Shopper Technology Institute
The primary resource for marketing, merchandising and technology executives

Big Data in Marketing:

Where We Are; Where We're Heading

Shopper Technology Institute's 2014 "Big Data in Marketing Survey" reveals awareness is high but action is still tentative.

By James Tenser

CONSUMER PRODUCTS MARKETERS are saturated in Big Data. It pours out in ever-increasing torrents from retail selling systems, marketing analytics, social media, search engines and mobile devices.

As an industry we're well aware that Big Data is important, and pretty sure we know why, but we're still figuring out how to make the most of it for the benefit of our consumers and our brands.

Brand marketers want to leverage Big Data to improve performance at retail, connect with consumers more directly and effectively, and enhance the ability to differentiate ourselves from our competition. The effort is underway:

- Nearly half (47%) are integrating new data sources to gain a better view of consumers.
- More than half (54%) are linking syndicated data with new data sources to improve promotions.
- Seven in ten (70%) have applied Big Data insights to sharpen promotion strategies.
- One in three (33%) have invested in Big Data technology, and another 17% plan to this year.

However, we are still seeking understanding about Big Data options and practices. Few companies have an enterprise Big Data strategy in place, and most are simply not ready with rationale, technology or the talent to put it to beneficial use:

- Two thirds (68%) are still determining the business case for Big Data
- Just 6% have deployed Big Data solutions in consumer marketing.
- Fewer than 10% have talent acquisition strategies that address Big Data opportunities.
- Only a third (35%) measure their Big Data program ROI

When it comes to Big Data in consumer products marketing, there's a lot of work ahead, folks.

Big Data in Marketing Survey

The findings highlighted above are excerpted from industry market research conducted in late 2014 by the Shopper Technology Institute, in conjunction with VSN Strategies. Gartner Group participated in an advisory role on survey design and interpretation of some results. The Big Data in Marketing survey reached out to executives at manufacturing firms in the food & beverage, health & beauty, and general merchandise categories.

The investigation set out to learn how far along CPG marketers are in their knowledge of Big Data and what new practices they have adopted and plan to adopt as a result. Investigation and even some innovation are happening at these companies, but it is also true that Big Data adds complexity at the same time that it puts marketing ROI under an even more powerful microscope.

As Voltaire famously stated, "Perfect is the enemy of the good." Nowhere is this truer than when it comes to efforts by CPG companies to corral and analyze Big Data.

What Makes it So Big?

Any discussion of Big Data begs a number of fundamental questions, especially what it is and what it might be good for. Definitions can vary, especially when solution vendors try to bend them to fit the limitations of their business intelligence offerings.

To be clear, it's not just conventional databases with more fields, more rows, and bigger hard drives. Neither is Big Data is subject to a kind of Moore's law (the famous 1965 observation by Moore that the number of transistors on a computer chip doubles every 2 years).

There is no equivalent when it comes to expanding data, wrote columnist Dan Woods on the *Forbes* Tech blog, "More data just means more data. In many cases data is a liability. More data means more costs for storage, for governance and having too much unorganized data may make it more difficult to find what you need. In other words more data can mean less value."[1]

Getting a handle on Big Data begins by recognizing it is defined by traits as well as sheer quantity of bytes. The experts talk in terms of Volume, Velocity, Variety, and if you're very diligent, Veracity. These parameters merit a quick review before we dive deeper into the detailed survey findings.

Volume is just what it sounds like. More data, from more sources, resulting in data tables that become too large to parse using conventional data analytics tools. Data volume is not merely growing in the present era, it is surging, which is why it's important to understand …

Velocity reflects increasing speed of new data creation and the sheer pace of analysis that demands of anyone who wants to extract insights from it. It's not a linear thing. It's a function of the expanding number of nodes in the social, mobile, location and search (SoMoLoMe) networks. The faster it grows, the faster it grows.

Variety is a large measure of the reason why Big Data moves so rapidly. Creation of unstructured data types, like text, images, audio and video, is exploding, as a result of the widening use of SoMoLoMe media by an expanding segment of the private citizenry. The result is more apps, more channels, more individuals, and larger files of varied types. Yes there's a high proportion of low-value junk mixed in, but marketers need to learn how to sift it for the valuable bits.
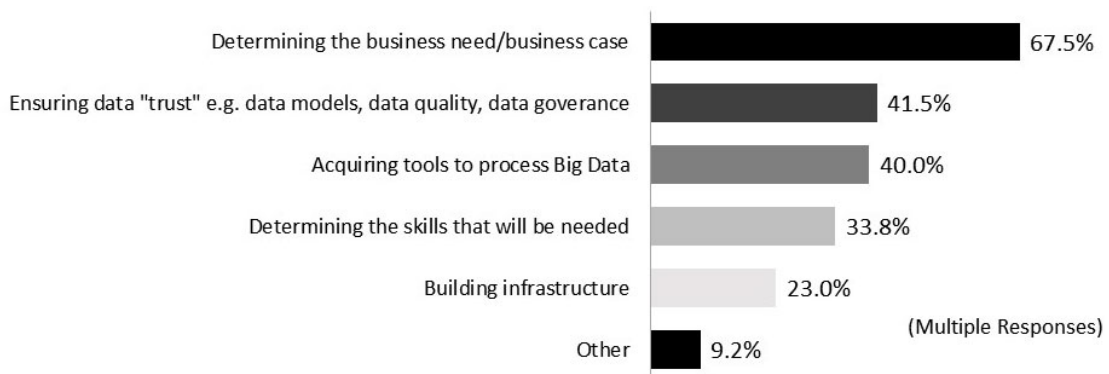
Veracity, or truth, is therefore a crucial aspect of Big Data for marketers. In order to apply the rich insight potential, they need to cultivate an ability to trust in the reality and accuracy of the data flows. What extracts of the data can be reliably applied toward better business decisions? This is an area of developing art.

Is Big Data the signifier of a golden era arriving for the retail consumer products industry? Or is it just another buzz-trend looking to gain legitimacy through best practices yet to be developed? The survey results suggest the buzz seems to have settled down a little bit of late, as companies turn their focus toward defining and tackling the work.

Big Data Status

The STI Big Data in Marketing survey reveals that CPG organizations are working diligently to get a handle on Big Data for consumer marketing. When asked what they are doing to get ready, two-thirds of respondents (68%) admitted their organizations are still working out the business case for Big Data initiatives (Fig. 1.). Four in ten are acquiring tools to enable them to process Big Data, which indicates the remainder haven't commenced that activity yet.

Fig. 1. Readiness for Big Data
What is your organization doing to get ready for Big Data for Consumer Marketing?

