With all the talk of data in advertising and marketing circles today, you might be tempted to assume that the discipline is just emerging; that it’s a product of our digitally-centric times, no doubt the result of a breakthrough revelation—“Eureka! We can learn from information, and then use that insight to make better marketing decisions!”—hatched right around the time that “omnichannel” and “programmatic” emerged to round out a frenzied three-way Battle of Buzzwords.

The truth, of course, is far different. The origins of what we now think of as “data-driven marketing” wind back hundreds of years, quite literally to the very first subscription magazines and mail-order catalogs. The capture of consumer data in support of those media substantiated the growth of an entire discipline—direct marketing—that generates billions of dollars in annual economic activity in the United States, having laid much of the groundwork for the practice and principle that support the emerging digital economy.

History lessons aside, though, the real power of consumer data is not linked to its past. It’s vested in its future potential, offering the opportunity for advertisers, marketers and media providers to drive more impactful messaging, eliminate wasteful spending, optimize the development of new products and improve the quality and character of the customer experience. And, oh, maybe just unlock trillions of dollars in new value by opening doors to untapped markets and consumer audiences.

To a great extent, that’s the opportunity that’s really inherent in “data.” It’s why the marketing community roars with buzz when powerful new datasets hit the market. Why technology companies and investors spent billions of dollars last year on acquisitions and product development efforts aimed at building bigger and better information infrastructure. Why marketers of virtually all sizes are aggressively moving to connect the dots of disparate traditional and digital data feeds, leveraging platforms and processes (like DMPs and onboarding solutions) to build a comprehensive view of their addressable audiences.

What do these efforts have in common? They all seek to rewrite traditional marketing paradigms (some of them with centuries of precedent behind them) through the deployment of data. And they all require the thoughtful deployment of technology as the engine that makes it happen.

No doubt, many marketers can cite chapter and verse of the “data” story. But to many, articulating a similarly actionable vision for technology—how it’s to be used, where it should be developed, how it’s expected to evolve over time—is something that represents a far more daunting challenge. Our hope is that this white paper helps advance the industry’s understanding, and resolution, of those very fundamental questions. Tackling the awesome future potential of consumer data, after all, will require nothing less.

Jonathan C. Margulies
Managing Director, Winterberry Group
jmargulies@winterberrygroup.com
ACKNOWLEDGEMENTS

This white paper would not have been possible without the significant contributions of more than 50 executive-level thought leaders—including contributors, sponsors and reviewers representing all segments of the advertising, marketing, media and technology industries. In particular, Winterberry Group is grateful to our research partner, the Interactive Advertising Bureau, as well as the following sponsors for their generous support of this research initiative:

Additionally, we extend our deepest appreciation to the marketers, publishers, technology developers and service providers who contributed their time, insights and enthusiasm in support of our research. Though their individual names are not mentioned in this paper, they represent some of the most respected and innovative companies in the data-driven marketing and media world—and include Allstate, AKQA, Assurant Health, eBay, Epsilon, Foursquare, Havas Media, IXI Services (a division of Equifax), Kum & Go, Marriott, MediaLink, Scripps Networks Interactive, Sq1, Starwood Hotels and Resorts, Zoro Tools, and many others.

NOTICE

This report contains brief, selected information and analysis pertaining to the advertising, marketing, media and technology industries and has been prepared by Winterberry Group LLC in partnership with the Interactive Advertising Bureau. It does not purport to be all-inclusive or to contain all of the information that a prospective manager, investor or lender may require. Projections and opinions in this report have been prepared based on information provided by third parties. Neither Winterberry Group, the Interactive Advertising Bureau, nor their respective sponsors make any representations or assurances that this information is complete or completely accurate, as it relies on self-reported data from industry leaders—including advertisers, marketing service providers, publishers, technology developers and agencies. Neither Winterberry Group, the Interactive Advertising Bureau (nor any of their officers, employees, representatives or controlling persons) make any representation as to the accuracy or completeness of this report or any of its contents, nor shall any of the forgoing have any liability resulting from the use of the information contained herein or otherwise supplied.
Data and technology. Together, they’re upending the worlds of advertising and marketing. No longer just the province of the direct marketer (and recognized as the linchpin of the burgeoning “programmatic marketing” practice), consumer data is growing to support programs that span virtually all digital and traditional media. Likewise, a frenetic pace of new investment—978 deals were completed in the U.S. marketing technology sector in 2014, according to investment bank Petsky Prunier LLC, representing a total of $19.4 billion in aggregate value—is driving unprecedented innovation in the tools used to activate those precious information resources.

From afar, the new mandate to marketers is clear: Stay on top of this tide of technological change, or risk losing ground to more nimble competitors.

Closer to the ground, though, today’s technology landscape is dauntingly complex. While the growing volume and velocity of addressable data challenge marketers to simply keep up the pace, supplier consolidation and the seemingly continuous emergence of disruptive new tools are changing the face of the industry around them—confronting marketers, publishers, agencies (and even technology companies themselves) with a series of stark strategic alternatives:

*Do we build bespoke systems to address objectives that are specific to our business? Assemble customized “stacks” of neutral third-party tools? Or turn toward solutions that purport to be integrated—the “Clouds” and “Suites” being aggressively marketed by their global parent companies—with an eye to managing complex programs through a single interface?*

Today, all around the world, enterprises are experimenting aggressively with permutations of all three approaches. While it’s still too early to proclaim any one a universal “best practice,” two clear truths have already emerged:

- When it comes to technology, no single “one-size-fits-all” solution can address every marketer’s need.

- And capitalizing on data’s vast inherent value requires more than just a casual assessment of those tools that power its utilization. Rather, it calls on users to rigorously map the roles and contributions of various potentially interconnected platforms—to become masters of the new domain of “data technology.”

