned by marketers across all verticals as the primary benefit of having access to the right data. About half point to planning and coordinating marketing activities as a potential benefit. Interestingly, respondents from financial services and healthcare/ life sciences are more apt to mention planning and coordinating

than marketers in other verticals. As marketers in heavily regulated industries, proper planning and coordination can often mean savings in terms of millions of dollars by avoiding compliance issues.

Fig 20. How the Right Data Would Most Benefit Marketing Operations Functions

Measure success of marketing activities (prove ROI) **71%**

Plan and coordinate marketing activities **48%**

Allocate budget for marketing activities **43%**

Manage your events (including event communication) **11%**

Set up proper workflows (internal and external) **20%**

Brand management (including digital assets) **25%**

Project planning of your marketing campaigns **35%**

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The theme of proving the value of marketing continues when the response is opened up to all divisions in marketing. All respondents were asked to name the top two most challenging questions they need to answer in their role.

Proving the effectiveness of marketing is the top challenge for marketers followed by how they support company objectives and how can marketing improve the customer experience.

Fig 21. Most Challenging Questions Marketers Have to Answer in Their Role

Question	%
Which marketing initiatives are effective?	39%
How will marketing activities support company objectives?	32%
How can they improve the customer experience?	31%
Which campaigns are driving higher revenue?	23%
Can they stretch the budget to support more initiatives?	20%
What channels should they prioritize?	13%
How efficient are their marketing's processes?	12%
Who are the most profitable customers?	12%
What is/should be their social marketing strategy?	10%
Are they meeting compliance regulations?	4%
How much is spent on each initiative?	3%

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The following table shows the percentage of marketers in each discipline who believe each of the corresponding objectives is a priority.

Major opportunities to change the performance of marketing exist where large gaps exist between priorities and current ability to execute. For everyone except data scientists, the priority and the best opportunity to apply data is in measuring ROI of all campaigns across all channels. For data scientists, the priority and current focus is creating a single view of the customer.

Marketing Attribution—the practice of assigning proper value to each touch point in a customer's journey— is not heavily practiced by marketers. While most respondents understood the value of having accurate attribution models, organizational and data complexity were cited as two of the top obstacles. Ultimately, marketing attribution is still only practiced by a few innovators as a way to prove the value of marketing and its contribution to the bottom line. Those that practice attribution, though, consider it to be a key cornerstone of their marketing success. Companies, therefore, are well served to investigate whether this is feasible.

Fig 22. Percentage of Marketers Indicating each Initiative as a Top-3 Priority for the Next Year

% PRIORITY	BRAND	MARKETING COMMUNICATIONS	MARKETING OPERATIONS	CAMPAIGN MANAGEMENT	DIGITAL	DATA SCIENCE	EXECUTIVE
SINGLE VIEW OF CUSTOMER	34	35	35	39	37	43	37
USE BIG DATA TO POWER MARKETING	28	32	33	27	31	33	28
DEVELOP ATTRIBUTION MODELS	26	28	29	30	29	33	26
IMPROVE CUSTOMER EXPERIENCE	31	35	33	37	38	35	30
TAKE REAL-TIME ACTION ON CUSTOMER BEHAVIOR	27	29	31	28	29	31	26
CROSS-CHANNEL COORDINATION	28	32	34	33	31	36	30
MEASURE ROI	40	40	38	40	39	34	41

DO MARKETING DEPARTMENTS HAVE A DATA-DRIVEN MARKETING STRATEGY TODAY?

Most marketers in large enterprises say they have begun implementing their data-driven marketing strategy, even if they are only practicing on an ad hoc basis. More importantly, most expect that within a year, data-driven marketing will be a routine part of their standard processes.