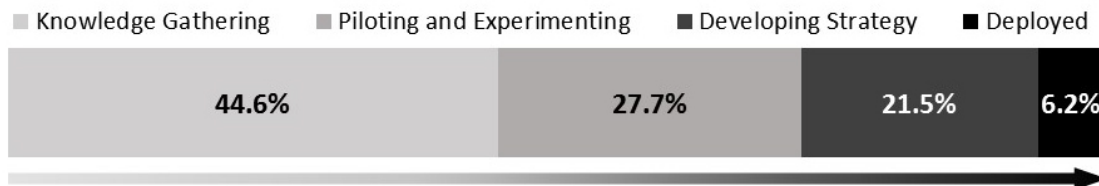| Category	Percentage
Determining the business need/business case	67.5%
Ensuring data "trust" e.g. data models, data quality, data goverance	41.5%
Acquiring tools to process Big Data	40.0%
Determining the skills that will be needed	33.8%
Building infrastructure	23.0%
Other	9.2%

(Multiple Responses)

Source: Big Data in Marketing Survey © 2014-15 Shopper Technology Institute

Referencing the subject of Big Data Veracity, 41.5% indicate they are working on ensuring data "trust", with attention to data models, data quality and data governance.

In general, respondents indicate the consumer products sector is still in the information-gathering stages (Fig 2). Asked about their organizations' level of adoption of Big Data, only 6% indicated they had reached the deployment stage, while more than 7 in 10 have yet to commence formulating strategy. However as we will see in Fig. 5, there may be some uncertainty about the meaning of "strategy" in this context.

Our survey partners at Gartner Group inform that the CPG responses to this question mirror findings from their own survey of North American IT professionals, which targeted respondents who are planning to invest in Big Data technologies. In other words, CPG companies are not lagging behind industry in general, but neither are they leading the charge.
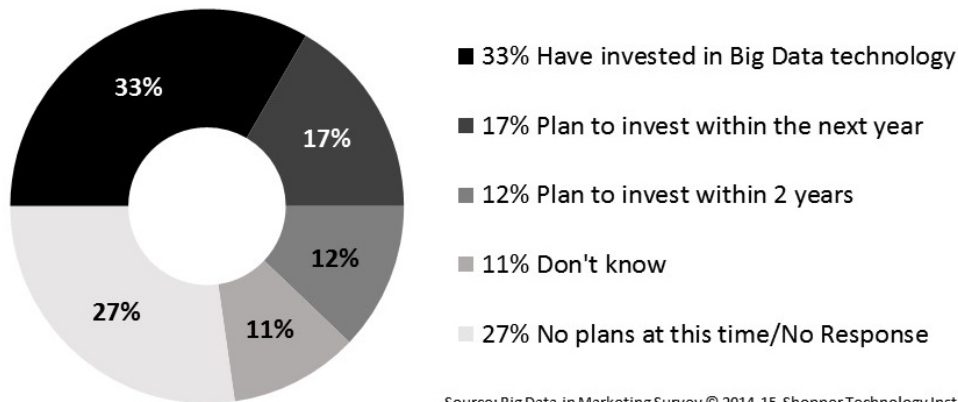
Fig. 2. Level of Adoption
Which of the following best describes your organization's stage of Big Data adoption in consumer marketing?

■ Knowledge Gathering	■ Piloting and Experimenting	■ Developing Strategy	■ Deployed
44.6%	27.7%	21.5%	6.2%

Source: Big Data in Marketing Survey © 2014-15 Shopper Technology Institute

The flow of money to the Big Data proposition is an indicator of effort underway and activity to come. A third of companies are already spending on Big Data technology, while another third say they have no plans yet (Fig. 3). Once again, the findings are "remarkably consistent" with those from Gartner's survey of IT professionals.

Fig. 3. Big Data Investment
Has your organization already invested in technology specifically designed to address the Big Data challenge?

- ■ 33% Have invested in Big Data technology
- ■ 17% Plan to invest within the next year
- ■ 12% Plan to invest within 2 years
- ■ 11% Don't know
- ■ 27% No plans at this time/No Response

Source: Big Data in Marketing Survey © 2014-15 Shopper Technology Institute

It is notable that an additional 17% have firm plans to invest within the year, which means half of the CPG firms responding have committed funds toward mastering Big Data.

Clarity about the pursuit of business benefits from Big Data is an indicator of the maturity of the organization that likely influences investment. When asked to self-rate on this, only two in ten respondents indicated their companies are "mature" or "very mature" when it comes to leveraging Big. Data (Fig. 4).

This is an instance where survey respondents were brutally honest about where they stand. While their responses reveal they know Big Data is important, they are still formulating strategy, and Big Data is far from pervasive or embedded in business processes, with rare exceptions.

Gartner informs that this finding too is consistent with other industries. In its recent survey of IT decision makers, about 50% of respondents were either in full deployment of big data or in second generation deployment. Again, those respondents were in information technology roles, where they tend to have more visibility to enterprise Big Data activities compared with brand marketers.

Fig. 4. Big Data Maturity

Which statement best describes the maturity level of your organization when it comes to leveraging Big Data to achieve business benefits?

■ IMMATURE	■ BASELINE	■ DEVELOPING	■ MATURE	■ VERY MATURE
22.6%	32.1%	24.5%	13.2%	7.5%
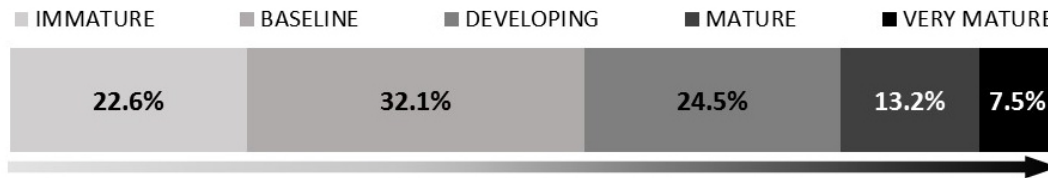
IMMATURE - The organization is just beginning to assess how to best leverage Big Data going forward
BASELINE - The organization is establishing enterprise information management processes for Big Data, but has not yet implemented a formal strategy
DEVELOPING - Enterprise Big Data is readily available to select business functions, but not yet leveraged across functions
MATURE - Enterprise Big Data is readily available across business functions but currently embedded only in select business processes and analytics
VERY MATURE - Enterprise Big Data is pervasive and embedded in business processes and analytics across all major business processes
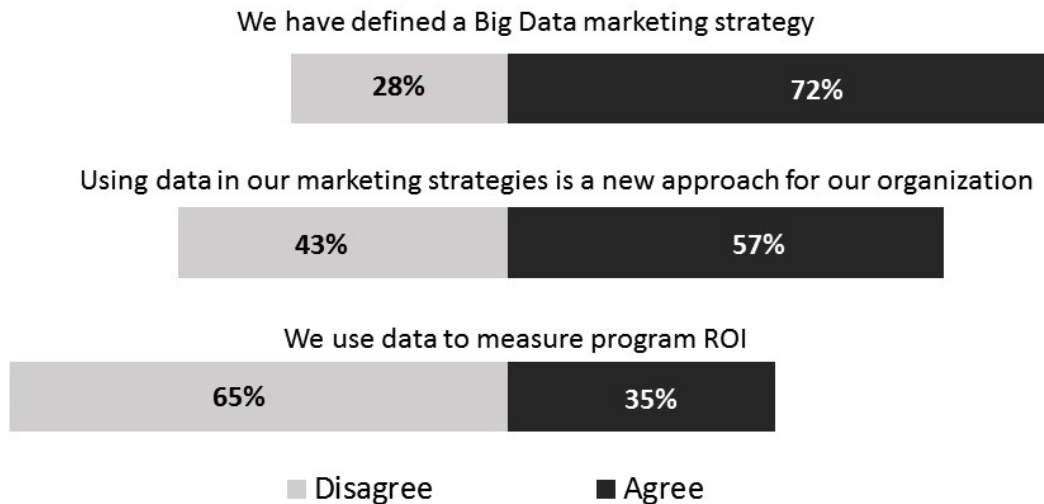
Source: Big Data in Marketing Survey © 2014-15 Shopper Technology Institute