This white paper seeks to clarify how marketers are reconciling those questions as they seek to advance their utilization of consumer data technology used to support advertising and marketing functions. Compiled through an intensive executive-level outreach effort, it will demonstrate that the embrace of data technology represents a transformative development for both marketers and enterprise technologists alike. Specifically, it will show:
While marketers have moved to embrace a wide range of emergent advertising and marketing technologies over the past decade, their most substantial efforts have been reserved for those that aim principally to harness and deploy customer data.

The first generation of enterprise-class digital data technology was adopted with an eye on powering programmatic marketing, primarily through the lens of open-market real-time bidding. But looking down the road, marketers say the still-unrealized potential of cross-channel integration—“programmatic everywhere”—is likely to define their highest-priority use cases.

On average, enterprise marketers today are leveraging upwards of a dozen distinct toolsets to support their aggregation, onboarding, management and deployment of customer data—with a small (but not insignificant) subset working with more than 30 tools on a regular basis.

The earliest deployments of enterprise data technology platforms were driven by an overriding need to support pilot marketing use cases and fill glaring gaps with respect to reporting and measurement—no matter how well situated those tools may have been to address long-term need.

Looking down the road, marketers are aiming to integrate various toolsets through the common conduit of data in order to support a vastly expanded array of use cases and feed continuous growth of their audience engagement efforts. (And they expect all their toolsets will support comprehensive measurement and reporting).

When considering the “integrated or independent?” dilemma, marketers are split down the middle—with approximately equal numbers favoring bundled and point solution approaches, respectively—though the preponderance say they’re driven more by a desire to support best-in-class performance than they are by a desire to align with a specific technology sourcing strategy.

Users see integrated tools as providing seamlessness in data management, oversight and governance—as well as meaningful deployment efficiencies.

While the dependence on multiple independent data toolsets typically creates significant complexity (with respect to campaign setup and deployment), users also say it serves an important role in fostering innovation and mitigating business risk.

What’s going to help marketers extract value from their data? Ironically, it's not just technology; the people and processes that govern those tools are just as critical to enabling long-term success—and maybe even more demanding of upfront investment.
This white paper will explore the rapidly evolving world of data technology—including the various platforms and applications that marketers, publishers and others use to aggregate, manage and deploy data for advertising, marketing and customer engagement purposes. Published in partnership with the Interactive Advertising Bureau—and with the sponsorship of LiveRamp, Signal and Turn—the paper’s findings are based on the results of an intensive research effort that included phone, online and in-person surveys of more than 50 advertisers, marketers, publishers, technology developers and marketing service providers (primarily based in North America, and conducted between August and December 2014).

How would you describe your principal role/business focus?

- Developer of technology that supports marketing or advertising execution: 22.2%
- Provider of data and/or other marketing services: 16.7%
- Marketer, advertiser or publisher (or agency working on their behalf): 59.3%
- Other: 1.9%

N=54

*Includes panelists who completed all (or substantively all) of a detailed survey questionnaire, the results of which are reported throughout this report.
What is a “data technology,” anyway? Though the tools continue to evolve at a rapid pace, marketers typically source and deploy platforms with one—or several—of the following applications in mind:

<table>
<thead>
<tr>
<th>TOOLSET</th>
<th>WHAT IT DOES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ad serving</td>
<td>Governs online ad inventory and deployment, managing the delivery of the right creative to the right audience</td>
</tr>
<tr>
<td>Analytics</td>
<td>Leverages data to drive a better understanding of customer behavior and supports segmentation of those customer audiences into actionable populations for targeted messaging</td>
</tr>
<tr>
<td>Attribution</td>
<td>Assesses and assigns a value to an individual action (or “event”) that supports a desired outcome; commonly associated with the measurement and optimization of a given media mix</td>
</tr>
<tr>
<td>Campaign management</td>
<td>Enables marketers to plan, schedule and deploy marketing messages, typically across multiple channels and/or customer segments</td>
</tr>
<tr>
<td>Content management</td>
<td>Enables the creation, modification and publishing of content</td>
</tr>
<tr>
<td>CRM/customer database management</td>
<td>Organizes customer records such that audiences can be segmented and stored for various analytics and targeted marketing purposes</td>
</tr>
<tr>
<td>Data management platform (DMP)</td>
<td>Aggregates, integrates and prepares disparate data—including first-, second- and third-party data from various channels and environments—for deployment</td>
</tr>
<tr>
<td>Data onboarding</td>
<td>Connects traditional, structured customer datasets to their digital counterparts—primarily by matching anonymized customer records to online devices and distributing audience segments to multiple destinations</td>
</tr>
<tr>
<td>Data visualization</td>
<td>Presents datasets in visually compelling ways, revealing trends and insights that might be difficult to discern otherwise</td>
</tr>
<tr>
<td>Demand-side platform (DSP)/supply-side platform (SSP)</td>
<td>Respects the efforts of advertisers (on the demand side) and publishers (on the supply side) to manage digital media buying and selling based upon fluid availability, demand and data (as a proxy for “audience”), in line with pre-established business rules</td>
</tr>
<tr>
<td>Email/ESP (email service provider tools)</td>
<td>Enables the creation and deployment of email marketing messages to targeted customer lists; commonly supports campaign measurement and reporting, as well</td>
</tr>
<tr>
<td>Marketing resource management (MRM)</td>
<td>Enables the creation, collection and distribution of marketing collateral (images, messages, offers, etc.) to support the deployment of standardized campaigns</td>
</tr>
</tbody>
</table>
## TOOLSET