It probably should not be a surprise that the data scientists are the marketers most likely to use data to drive marketing performance today. These resources are most likely to have made data application a regular part of their processes and the ones most likely to think they will be pursuing it in a year.
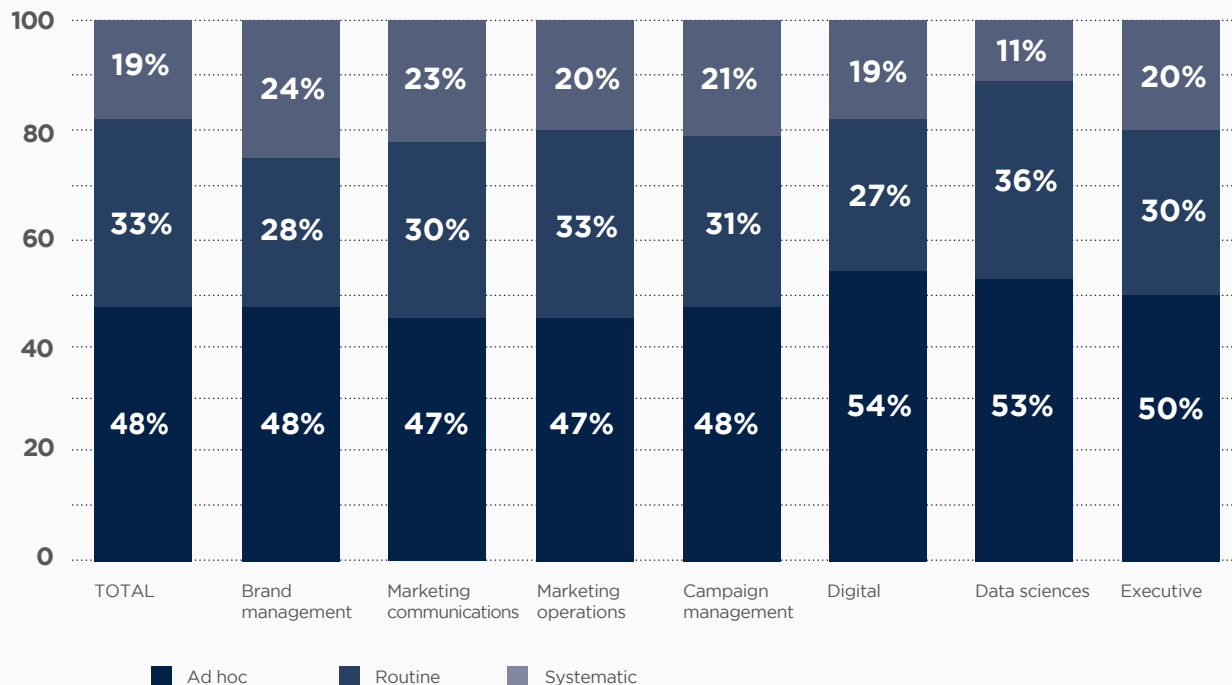
PROVE OR IMPROVE RETURN ON INVESTMENT (ROI)?

Proving ROI can not only be a moving target in marketing, but also a major burden due to the time required to accurately report results. Many marketing leaders struggle to accurately link results back to marketing investments. In fact, 75% of marketers who attempt to calculate ROI report some kind of problem or challenge. The question then becomes: should marketers focus on pure ROI or on ROI improvement?

Most marketers trying to calculate ROI report having problems because their systems do not allow them to manage and consolidate the data they need. This makes it hard to connect earnings to marketing activity.

Ultimately, a successful marketing ROI transformation comes down to proving your organization can increase the value of its investments. The marketing ROI discipline can generate significant credibility, and the results can instill confidence in marketing's ability to contribute to the financial well-being of the company. However, a singular focus on proving ROI can be risky because some marketing initiatives may be effective while others may fall short. Those that fall short, unfortunately, will carry a stigma as campaign result data is spread to other areas of the business. To counter this, marketers appear to be changing their focus to improving ROI, of which the analysis is likely to be more rapid and insightful. But the overall target is clear: marketers must use data to determine which campaigns are driving revenue and which ones need to be ended before cost becomes greater than benefit.