These figures suggest CPG companies who responded were being frank about where they now stand. Equally interesting are the 20% not visible on this chart who didn't respond at all to this question – which sends a clear message that there is a lot of work to do at many CPG companies.

The conversation about strategy poses an apparent inconsistency. In Fig. 5, 72% of respondents indicate that they have a Big Data marketing strategy defined, compared with the 28% who said they were at the strategy stage or beyond when asked to self-rate their adoption in Fig. 2. The two questions were framed differently, of course, and respondents may consider Big Data strategy at either the departmental or enterprise level.

Without stretching our interpretation of these differences too far, it's notable that more than half of responding CPG companies (57%) agree that using data in marketing strategies is a relatively new approach. Just over a third say they are using data to measure return on investment.

Fig. 5. Big Data Marketing Activities
Do you agree or disagree with the following statements?

We have defined a Big Data marketing strategy

| 28% | 72% |

Using data in our marketing strategies is a new approach for our organization

| 43% | 57% |

We use data to measure program ROI

| 65% | 35% |

■ Disagree   ■ Agree

Source: Big Data in Marketing Survey © 2014-15 Shopper Technology Institute

Brand marketers understand Big Data is important and are collecting it. They are addressing and formulating strategy, but their activities are confined to selective tactics, as we'll see in the next section. The inability to measure program ROI may be a significant inhibitor to moving ahead more aggressively, but at this early stage, it is a hopeful sign that 35% are already able to understand what they are getting from their Big Data investment.
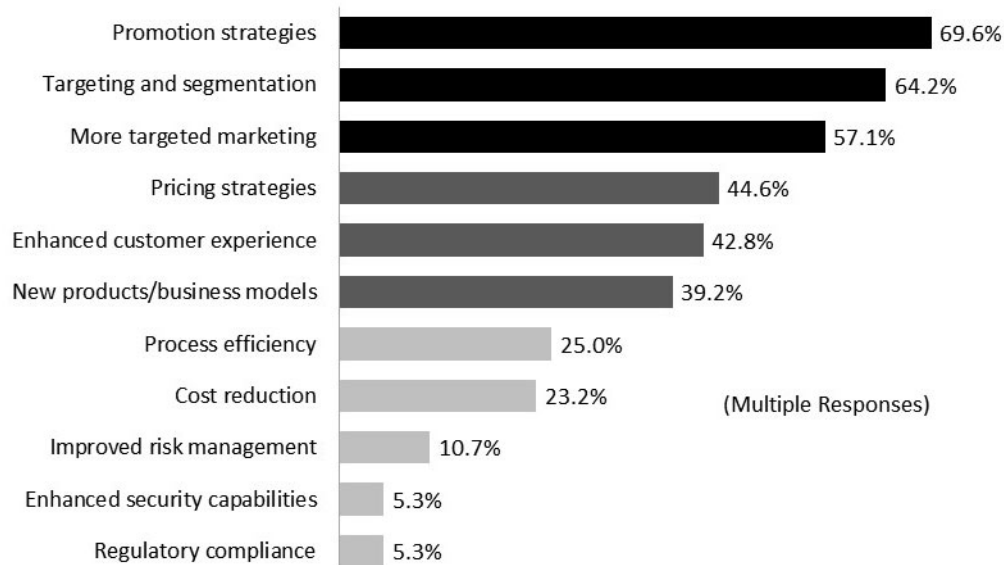
Present Activities

Even while they continue to define and refine strategy for Big Data, CPG marketers are forging ahead on Big Data-enabled activities and they are mining Big Data for insights that can guide marketing tactics. Naturally, as this survey focused on product marketing professionals, their responses reveal a heavy focus on promotion and targeting.

They are folding new types of data into the marketing equation, including, but not limited to those derived from social media. At the same time, they are struggling to derive value from these new activities and working hard to master new types of data and new analytic techniques. Most report success at finding new consumer insights as a result of Big Data activities, but other anticipated benefits have been slow to arrive.

When asked in what business activities they have applied Big Data insights, respondents revealed a high degree of focus on promotion strategies, targeting and segmentation (Fig. 6). At the top of the list, seven in ten indicated they have applied Big Data insights to their promotion strategies, and a majority cited "targeting and segmentation" and "more targeted marketing" as areas of activity.

Nearly four in ten respondents indicated that Big Data had been used to support new product or business model development. Contrast that with the response in Fig. 11, where just 4.5% said product development was most likely to benefit from Big Data. It seems experimentation is underway in many brand marketing disciplines, but opinions are already being formed about which pursuits are likely to be fruitful.

Fig. 6. Big Data Insights
For what types of activities have you applied insights generated by Big Data?