<table>
<thead>
<tr>
<th>Mobile marketing tools</th>
<th>Supports audience engagement on mobile devices, including functions that deliver targeted messages in apps or SMS environments, power geo-targeting (or “beaconing”) and manage unique device IDs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retargeting</td>
<td>Drives digital media buying grounded in behavioral data; content is mapped to user’s inferred intent as based on their previous activity, “reminding” them about items they may be considering for purchase</td>
</tr>
<tr>
<td>Social media tools</td>
<td>Support efforts to both aggregate audience insights from social media activity as well as engage with audiences on the platforms. Include listening, display media buying (including CRM and “native” advertising) and content management applications</td>
</tr>
<tr>
<td>Tag management</td>
<td>Manages third-party tags that may be associated with a given website; collects, manages, integrates and executes on data derived as a result of those tags — with the goal of streamlining their utilization, improving site functionality and driving more relevant content</td>
</tr>
<tr>
<td>Video content/marketing tools</td>
<td>Supports video marketing and related solutions including deployment of video ads (pre- and post-roll) and viewer analytics and performance reporting</td>
</tr>
<tr>
<td>Web analytics</td>
<td>Tracks and reports activity across a website or online property, including unique visitors and clicks; data is used to understand audience engagement and interest</td>
</tr>
<tr>
<td>Website content/personalization</td>
<td>Recognizes website visitors and, in some cases, serves those individuals with appropriately curated content, offers and messages. Recognition is completed through cookies, tags or required registration/log-in</td>
</tr>
</tbody>
</table>

## IN THEIR OWN WORDS

"Right now, frankly we’re just getting all our digital data wrangled together into one place. There’s value in us getting that house in order, while separately there’s a broader enterprise big data initiative. The amount of data we have is massive. It’s ridiculous. There’s still so much to figure out in an offline setting….. and once you find a way to centralize the data then you can begin running processes to extract real-time insights in a more regular cadence."

—DIGITAL MARKETING PROGRAM MANAGER, LARGE INSURANCE PROVIDER

"First and foremost, the most important thing for us is to learn about our customers so we can better engage them. We have so much data moving at such rapid rates, and if we could bring it all together it would be phenomenal…. Ultimately we want to know that when someone buys something today, they will probably need this other product in two months. That ability to use our data to create predictive insights is really important."

—SENIOR DIRECTOR OF MARKETING OPERATIONS, INDUSTRIAL MANUFACTURER
While marketers have moved to embrace a wide range of emergent advertising and marketing technologies over the past decade, their most substantial efforts have been reserved for those that aim principally to harness and deploy customer data.

To what extent are you familiar with (i.e. understand the purpose of/ have experience working with) dedicated technologies used to support the following functions?

Of those platform technologies most familiar to marketers—both by virtue of their contributions and current adoption levels—the overwhelming majority (including three of the top four as cited by panelists) are directly dependent on a constant feed of consumer data. Among these, panelists said that analytics platforms—powering audience segmentation and predictive modeling—are most common among the implements in their toolboxes, indexing at 4.17 on a 1-to-5 scale (with 5 indicating that respondents are “extremely” familiar with the application).

When discussing their current mandate, marketers reported a common, overarching objective: make data actionable. Practitioners said they leverage analytics to uncover insights to drive segmentation and targeted marketing efforts. They also noted that as data sources continue to expand, they expect that various solutions that work to connect independent data streams (such as onboarding services and data management platforms—the “DMPs” that aggregate and manage disparate data feeds for downstream utilization) will continue to assume a more central role as the centerpiece of their digital marketing practices.
The first generation of enterprise-class digital data technology was adopted with an eye on powering programmatic marketing, primarily through the lens of open-market real-time bidding. But looking down the road, marketers say the still-unrealized potential of cross-channel integration—“programmatic everywhere”—is likely to define their highest-priority use cases.

Toward which of the following use cases is your organization (or your clients) leveraging technology in support of data-driven marketing and advertising today?

<table>
<thead>
<tr>
<th>Use Case</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audience analytics (in support of segmentation and targeting)</td>
<td>82.9%</td>
</tr>
<tr>
<td>Open-market programmatic media buying (&quot;RTB&quot;)</td>
<td>80.0%</td>
</tr>
<tr>
<td>Audience analytics (in support of product or offer development)</td>
<td>75.0%</td>
</tr>
<tr>
<td>Optimization/personalization of digital advertising content</td>
<td>61.1%</td>
</tr>
<tr>
<td>Private-market (or &quot;reserved&quot;) programmatic media buying</td>
<td>60.0%</td>
</tr>
<tr>
<td>Integration of emerging media</td>
<td>55.6%</td>
</tr>
<tr>
<td>Optimization/personalization of owned media content (e.g., website, email, etc.)</td>
<td>45.7%</td>
</tr>
<tr>
<td>Cross-channel measurement/optimization</td>
<td>45.7%</td>
</tr>
<tr>
<td>Audience engagement (omnichannel optimization)</td>
<td>41.7%</td>
</tr>
<tr>
<td>Cross-channel marketing messaging/audience engagement</td>
<td>41.7%</td>
</tr>
</tbody>
</table>

- Audience analytics—an omnibus business function that bridges the disciplines of digital and traditional marketing, as well as customer relationship management—represents the most common among the data-driven use cases, with 82.9 percent of marketers actively pursuing such applications today in support of general segmentation and targeting

- Nearly as many marketers, 75 percent, are applying those analytical insights to product or offer development, representing a tangible “cross-disciplinary” contribution of the marketing department (which, in these cases, is leveraging its own learnings to support corporate functions that are typically managed elsewhere in the organization)

- Focusing more squarely on the day-to-day practice of advertising and marketing, a large majority of practitioners (80 percent) say that the open-market programmatic media buying transaction ("RTB") represents a core focus of their data initiatives, with smaller majorities (61.1 percent and 60 percent, respectively) supporting the interconnected use cases of digital advertising content optimization and private-market programmatic buying

- Though less than half of marketers said they’re currently leveraging data and technology for cross-channel initiatives (including targeting, engagement and measurement), a vast majority of panelists indicated that these efforts are top of mind as they continue to gain experience leveraging data and sophisticated technology tools. Over the long-term, panelists said these cross-channel efforts are likely only going to grow in importance as the tools that support them grow more capable.
IN THEIR OWN WORDS

“Today capabilities are pretty well established for display—understanding who your audience is and how to reach them—but mobile and other channels are significantly behind. Marketers don’t really know what they are doing in these environments and that’s the next priority. It’s like they fundamentally understand programmatic, but they only come at it from a display perspective. Over time they’ll start to understand mobile more.”