Fig 23. Frequency of Applying a Data-Driven Marketing Approach to Regular Marketing Tasks

	TOTAL	Brand management	Marketing communications	Marketing operations	Campaign management	Digital	Data sciences	Executive
Systematic	19%	24%	23%	20%	21%	19%	11%	20%
Routine	33%	28%	30%	33%	31%	27%	36%	30%
Ad hoc	48%	48%	47%	47%	48%	54%	53%	50%

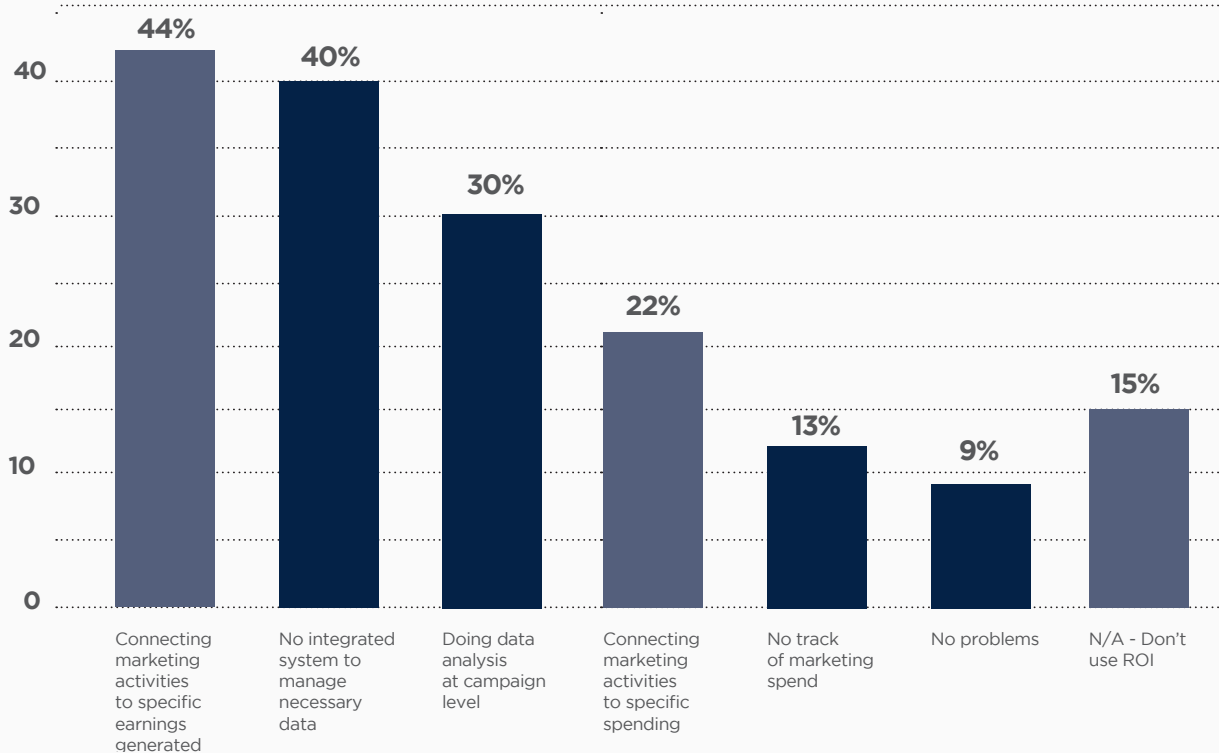■ Ad hoc ■ Routine ■ Systematic

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MAKING THE NECESSARY CONNECTIONS

As mentioned earlier, most marketers struggle with calculating ROI. The number one reason cited by marketers as a barrier to ROI calculation was lack of data integration. To be precise, they lack the ability to manage and consolidate the data necessary to link results to investment. Marketers are more likely to have challenges connecting revenue to marketing activities than connecting costs to marketing activity.

About 50% of marketers surveyed cited proving the effectiveness of the marketing department's activities as one of their top challenges. About one third of marketers regularly conducts analysis at the tactical campaign level and tie those results back to overall marketing expenses. They struggle, however, to connect their department results to what is shown on the balance sheet.

Fig 24. Problems Experienced in Calculating ROI

Connecting marketing activities to specific earnings generated	No integrated system to manage necessary data	Doing data analysis at campaign level	Connecting marketing activities to specific spending	No track of marketing spend	No problems	N/A - Don't use ROI
44%	40%	30%	22%	13%	9%	15%

CONCLUSION

Now is the time to evolve. Embrace a data-driven marketing strategy to enhance your engagement with customers and optimize the inner-workings of your marketing department. Leverage data in realtime to create and deliver relevant interactions for each of your customers. Analyze data to inform decisions, optimize the mix of your marketing initiatives, and prove the value of marketing.