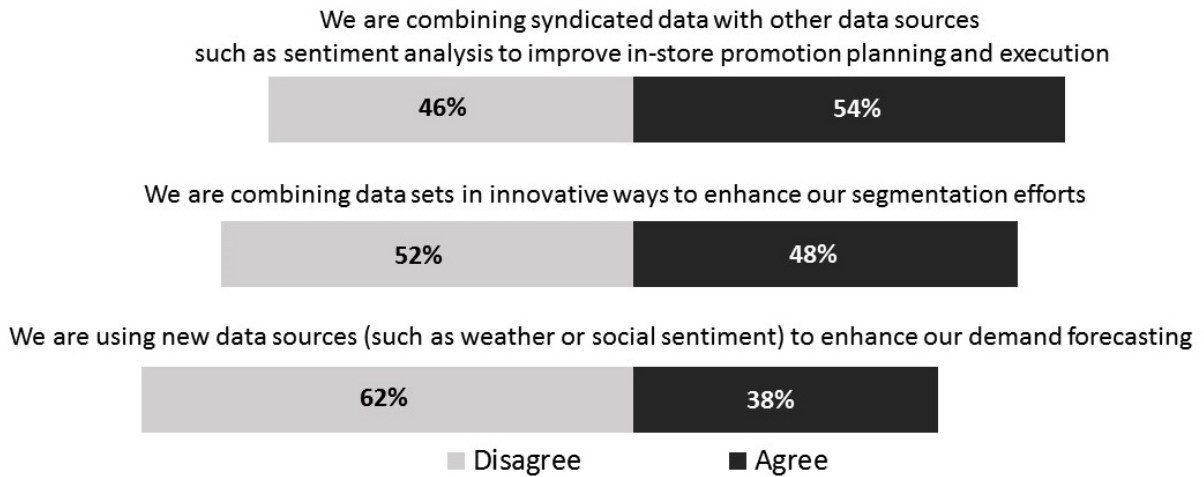| Activity	Percentage
Promotion strategies	69.6%
Targeting and segmentation	64.2%
More targeted marketing	57.1%
Pricing strategies	44.6%
Enhanced customer experience	42.8%
New products/business models	39.2%
Process efficiency	25.0%
Cost reduction	23.2%
Improved risk management	10.7%
Enhanced security capabilities	5.3%
Regulatory compliance	5.3%

(Multiple Responses)

Source: Big Data in Marketing Survey © 2014-15 Shopper Technology Institute

As in the question about Big Data analytics (Fig. 7), the top level of responses are really about driving demand and ensuring optimized activity at retail. Compared to the Gartner survey, respondents placed more priority on enhancing the customer experience, process efficiencies and new products/new business models. Again, the survey responses are partly reflective of the roles responding to the survey.

CPG companies are moving ahead with more sophisticated kinds of data analysis, with more than half (54%) combining new forms of data with traditional syndicated data sources in an effort to improve promotion planning and execution in stores (Fig. 7).

Social sentiment analysis (sometimes also called opinion mining) uses natural language processing, text analysis and computational linguistics to identify and extract subjective information from content. When it is applied to social media content, it can enable marketers to "take the temperature" of consumer opinion about topics of interest, including but not limited to branded messages.

Fig. 7. Big Data Analytics Activities
Do you agree or disagree with the following statements?

We are combining syndicated data with other data sources
such as sentiment analysis to improve in-store promotion planning and execution

46%	54%

We are combining data sets in innovative ways to enhance our segmentation efforts

52%	48%

We are using new data sources (such as weather or social sentiment) to enhance our demand forecasting
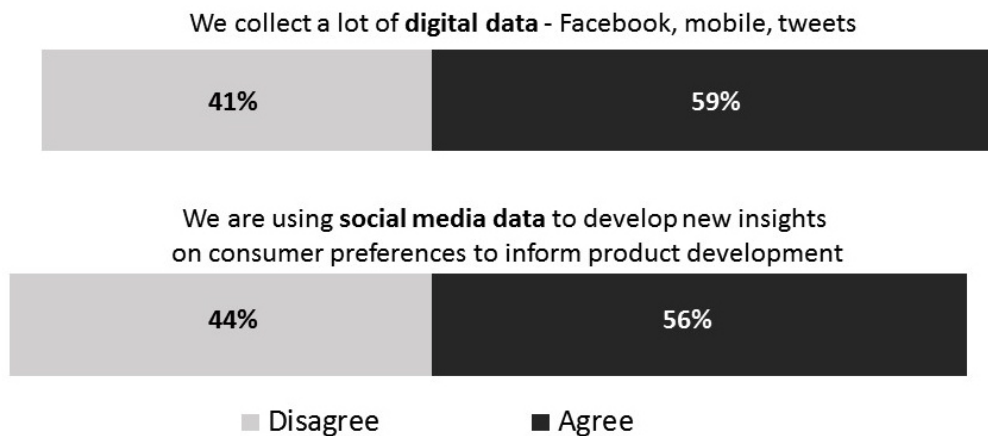
62%	38%

☐ Disagree   ■ Agree

Source: Big Data in Marketing Survey © 2014-15 Shopper Technology Institute

CPG companies have been slower to put new data types to work to enhance demand forecasting (38%). Adding insights from complex data sources like weather or social sentiment may serve to make an already difficult discipline a bit harder. On the other hand, nearly four in ten companies have taken on the challenge (Fig. 7). It may be worth the effort: better forecasts have the potential to inform store-level planning and improve targeting.

Turning more specifically to the use of social and mobile data, CPG companies are doing a lot of collecting and they are putting the insights to work on product development (Fig. 8).

Fig. 8. Social Media Activities
Do you agree or disagree with the following statements?

We collect a lot of **digital data** - Facebook, mobile, tweets

41%	59%

We are using **social media data** to develop new insights
on consumer preferences to inform product development

44%	56%

☐ Disagree   ■ Agree

Source: Big Data in Marketing Survey © 2014-15 Shopper Technology Institute

Obtaining data is not the same as putting it to work, of course, but the ready availability of content from Facebook, twitter, Pinterest and other popular applications may make it impossible to turn away. If volume is an indicator of potential value, it may even be irresponsible to ignore.

It's worth pointing out that a majority of respondents (56%) say they are using social media insights to inform product development. This touches one of the interesting sub-themes of this research, as we noted previously that just 4.5% of respondents identified product development as an area of high potential for Big Data (Fig. 11). Social media are primary and fast-growing sources of Big Data, but perhaps they are not interchangeable in the minds of CPG marketers.
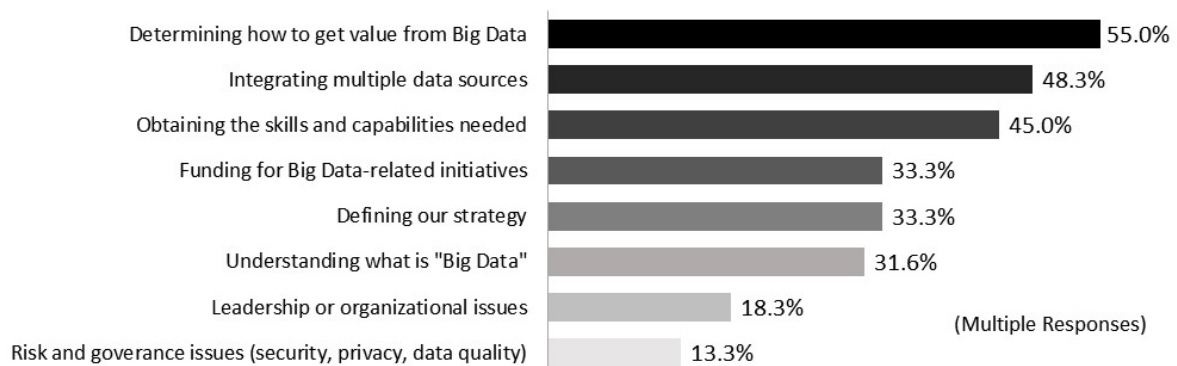
Big Data is hard. It presents a host of challenges and hurdles for organizations. More than half (55%) are uncertain how to derive value from Big Data, while nearly half (48%) are wrestling with integration of multiple data sources (Fig. 9).