—DIRECTOR OF REVENUE, LOCAL SEARCH AND RECOMMENDATION PLATFORM

“We’re early in our evolution here, but we’re looking to create a seamless experience across all our channels. Not many months earlier, we just started putting some product online—we’re now embarking on a big effort to unify our channels, so that consumers can shop however, wherever, whenever they want.”

—VICE PRESIDENT AND GENERAL MANAGER OMNICHANNEL, U.S.-BASED MASS RETAILER

“We’d like to go in the future is the idea of causal attribution. There’s a huge gap that I’ve seen with multi-touch or cross-channel attribution. Sometimes there’s a measurement capability, but there’s no recommendation. That’s key. I think the technology isn’t there to offer that yet, but over the next few years that will be the area to watch.”

—MANAGER, DIGITAL MARKETING TECHNOLOGY, GLOBAL HOSPITALITY COMPANY
On average, enterprise marketers today are leveraging upwards of a dozen distinct toolsets to support their aggregation, onboarding, management and deployment of customer data—with a small (but not insignificant) subset working with more than 30 tools on a regular basis.

How many distinct toolsets does your organization (or your clients) use in support of data-driven marketing or advertising today?

Which functions or departments within your (or your clients’) organization use at least one of those toolsets?

- Digital marketing: 90.9%
- Analytics/BI: 87.9%
- Media buying (display and search): 72.7%
- CRM/customer management: 63.6%
- Direct marketing: 51.5%
- Media buying (traditional media): 45.5%
- Information technology: 45.5%
- Operations/product management: 42.4%
- E-commerce: 39.4%
- Brand management: 39.4%
- Customer service: 36.4%
- Finance: 21.2%
- In-store experience/sales: 18.2%
- None of these: 0.0%

- Though a majority of panelists (51.5 percent) reported that they use only 5 to 10 distinct toolsets to support their marketing data deployment, nearly 40 percent of panelists said they use more—netting out to an average in excess of a dozen independent platforms per marketer.

- A small but notable minority (just 9.1 percent of panelists) said their organizations rely on 31 or more independent tools to support their data utilization, suggesting that a number of organizations are still supporting technology strategies that are largely fragmented or grounded in priorities other than centralized data management.

- Panelists also said that five internal departments and/or functions access these data tools more than any other—including digital marketing, analytics/audience insight, media buying, CRM/loyalty management and direct or traditional marketing; and

- Though marketers insist that it’s growing increasingly important to link these various platforms (in alignment with other organizational processes), today a range of technology engagement models predominate within the marketing organization. In some companies, various internal groups access and use a network of common tools, for example. By contrast, other companies (typically larger organizations that value—and tolerate—installed redundancies and risk management measures) focus on a “best tool for the job” approach to technology deployment, with networks of independent systems—sometimes operating in direct parallel—existing as distinct point solutions.
In my mind, you need Web analytics tools, personalization software and offline onboarding—all of those functions that effectively feed or are part of a DMP. Then you also need a DSP, search, email and an attribution vendor. Onsite, you probably have a tag management system. In media, you have a dynamic creative optimization vendor, and on the website side you probably have a CMS system. And that would cover only the most basic needs of today's marketer!

—VP DIGITAL MEDIA SOLUTIONS, LARGE MARKETING SERVICE PROVIDER

I’m counting the number of components to our “stack,” and they include a data management platform, a tag management solution, multiple demand-side platforms, an attribution platform and I guess you could count an ad serving platform as well. We have a paid search bidding platform and Web analytics also. I think that’s the core, but then we have a number of other ancillary platforms, like dynamic creative optimization, landing page tools, multivariate testing and optimization for site-side—these are somewhat separate, but they plug in to what we have.

—DIGITAL MARKETING PROGRAM MANAGER, LARGE INSURANCE PROVIDER

We have approximately four or five tools that my group uses directly, but then there are others that are used for data by the analytics teams and other groups. We probably have around 10 different technologies in total and the majority provide us with very unique data sets to understand and serve our customers.

—SENIOR DIRECTOR OF MARKETING OPERATIONS, INDUSTRIAL MANUFACTURER

I see clients with multiple DSPs for retargeting, dual tag management technologies across their various owned properties and sometimes two Web analytics solutions… It’s a hot mess and the reason is because the organizations are internally distorted; they’re too siloed to leverage technology to its optimal ability so they engage with whatever their group needs. This is especially true for multinational, franchise organizations.

—CHIEF ANALYTICS OFFICER, GLOBAL MEDIA AGENCY

We don’t want to have so many partners that we can’t keep track of things. Right now we have around 15 partners, touching about five teams from operations, to sales and marketing…and in that, we try to be self-service whenever we can. We’re not fans of the black box; our teams want to know how things work so that we can deliver value and be responsible for what we do.

—DIRECTOR, AUDIENCE SEGMENTATION, LIFESTYLE PUBLISHER NETWORK
The earliest deployments of enterprise data technology platforms were driven by an overriding need to support pilot marketing use cases and fill glaring gaps with respect to reporting and measurement—no matter how well situated those tools may have been to address long-term need.

To what extent were the following qualities important in evaluating your current technology investments?

The task of evaluating potential data technologies is not an easy one, panelists said, suggesting that more than a dozen typical considerations are taken into account when selecting platforms that supporting marketing execution.

To date, the most important among these many criteria speak to the difficulties that marketers have in measuring and attributing the impact of their various marketing initiatives—and in rolling out subsequent efforts to audiences of scale. Panelists said that the presence and quality of reporting tools represented the most important factor in evaluating their current data technology solutions (indexing at a 4.54 on a 1-to-5 scale, with 5 indicating an “extremely important” criterion), followed closely by scalability of the underlying platforms (4.42).

Perhaps surprisingly, panelists said that innovation has actually not represented one of the most important drivers of platform selection in their technology investments to date, reinforcing substantial anecdotal evidence that suggests the first wave of data investments were driven by an overriding focus on deploying solutions that were economical, functional, linked to addressable use cases—and not demanding of substantial business risk.