As a marketing leader, you know that true consumer insight resides in your data. But making the transition from simply tracking data transactions to creating meaningful data-driven interactions isn't always easy. The insights of the 2,220 marketers participating in our global study can help you understand the challenges, opportunities, and successes of a data-driven marketing approach.
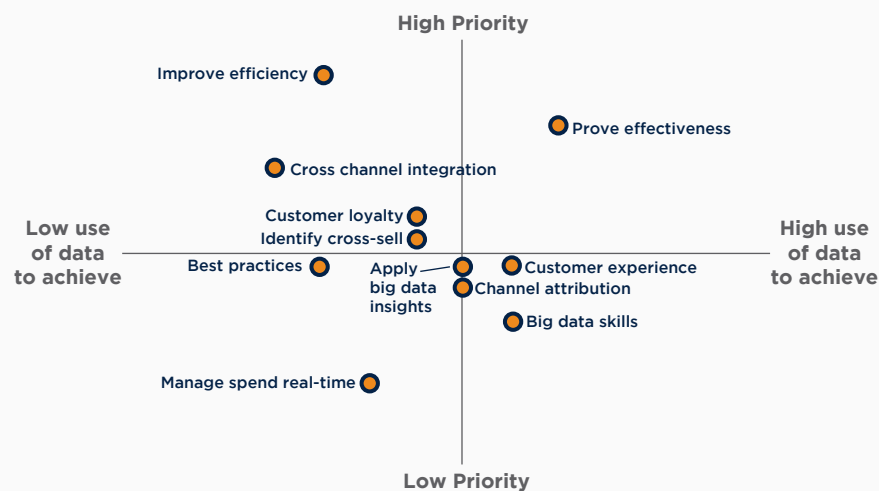
Check the graph below to see how your department compares to the market's current use of data for marketing department objectives of high and low priority. Although they will differ based on each company's specific circumstances, there are many opportunities for increasing the use of data to better achieve marketing objectives. So identify a place your company can gain a competitive advantage by better leveraging data to achieve an objective. Then use that objective as a starting point in building your own data-driven marketing strategy.

It's time for you and your marketing department to navigate the new world of big data, empowered consumers and integrated, omnichannel marketing. Are you ready?

Learn More at Teradata.com/datadrivenmarketing

Fig 25. Marketing departments current use of data insights to achieve top priorities

Fig 25. Marketing departments current use of data insights to achieve top priorities

- High Priority
- Improve efficiency
- Prove effectiveness
- Cross channel integration
- Low use of data to achieve
- Customer loyalty
- Identify cross-sell
- Best practices
- Apply big data insights
- Customer experience
- Channel attribution
- Big data skills
- High use of data to achieve
- Manage spend real-time
- Low Priority

SURVEY DEMOGRAPHICS

Fig 26. Survey Respondents - Company Size

- 19% $100M-$500M
- 33% $10B+
- 22% $501M-$2B
- 26% $2.1B-$10B
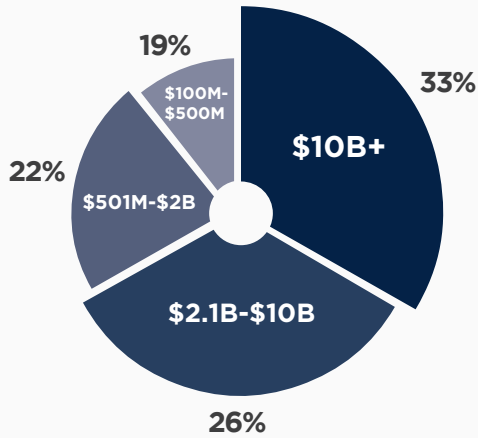
Fig 27. Breakdown of Respondents by Vertical and Revenue