Compared with Gartner's research of IT professionals, the CPG respondents are consistent in identifying the top challenge, determining how to extract value from Big Data, cited by 55%. CPG respondents rate the challenges of obtaining skills and capabilities and data integration as larger challenges than the overall Gartner respondents. This may be a function of the sheer number of data sources that a CPG has access to, both from retailers and other 3rd party sources.

Nearly a third identified "Understanding what is Big Data" among their top three challenges. This is 10 points higher compared with the similar Gartner survey finding. We may take this as an indicator that there is still much education to be done among marketing professionals.

Fig. 9. Big Data Challenges
What are your organization's top three hurdles or challenges with Big Data?

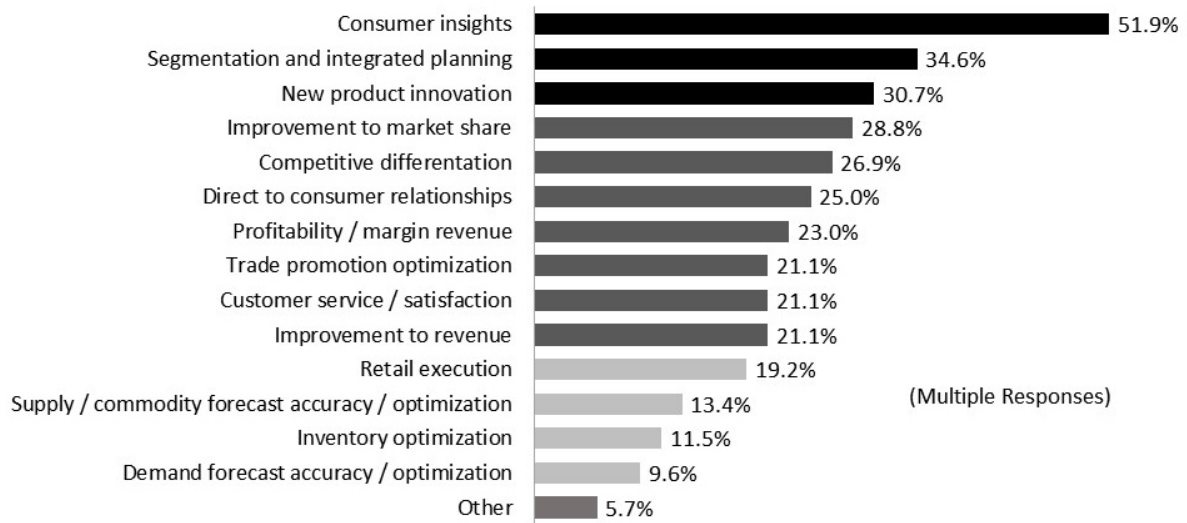| Challenge	Percentage
Determining how to get value from Big Data	55.0%
Integrating multiple data sources	48.3%
Obtaining the skills and capabilities needed	45.0%
Funding for Big Data-related initiatives	33.3%
Defining our strategy	33.3%
Understanding what is "Big Data"	31.6%
Leadership or organizational issues	18.3%
Risk and goverance issues (security, privacy, data quality)	13.3%

(Multiple Responses)

Source: Big Data in Marketing Survey © 2014-15 Shopper Technology Institute

The Big Data story is not all about difficulty, however. CPG companies are already scoring benefits across a host of dimensions. When asked to identify their most significant business benefits from Big Data (Fig. 10), 52% cited consumer insights, by far the largest consensus, followed by segmentation and integrated planning, cited by 35%.

More than one in five respondents (23%) indicated that their organizations have seen benefits to profitability/margin revenue from the use of Big Data. This of course implies these companies have an ability to measure ROI on some level. Is this response related to their activities with social media integration?

It is interesting that new product innovation scores high among the 14 benefit areas identified in this question. Respondents have already indicated some progress in using social media data to support new product innovation (Fig. 8), but they also say product development has a low likelihood of benefitting from the use of Big Data (Fig. 11).

Fig. 10. Big Data Benefits
What are the three most significant business benefits your organization has derived from Big Data?

Benefit	Percent
Consumer insights	51.9%
Segmentation and integrated planning	34.6%
New product innovation	30.7%
Improvement to market share	28.8%
Competitive differentation	26.9%
Direct to consumer relationships	25.0%
Profitability / margin revenue	23.0%
Trade promotion optimization	21.1%
Customer service / satisfaction	21.1%
Improvement to revenue	21.1%
Retail execution	19.2%
Supply / commodity forecast accuracy / optimization	13.4%
Inventory optimization	11.5%
Demand forecast accuracy / optimization	9.6%
Other	5.7%

(Multiple Responses)

Source: Big Data in Marketing Survey © 2014-15 Shopper Technology Institute

Stepping back for a broad look at the benefits ranking in Fig. 10, the top 3 choices – consumer insights, segmentation and integrated planning, and new product innovation – all share the element of driving differentiation. This makes sense in a crowded market place with a great many choices. Operational benefits like demand forecasting, inventory optimization and retail execution fell low on the list of importance – not surprising from a group with a brand marketing orientation.
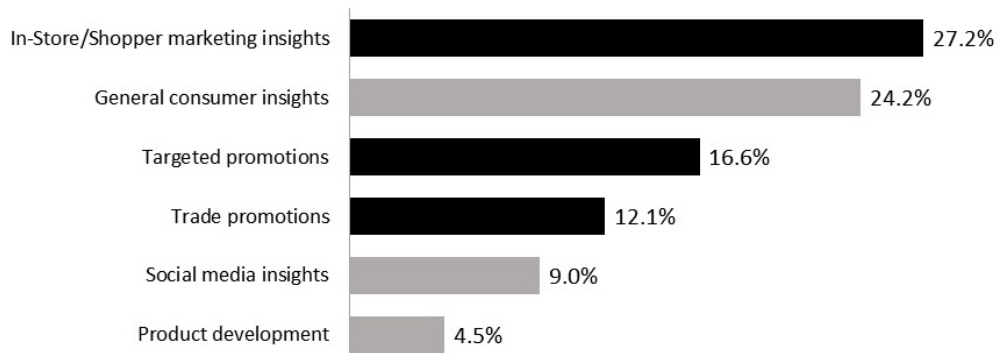
Big Data Priorities

It is evident that many CPG marketers have embarked on a journey to make the most of Big Data opportunities. Most professionals naturally gravitate toward the activities that are aligned with existing business priorities, so it is no surprise to see a focus on the retail environment.