Marketers also said that the ability to stand up a solution and initiate testing quickly represented a major priority with respect to these “first-generation” deployments. Panelists explained that overly lengthy or complicated implementations create hurdles for engendering C-suite support, and so ensuring some “quick wins” is a good strategy to guarantee continued institutional backing.
We still do things a little ad hoc as we’re still early in the process and trying to build up the structure of the company and the people for the objectives we want to accomplish. We have some ideas of stuff we’d like to be able to do and now we’re working on assembling that, first and foremost, to start delivering on our goals."

— MARKETING MANAGER, U.S.-BASED CONVENIENCE STORE CHAIN

“When looking at technology, you really have to consider where you are on the maturity curve. Early on, you don’t need everything… you need to get a few standard pieces to start proving your business case. Then as you start to advance, the need for customization increases.”

— VP DIGITAL MEDIA SOLUTIONS, LARGE MARKETING SERVICE PROVIDER

“The number one thing we come up against, even from a service perspective, is the possibility that the CMO will say ‘Yeah, so?’ Senior executives need better insight into the ROI and bottom line. All of the reports look good in their silos, but back from there there’s little understanding or holistic insight. We look for technologies that can help the CMO prove ROI or support a decision to move budgets around.”

— CHIEF MARKETING TECHNOLOGIST, DIGITAL MARKETING AGENCY

“We don’t have a lot of opportunity for waste, so we really have to narrow down into what’s working and do more of that and cut out what’s not. So when we evaluate tools it may be more investment up front to find the tools and set them up so that we can figure that out, but in terms of a long-term play, that’s where we think the value creation is.”

— MARKETING MANAGER, U.S.-BASED CONVENIENCE STORE CHAIN

“We’ve included our statisticians and data scientists in these discussions and they are key decision makers. They are stakeholders too and this information is something they will have to engage with and apply and integrate with our current systems, so it’s important that they are certain any tools we engage with meet their requirements for analytics, measurement and reporting.”

— SENIOR DIRECTOR OF MARKETING OPERATIONS, INDUSTRIAL MANUFACTURER
Looking down the road, marketers are aiming to integrate various toolsets through the common conduit of data in order to support a vastly expanded array of use cases and feed continuous growth of their audience engagement efforts. (And they expect all their toolsets will support comprehensive measurement and reporting).

To what extent do you believe the following qualities will be important in how you evaluate technology investments that you (or your clients) will make in two years?

The considerations that marketers expect to drive their future technology investments are just as complex and varied as those that have driven platform selection to date, panelists said, though those priorities are evolving along with the underlying toolsets. In particular, users said that they’re preparing for a future where data-driven digital initiatives are supporting a wider range of enterprise marketing strategies—and doing so at the largest possible scale. In concert, they said that they’d be considering the extent to which technology drives “scalability” and “supports high-volume/high-velocity data processing” much more substantially than in the past, indexing those priorities at a 4.56 and 4.38, respectively—compared to 4.42 and 4.15 previously (on a 1-to-5 scale, with 5 indicating that the criterion is “extremely” important to platform selection)

While users are still likely to consider reporting capabilities as a critical indicator of platform value, the relative importance of that functionality is actually expected to fall modestly in the future—potentially as a result of improved general reporting features (and a growing expectation that the same will be embedded in virtually all addressable platforms). Panelists indexed the likely future importance of “reporting tools” at 4.46, down from the 4.54 score they benchmarked with respect to previous consideration cycles.

Interestingly, technology users also said they expect to value solutions considered “best-in-breed” less in the future than they do today—benchmarking the expected importance of that future consideration at 3.35 on a 1-to-5 scale, down from 3.84 when asked about current buying priorities; and

The burgeoning number of data technologies is also intensifying marketer focus on the integration of these independent toolsets. Marketers indexed the future importance of platform integration—both internal (with other licensed tools) and external (with the tools of partners and third-party suppliers)—at scores of 4.29 and 4.24, respectively, up from 3.85 and 4.15 with respect to previous considerations.
Interoperability is becoming more important as we go because there is a business expectation that all these systems ought to talk to each other. Customers don’t care what we call our system or whose stack we’re using, they just want to benefit from the experience. So interoperability is becoming more important as we continue down this journey. In the beginning, it didn’t matter so much because nothing talked to each other. Now that’s becoming the expectation.

—MARKETING MANAGER, U.S.-BASED CONVENIENCE STORE CHAIN

The reason we have what I’d consider to be a best-of-breed—albeit cobbled-together—stack today is that we started down this journey before the bigger companies had all-in-one, viable stacks. As a result, we identified top solutions and architected them together. Now that’s what everyone else is working on—the integration. It’s what marketers are looking for today and most of the big providers will get there eventually.

—DIGITAL MARKETING PROGRAM MANAGER, LARGE INSURANCE PROVIDER
When considering the “integrated or independent?” dilemma, marketers are split down the middle—with approximately equal numbers favoring bundled and point solution approaches, respectively—though the preponderance say they’re driven more by a desire to support best-in-class performance than they are by a desire to align with a specific technology sourcing strategy.

The proliferation of marketing data over the last few years has focused attention on various approaches by which marketers may source, license and utilize data technologies. Some developers, for example, promote an integrated (or “stack”) approach—supporting multiple functions through the same core platform. Others, by contrast, lead with an independent (or “point”) model—focusing on delivering highly-specialized tools that support one or just a few functions.

In thinking about your organization (or those of your clients) and its approach to data technology, to what extent would you say your organization prefers to engage with integrated or independent solutions?
Merger and acquisition activity has consolidated the landscape of data technology developers in recent years. In your opinion, to what extent is this consolidation likely to drive benefits to end users (i.e. marketers, advertisers and publishers)?