Legend:
- $100M - 500M
- $501M - 2B
- $2.1-10B
- $10.1 B+

Categories: Retail/e-commerce, Health/life sciences, Consumer products, Financial services/insurance, Telecom/utilities, All other industries
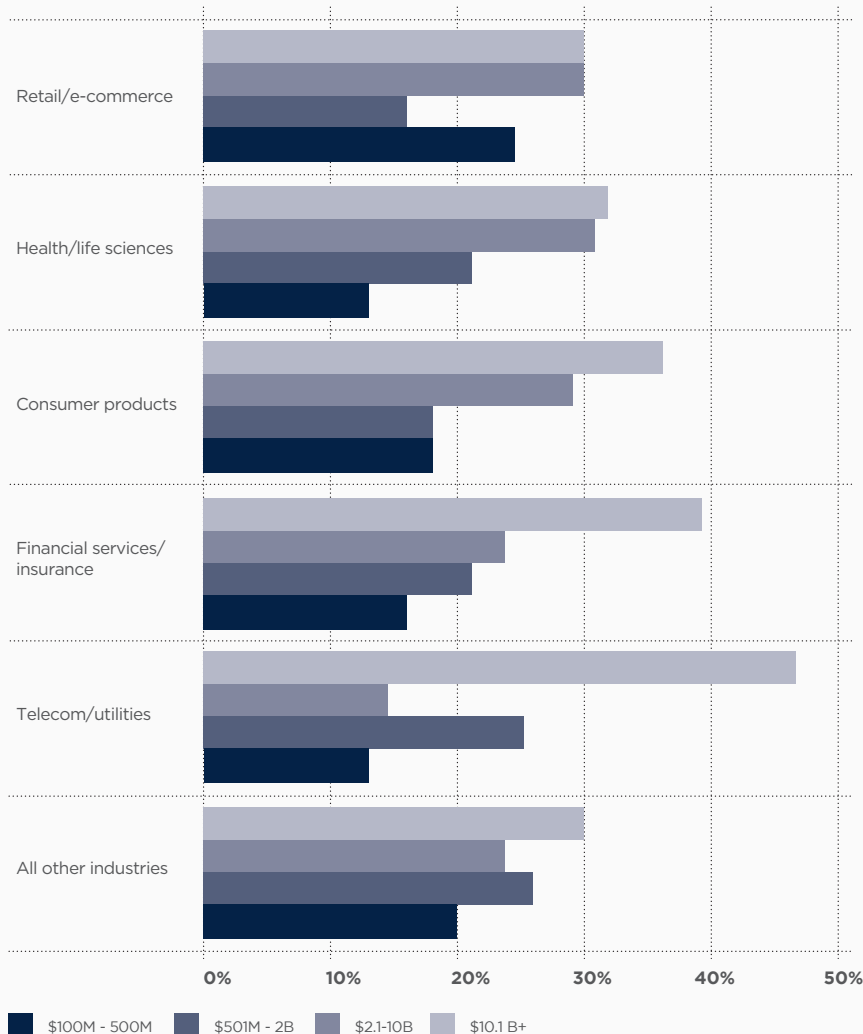
METHODOLOGY

Data Collection Methodology
Web-based survey consisting of 58 closed-ended questions.

Sample Source and Size
Sample came from several sources. All participants were invited to complete the survey via email. All lists used were deduped.

Respondent Qualifications:
All respondents work in the marketing function (or are executives with responsibility for marketing) in companies with annual revenue greater than $100M.

Dates
The survey data was collected March through May of 2013.

Blind Survey
Teradata was not named as the sponsor of the survey.

Margin of Error
The margin of error for the overall sample varies according to the base size for each question and ranges from +/- 3 percentage points to +/- 3.5 percentage points calculated at the midpoint of the 95% confidence interval.

Weighting
Data is not weighted.

Teradata is a global leader in analytic data platforms, marketing and analytic applications, and consulting services. Teradata helps organizations collect, integrate, and analyze all of their data so they can know more about their customers and business and do more of what's really important. With 10,000+ professionals in 77 countries, Teradata serves more than 2,500 customers, including the top companies across all major industries: consumer goods, financial services, healthcare, automotive, communications, travel, hospitality, and more. An ethical and future-focused company, Teradata is recognized by the business media and industry analysts for technological excellence, sustainability, and business value. Visit **teradata.com** for details.

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