In-Store and Shopper Marketing Insights are seen as the greatest area of benefit from the use of Big Data, selected by 27% in a forced-choice survey question (Fig. 11). This expectation is followed closely by General Consumer Insights, selected by 24%.

Our collaborators at Gartner Group observed, looking at these numbers, that fully 55.9% of the uses for big data (black bars) are focused on the retail environment. This underscores the importance of using data and analytics to make trade promotions and other shopper marketing activities more efficient, or simply being able to measure performance.

Fig. 11. Marketing Activities
Of the following, which is MOST likely to benefit from the use of Big Data?

Activity	Percentage
In-Store/Shopper marketing insights	27.2%
General consumer insights	24.2%
Targeted promotions	16.6%
Trade promotions	12.1%
Social media insights	9.0%
Product development	4.5%

Source: Big Data in Marketing Survey © 2014-15 Shopper Technology Institute

This in-store focus is underscored further in Fig. 12, where seven in ten respondents agree on the importance of Big Data from in-store behavior to the pursuit of their marketing strategy.

Fig. 12. In-Store Data
Do you agree or disagree with the following statement?

Big Data from **in-store behavior** are important to our organization's marketing strategy

Disagree	Agree
32%	68%
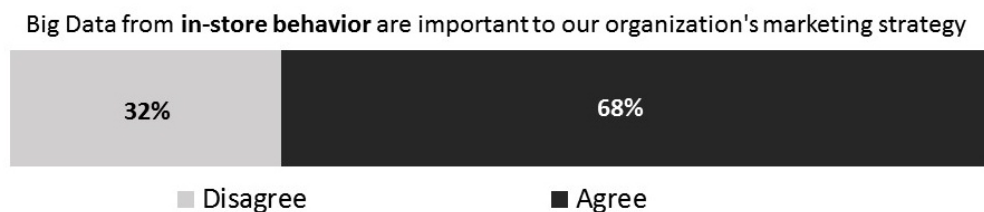
Source: Big Data in Marketing Survey © 2014-15 Shopper Technology Institute

Respondents were asked to rate their priority of several strategic options for Big Data over coming year (Fig. 13). They responded to the following six statements using a numerical (Likert) scale:
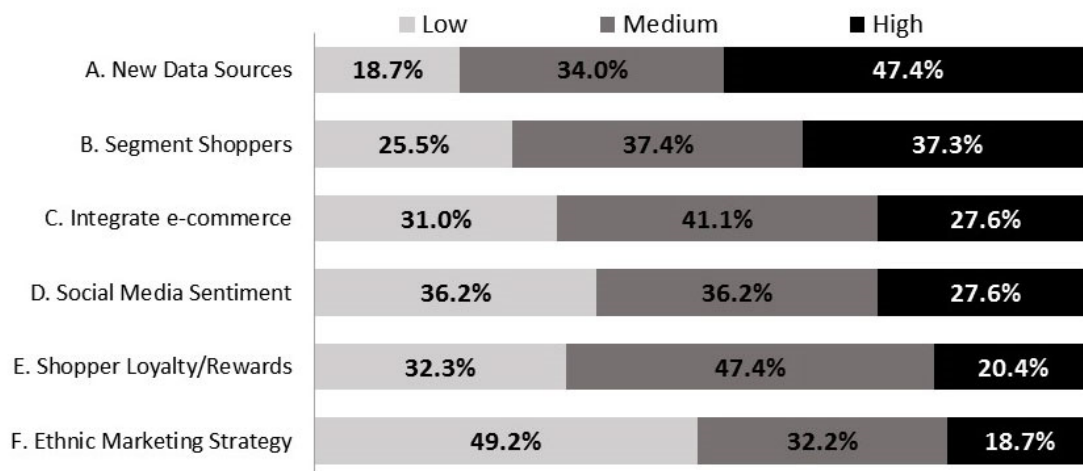
A. Continuously integrate **new data sources** to get a better snapshot of the consumer
B. Purchase improved analytics capabilities to better **segment shoppers**
C. **Integrate e-commerce** sales into our corporate data warehouse for better sales insights

D. Integrate **social media sentiment** into our internal data warehouse

E. Deploy a Big Data strategy to address **shopper loyalty/rewards**

F. Deploy a Big Data strategy to inform an **ethnic marketing strategy**

Analysis of the responses reveal it's mainly about the data, with the integration of new sources rated highly by 48% of CPG marketers, followed closely by shopper segmentation, highly rated by 37%.

The response distribution was fairly well divided regarding Shopper Loyalty/Rewards, possibly reflecting the divide in the retail world, where some large accounts have frequent shopper card programs and others do not. Ethnic marketing landed at the bottom of the priority list for Big Data – we may surmise that more conventional demographic tools seem sufficient to our respondent base.

Fig. 13. Near Term Plans Summary
Rate your organization's strategic priority for
Big Data marketing activities over the next 12 months?

	Low	Medium	High
A. New Data Sources	18.7%	34.0%	47.4%
B. Segment Shoppers	25.5%	37.4%	37.3%
C. Integrate e-commerce	31.0%	41.1%	27.6%
D. Social Media Sentiment	36.2%	36.2%	27.6%
E. Shopper Loyalty/Rewards	32.3%	47.4%	20.4%
F. Ethnic Marketing Strategy	49.2%	32.2%	18.7%

Source: Big Data in Marketing Survey © 2014-15 Shopper Technology Institute
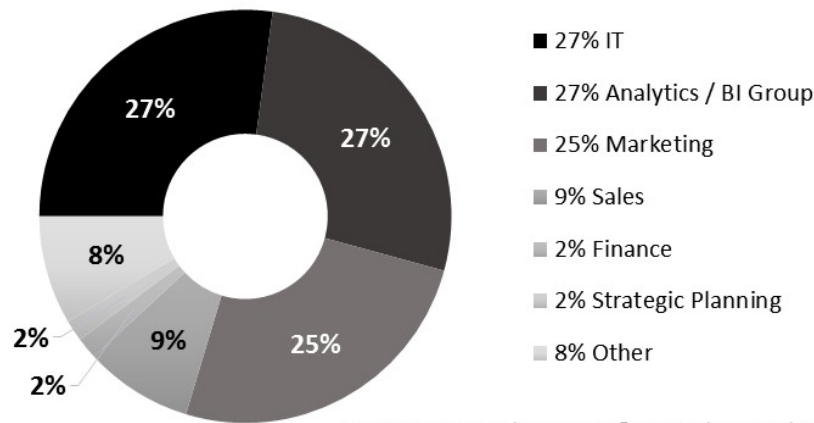
Roles in the Organization

As much as Big Data innovation is about *what* gets done, it is also about *who* is doing it. Respondents were asked what departments in their organizations "own" or control enterprise Big Data, as well as which functional areas put it to use. The heaviest users, it seems are not always the same people in charge of Big Data resources.