Reinforcing the lack of consensus on the current debate between “integrated” and “independent” technologies, panelist response distributed perfectly across the sentiment continuum, with a plurality of respondents suggesting they have no inherent preference for either technology model—and equal aggregate numbers (30.4 percent) voicing some degree of favor for “point” and “suite” solutions, respectively. By contrast, panelists said that baseline functionality—in support of their current-state marketing objectives—was a more critical consideration than how various toolsets are aligned with others.

Though marketers expressed little inherent bias for “stacked” or “independent” technology models, they did express modest confidence that continued consolidation across the data technology landscape is likely to drive benefits for their practice and organization. On a 1-to-5 scale (with 5 indicating that panelists feel consolidation is likely to drive “substantial” benefits to end users), marketers pegged their “consolidation confidence” at 3.28, adding that less complexity should ultimately help them focus more on use cases, functionality and platform onboarding—and less on deciphering a supply chain that’s muddled in its composition and often pivoting to chase the latest trend.
“Rather than select a given technology model, over all else I think that ultimately you’ve got to make good choices of who you’re going to work with [based on your business needs] and then from there you’ve got to keep the pressure on your partners to continually innovate and meet your needs.”

—DIRECTOR, AUDIENCE SEGMENTATION, LIFESTYLE PUBLISHER NETWORK

“To use a ready-made stack or not? That depends entirely on the marketer; there’s good arguments for both. I get upset when I see the analyst reports on DMPs and other tools simplify these issues. It varies radically by marketer and use case.”

—VP DIGITAL MEDIA SOLUTIONS, LARGE MARKETING SERVICE PROVIDER

“My hope would be that from an end user, retail or customer perspective, the fewer companies I have to manage, the better. If I can do a one-stop shop, that’s better than having to manage 20 different relationships and do integrations amongst all of them. That said, there’s risk in having all your eggs in one basket, where the more you implement of their solution, the more you depend on it, the higher the switching cost, etc. So in the end I think you need to just pick the tools that work best for you.”

—VICE PRESIDENT AND GENERAL MANAGER OMNICHANNEL, U.S.-BASED MASS RETAILER

“I think consolidation must happen to help simplify the roles and functions of marketers. The more complex and cluttered the landscape of vendors becomes, advertisers and agencies will work to invest in these systems and have their data engineers figure them out. If it was more integrated and less complex marketers could focus on audience engagement—and marketing—rather than technical engineering and integration.”

—CHIEF ANALYTICS OFFICER, GLOBAL MEDIA AGENCY
Users see integrated tools as providing seamlessness in data management, oversight and governance—as well as meaningful deployment efficiencies.

To what extent do you believe each of the following present compelling reasons to engage with “integrated” or “independent” data technology models?

Largely reflecting their divided enthusiasm for each of the two technology approaches, respondents said that they associated nine potential benefits with “integrated” platform strategy (out of 15 potential options)—though the degree of that association was only modest. In particular, marketers were most compelled by a combination of factors that speak to reporting and platform efficiency: “Ability to measure return on investment,” “cost of purchase/implementation,” and “speed/ease of implementation” indexed at the same 2.68 on a 1-to-5 scale (with scores of 1 to 3 indicating the benefit represents a reason to engage with “integrated” solutions, and 3 to 5 indicating a reason to engage with an “independent” solution); and other arguments for platform integration fell similarly in line to those arguments for efficiency. Marketers were bullish about the potential for unified tools to support high-volume processing, ease of use, scalability and low-cost data sourcing. With respect to potential effectiveness benefits, panelists noted a potential benefit with respect to analytics; with deeper integration of various data streams, some argued, the level of analytical insight—and downstream actionability—could only be expected to grow.

Note: this chart only shows response in support of integrated approaches
The integrated stack makes sense to me. There is value in it in that it makes it easier for the bigger organizations to move forward with new programs and solutions because you basically have a trusted partner and then they add on another feature and it makes it easy for CMOs to test that solution.

—CHIEF MARKETING TECHNOLOGIST, DIGITAL MARKETING AGENCY

The value of the integrated stack is simplicity; there are also economies, synergies… but it also depends on your business. It matters if you’re global, for example, because it makes rolling out technology a lot more cumbersome and painful. If you’re a company that has 15 regions and 100 brands, having a stack is better because you can’t afford that level of complexity across every division of the business.

—VP DIGITAL MEDIA SOLUTIONS, LARGE MARKETING SERVICE PROVIDER

For clients that have engaged with a full ‘stack,’ it’s actually working quite well. It removes the complexity and the labor of integrating, connecting and linking disparate technologies together to figure out how to take an action. In these cases where clients have a single solution—good, bad or indifferent—everybody’s moving in the same direction, and it’s easier to make a decision.

—CHIEF ANALYTICS OFFICER, GLOBAL MEDIA AGENCY

For bigger companies having a bigger relationship and everything under that one roof makes sense from a logistics and decision-making perspective for sure.

—DIRECTOR OF REVENUE, LOCAL SEARCH AND RECOMMENDATION PLATFORM
While the dependence on multiple *independent* data toolsets typically creates significant complexity (with respect to campaign setup and deployment), users also say it serves an important role in fostering innovation and mitigating business risk.

To what extent do you believe each of the following present compelling reasons to engage with “integrated” or “independent” data technology models?

<table>
<thead>
<tr>
<th>Rating</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.0</td>
<td>Supports wide range of data cases</td>
</tr>
<tr>
<td>3.82</td>
<td>Integration with other licensed and/or proprietary technologies used by your organization</td>
</tr>
<tr>
<td>3.27</td>
<td>Flexibility/modularity</td>
</tr>
<tr>
<td>3.18</td>
<td>Integration with other external advertising and marketing technologies (i.e those used by your business partners)</td>
</tr>
<tr>
<td>3.09</td>
<td>Reporting tools</td>
</tr>
<tr>
<td>3.05</td>
<td>Represents a “best in breed” point solution</td>
</tr>
<tr>
<td>3.00</td>
<td>Has little bearing on the decision to engage with “integrated” or “independent” solutions</td>
</tr>
<tr>
<td>1.0</td>
<td>Extremely compelling reason to engage with “independent” solutions</td>
</tr>
<tr>
<td>1.0</td>
<td>Extremely compelling reason to engage with “integrated” solutions</td>
</tr>
</tbody>
</table>

Note: this chart only shows response in support of independent approaches

Though they displayed a similarly modest level of enthusiasm for its associated benefits, marketers identified slightly fewer benefits as inherent to the “independent” approach as they did with respect to “integrated” platforms. Among the most compelling reason to engage with these point solutions: the presumed ability to integrate with other tools, either directly licensed or used by third parties. Panelists also cited general “flexibility/modularity” as a compelling benefit; and

Though a preponderance of respondents noted an anecdotal vision to integrate all their technologies over the long term, many noted that the maintenance of toolset fragmentation ultimately serves several important business purposes. Supporting a fluid set of platforms fosters continuous innovation among technology developers, they said, keeps platform pricing aligned with market norms and supports parallel data governance objectives (with the “intentional siloing” of data representing a natural protection should any one dataset be compromised by outside forces). Some even suggested that ongoing internal pressures to source innovative, best-in-class tools would serve as a bulwark against the development of fully integrated infrastructure.
"For us, flexibility is a key reason to engage with nimble, independent solutions. If a partner doesn’t have a robust set of APIs, we’re not going to move forward with that partner because we value the technical infrastructure and being able to engineer it with other tools to meet our unique needs."

—DIRECTOR OF REVENUE, LOCAL SEARCH AND RECOMMENDATION PLATFORM

"In my view, ultimately the right decision is to use a company that’s more ‘future proof’ or has the latest technology because the idea is not to have to re-shop for technology or re-implement again. You’d rather get ahead of that curve. The standalone companies are able to focus on one thing and do it really well, so that’s where I’d go."

—MANAGER, DIGITAL MARKETING TECHNOLOGY, GLOBAL HOSPITALITY COMPANY

"We all know that technology doesn’t sit still and I think the standalone products, because they have a singular focus, they are able to really work on their solution, improve it and evolve it… they are more likely to be—and continue to be—what we’d call best-in-class."

—SENIOR DIRECTOR OF MARKETING OPERATIONS, INDUSTRIAL MANUFACTURER

"In terms of flexibility and being best-in-breed, I don’t think the big integrated stacks are the entire future. I think there’s a need for specialization. Those big guys will get so big that they won’t be able to keep up with innovation."

—CHIEF MARKETING TECHNOLOGIST, DIGITAL MARKETING AGENCY

"With these technology solutions, I think ubiquity’s not necessarily the right answer. If a ubiquitous, stack doesn’t deliver, you have to go in and ask to customize it to meet your business needs, which will cost more over time. It’s more practical to find the different solutions that work for you from the beginning."

—DIGITAL MARKETING PROGRAM MANAGER, LARGE INSURANCE PROVIDER
What’s going to help marketers extract value from their data? Ironically, it’s not just technology; the people and processes that govern those tools are just as critical to enabling long-term success—and maybe even more demanding of upfront investment.

Considering your organization’s current practices and business needs (or those of your clients), what would enable you to make better use of data technology in support of marketing and advertising? Please select all that apply.

- Better integration of our existing tools: 60.9%
- Improved processes for sharing data among various tools: 60.9%
- More experienced practitioners to lead efforts: 60.9%
- Better alignment of our internal organizational processes: 56.5%
- Larger budgets for supporting technologies: 47.8%
- More support from the C-suite/executive management: 47.8%
- More accurate/better performing data to fuel efforts: 43.5%
- More clarity around privacy and data governance best practices: 39.1%
- More training on the applications/use cases data technology can support: 39.1%
- More service/support from technology vendors: 21.7%
- Better/more detailed third-party technology analysis: 17.4%
- Something else: 0.0%
- Not at all sure: 4.3%
- Nothing else: 0.0%

- When it comes to extracting value from data technology, respondents said that integration matters—no matter what the provenance of the toolsets (or the efforts of their developers to be the sole conduit for that integration). More than 60 percent of panelists said that “better integration of our existing tools” would help them derive greater value from data.
- Marketers expressed the same level of need, though, with respect to the organizational processes and experienced talent that would ultimately power the deployment of data across various promotional channels. The ongoing “arms race” for analytics talent was cited by a number of panelists as a real concern in some organizations—and the development of business processes geared to a “digital- and data-first” future representing a comparable priority in many others.
- Drilling deeper, respondents said that experienced talent—and better ongoing training initiatives—would help them do a better job both extracting and acting upon data-driven insights (and managing the evolving network of tools used to power that work). And today, the development of that talent, some said, is fundamentally tied to infrastructure—including the compensation models, staff allocation and models of collaboration—that was established to support long-discarded models of advertising and marketing execution.
Within our company, we probably have 25 different disciplines and departments that use different pieces of our member data, so there is a connectivity issue within our own building. And because we’re so large and because so many people within the organization are tapping into the data we use, we sort of run into each other. We need to figure that out from a process perspective.

—REWARDS ACQUISITIONS DIRECTOR, GLOBAL HOSPITALITY CHAIN

Do we have a technology problem today? No. What we have is a ‘people and process’ problem. There’s plenty of technology to do most, if not all, things today, but to get organizations to leverage these abilities is the challenge… This is actually that generational moment where we have to re-create the organization.

—SVP MARKETING AND TECHNOLOGY SOLUTIONS, MEDIA AND ENTERTAINMENT CONSULTANCY

There is a massive gap for integration. Everyone says they can integrate but there’s not a platform or a vendor or a business that really has made that happen… As a service business we bring it together for our clients, but there’s no technology or other solution to bring it together. As we do it now it’s a lot of man hours to make it happen.

—CHIEF MARKETING TECHNOLOGIST, DIGITAL MARKETING AGENCY

I ‘speak’ technology and digital media and analytics. Usually those are siloed but I can speak to each which is unique and very valuable. For most companies though, they don’t have one person that can handle and understand it all so overall the need for more experienced talent is tremendous.