When it comes to Big Data ownership, we find an equal divide between IT (27%), Business Intelligence (27%) and Marketing (25%) functional areas (Fig. 14). Sales is next but well behind, at 8%, a finding that may conflict with its position as a top-three user of Big Data in Fig. 15. Our study partners at Gartner called this an "interesting split" which implies that there is no one perceived owner of big data. For now at least, it is relegated to functional silos.

Three additional options in this question – R&D/Innovation, Manufacturing and Supply Chain – had zero responses and are not reflected in the chart. This may reflect an innate bias on the part of CPG marketers about Big Data as a resource for marketing, not operations.

Fig. 14. Big Data Ownership
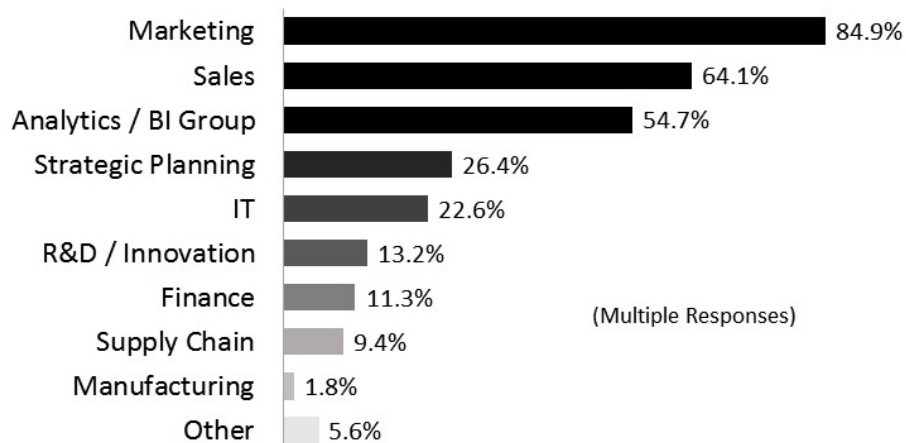### Which department within your organization is the PRIMARY OWNER of your company's enterprise Big Data?

- ■ 27% IT
- ■ 27% Analytics / BI Group
- ■ 25% Marketing
- ■ 9% Sales
- ■ 2% Finance
- ■ 2% Strategic Planning
- ■ 8% Other

Source: Big Data in Marketing Survey © 2014-15 Shopper Technology Institute

When it comes to putting Big Data to beneficial use, owners are not necessarily the biggest users. Asked to identify the top three users of Big Data in their organizations, marketing led the way with selection by 85% of respondents (Fig. 15). Sales rose almost to the top, with 64%, followed by Analytics/BI.

Fig. 15. Top Users
Which departments represent the TOP 3 USERS of Big Data in your organization?

Department	Percentage
Marketing	84.9%
Sales	64.1%
Analytics / BI Group	54.7%
Strategic Planning	26.4%
IT	22.6%
R&D / Innovation	13.2%
Finance	11.3%
Supply Chain	9.4%
Manufacturing	1.8%
Other	5.6%

(Multiple Responses)

Source: Big Data in Marketing Survey © 2014-15 Shopper Technology Institute

It is remarkable that while IT controls Big Data in 27% of companies (Fig. 14), they lag in using it. Here again, functional and operational areas of the business are viewed as less likely to be major users of Big Data. This make sense, partly as a function of the roles of respondents.

So who selects and purchases Big Data solutions in CPG marketing organizations? There is some disparity between who *should* and who *does* (Fig. 16). Nearly half (48%) say control SHOULD reside with a cross-functional team with representation from Marketing, senior management and IT, but only 32% report that is ACTUALLY the case in their companies.

The IT department exerts considerable influence at about one in five organizations, either as an approver of Big Data requests from marketing (11%) or with absolute final say (9%). Just 11% of marketing departments choose and authorize their own Big Data applications, and only 3% believe IT should have the final say.

These results generally corroborate findings from the Gartner research, particularly with regard to the strong support for cross-functional teams. In its survey, Gartner found cross functional teams ACTUALLY control Big Data in 42% of organizations.

Fig. 16. Applications Control
Who SHOULD control the selection, purchase, and management of Big Data marketing applications? In your organization, who ACTUALLY controls these?

Source: Big Data in Marketing Survey © 2014-15 Shopper Technology Institute
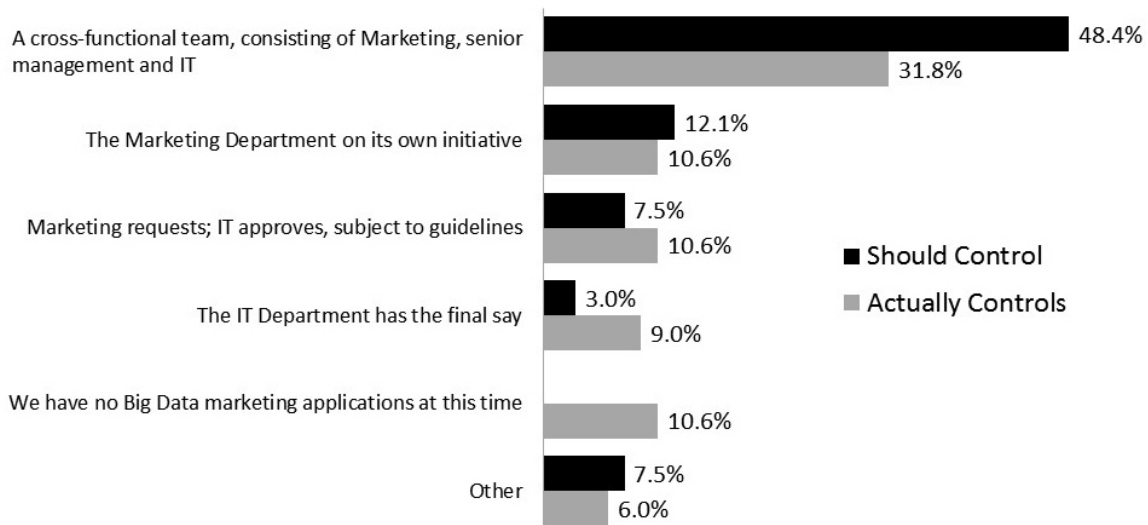
Most organizations responding to the Big Data in Marketing survey (57%) have established dedicated analytics departments with specific responsibility for managing Big Data (Fig. 17). This result aligns closely with the finding in Fig. 15, where 55% identify their Analytics/BI group as a top-three user of Big Data within their organization.

Fig. 17. Analytics Team
Do you agree or disagree with the following statement?

We have a **dedicated analytics department** to manage big data

43%	57%

◼ Disagree   ◼ Agree
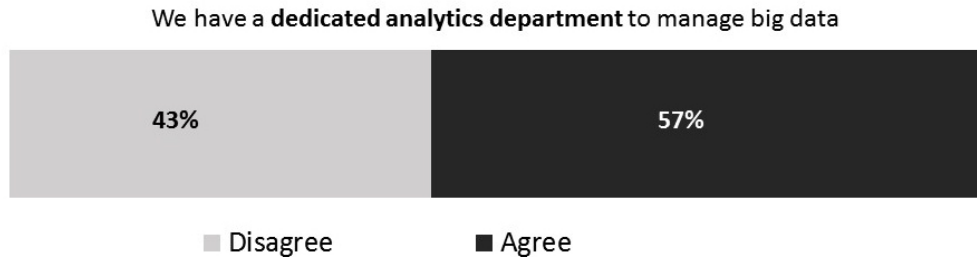
Source: Big Data in Marketing Survey © 2014-15 Shopper Technology Institute

While activity is building rapidly, Big Data adoption is still in the early stages and the strategic and organizational changes it seems to require have lagged somewhat. The most significant adjustments so far seem to be related to the go-to-market approach, with some changes to the way marketing teams are organized.

Respondents were asked to rate the degree of adjustment their organizations have made in several areas of business practice to accommodate Big Data (Fig. 18). They responded to the following four statements using a numerical (Likert) scale:

A. We have adjusted our **go-to-market approach** with retailers to take advantage of Big Data opportunities.
B. We have adjusted our **marketing team structure** to take advantage of market opportunities created by Big Data-related insights.
C. We have adjusted our **talent acquisition strategies** to address market opportunities created by Big Data-related analytics and insights.
D. We have adjusted our **product development team structure** to take advantage of market opportunities created by Big Data-related insights.
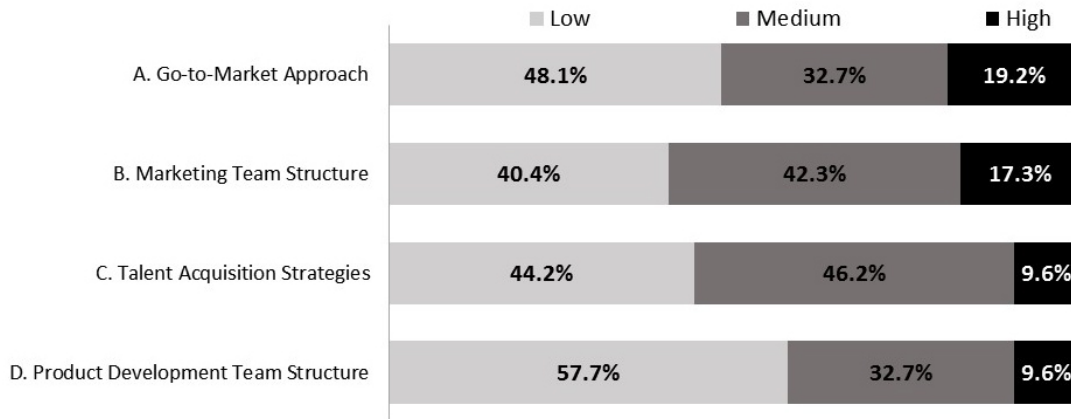
Any discussion of changes in the go-to-market approach with retailers must be relatively conceptual, even abstract, compared with the other three statements in this grouping, which focus on human factors within the CPG organization. In all these areas, there seems to be a divide between the very low and handful of very high ratings.

Nearly half of respondents (48%) said their organizations have made a low degree of adjustment to the way they go to market using Big Data. At the same time it had the largest proportion of high responses, at 19%.

Changes in the marketing team are nearly as polarized, with just 17% indicating a high degree of adjustment so far. Hiring practices have been only slightly impacted, while product development has barely moved the needle.

Fig. 18. Big Data Adoption

Please indicate the degree of adjustment your organization has made to the following with respect to Big Data:

	Low	Medium	High
A. Go-to-Market Approach	48.1%	32.7%	19.2%
B. Marketing Team Structure	40.4%	42.3%	17.3%
C. Talent Acquisition Strategies	44.2%	46.2%	9.6%
D. Product Development Team Structure	57.7%	32.7%	9.6%

Source: Big Data in Marketing Survey © 2014-15 Shopper Technology Institute

Conclusions

The survey results overall indicate there is still some lack of consensus on priorities and practices when it comes to Big Data in CPG marketing organizations. Activity is vigorous, spending is ramping up, new data is rolling in, and insights are beginning to flow, but organizations are still learning how to accommodate and prioritize Big Data skill sets and find the talent who can turn insights into beneficial actions with provable ROI.

Some other key takeaways from this research:

- CPG companies are well aware that Big Data is important, now and as a future priority.
- Major goals include using Big Data to improve performance at retail, connect with consumers more directly and effectively, and enhance their ability to differentiate themselves from the competition.
- Organizations are still researching their options and possibilities, only a minority have an enterprise big data strategy, and very few are ready with the needed talent or technology.
- Big Data influence on product development is still in its nascent stages, from the perspectives of both the application of insights and adjustments to the organization.

While still very much a work in progress, CPG companies are moving beyond fundamental issues about what Big Data is and what it's good for. They have made commitments of sweat and capital to unravel Big Data's potential and put it to work. Much of this is done on faith and an expectation of future success, since the ability to evaluate the ROI on Big Data activities is not well-developed in many organizations.

Taken together, the findings of the Big Data in Marketing survey signal continuing progress and a can-do outlook on the part of brand marketers.

_____

[This chart is optional. I think the description on the top of P.2 is sufficient.]

Fig. 19. Respondents Profile

Company Type	
Food/beverage manufacturer	39.3%
HBC manufacturer	10.6%
General merchandise manufacturer	7.5%
Other	15.1%
No Responses	27.2%

Respondent Titles	
Assistant or Administrator	1.5%
Manager	28.7%
Director	15.1%
Vice President	7.5%
General Manager/President	9.0%
Data Analyst	9.0%
Other	1.5%
No Responses	27.2%

Source: Big Data in Marketing Survey © 2014-15 Shopper Technology Institute

_____

[1] Woods, Dan, "How To Create A Moore's Law For Data" Dec 12, 2013,
http://www.forbes.com/sites/danwoods/2013/12/12/how-to-create-a-moores-law-for-data/