—MANAGER, DIGITAL MARKETING TECHNOLOGY, GLOBAL HOSPITALITY COMPANY

When we go in and try to sell integrated marketing or an integrated technology stack, everyone loves the idea but when we get to signing a contract, maybe five percent of our clients can follow through. It’s because there are structural organization problems that kill the process—no one has oversight for marketing and budgets holistically and it’s incredibly frustrating.

—DIRECTOR OF BUSINESS DEVELOPMENT, DIGITAL INNOVATION AND MEDIA AGENCY

We are lacking people to really dig into the data. So far we have leveraged the insights from the attribution provider that we use, but to be honest it doesn’t feel like they dig in and understand our business enough to really make a difference. We need people internally who get it, but those resources are hard to find.

—MANAGER, ECOMMERCE AND DIGITAL MARKETING, HEALTH INSURANCE PROVIDER
More than at any other time in recent history, the practice of advertising and marketing today is characterized by a quest to unlock the potential of several transformative disciplines—“programmatic,” “native,” “mobile,” “omnichannel,” “big data”—that purport to upend established paradigms (and blaze a path to new riches) through better, more impactful use of data and addressable media.

Buzzwords to some—and bets on the future, to others—these practices are immature and still largely in the process of validating their own worth, especially when it comes to activating the engagement and responsiveness of very large consumer populations. But for all that they still have yet to prove, they’re already well established in one clear respect: Every one of them depends fundamentally on the strategic deployment of technology.

Not surprisingly, the market has responded in full force, unleashing dozens of new toolsets (and “suites” of toolsets, and “clouds” of toolsets, and “integrated” toolsets and “point solution” toolsets) that offer various means of assembling, managing, standardizing and transporting data. Over the long term, it stands to reason that this fragmented landscape is destined to consolidate into a smaller and more manageable number of platforms—responding not just to natural merger-and-acquisition dynamics, but also to the sincere desire of marketers to build bigger, more actionable repositories of information on consumers, markets and cross-media interactions.

That, however, is the long-term vision. The short- and medium-term reality is a marketplace characterized by the presence of both “integrated” and “independent” platforms—some of them complementary to others, some of them outright disruptive. Which model is best? That’s a question that presents no straightforward answer, only more questions. And those organizations that have the wisdom to tackle those questions—mapping their business strategy to the potential contributions of both data and technology—will be those best positioned to capitalize on the potential of both.
WINTERBERRY GROUP is a unique strategic consulting firm that supports the growth of advertising, marketing, media and information organizations. Our services include:

CORPORATE STRATEGY: The Opportunity Mapping strategic development process helps clients prioritize their available customer, channel and capability growth options, informed by a synthesis of market insights and intensive internal analysis.

MARKET INTELLIGENCE: Comprehensive industry trend, vertical market and value chain research provides in-depth analysis of customers, market developments and potential opportunities as a precursor to any growth or transaction strategy.

MARKETING SYSTEM OPTIMIZATION AND ALIGNMENT: Process mapping, marketplace benchmarking and holistic system engineering efforts are grounded in deep industry insights and "real-world" understandings— with a focus on helping advertisers, marketers and publishers better leverage their core assets.

MERGERS & ACQUISITIONS DUE DILIGENCE SUPPORT SERVICES: Company assessments and industry landscape reports provide insight into trends, forecasts and comparative transaction data needed for reliable financial model inputs, supporting the needs of strategic and financial acquirers to make informed investment decisions and lay the foundation for value-focused ownership.

Additionally, Winterberry Group is differentiated through its affiliation with Petsky Prunier LLC, the leading investment bank serving the technology, media, marketing, e-commerce and healthcare industries. Together, the two firms provide one of the largest and most experienced sources of strategic and transactional services in their addressable markets.

For more information, please visit www.winterberrygroup.com

IN PARTNERSHIP WITH:

The INTERACTIVE ADVERTISING BUREAU (IAB) empowers the media and marketing industries to thrive in the digital economy. It is comprised of more than 650 leading media and technology companies that are responsible for selling, delivering, and optimizing digital advertising or marketing campaigns. Together, they account for 86 percent of online advertising in the United States. Working with its member companies, the IAB evaluates and recommends standards and practices and fields critical research on interactive advertising. The organization is committed to professional development, elevating the knowledge, skills, and expertise of individuals across the digital marketing industry. The IAB also educates marketers, agencies, media companies and the wider business community about the value of interactive advertising. Founded in 1996, the IAB is headquartered in New York City.

For more information, please visit www.iab.net
LiveRamp connects data across more than 120 digital marketing applications and media platforms. By onboarding customer data into the targeting, measurement, and personalization products developed by our partners, we help leading brands eliminate data silos and run more efficient marketing programs.

For more information, please visit www.liveramp.com

Signal is a global leader in real-time, cross-channel marketing technology. The Signal Open Data Platform helps marketers collect data from any offline or online source, synchronize that data across all consumer touch points, and deliver it to any marketing or analytics endpoint—all in real time. The platform is ecosystem-neutral and helps data and marketing technologies work better together, driving increased engagement, loyalty and conversions. Signal’s technology runs on more than 40,000 digital properties in 158 countries. Our platform facilitates billions of data requests monthly, supporting top brands around the world that generate more than $1.5 trillion in commerce, including Allstate, Audi, Crate & Barrel, DeVry University, GAP, JetBlue Airways, Macy’s, 1-800-Flowers.com, Starcom MediaVest Group, Starwood Hotels and Resorts, and many more.

For more information, please visit www.signal.co

Turn delivers real-time insights that transform the way leading advertising agencies and enterprises make marketing decisions. Our integrated cloud platform enables data management, cross-channel advertising and advanced analytics from a single login, along with point-and-click access to more than 150 integrated technology partners. Turn is headquartered in Silicon Valley and provides its products and services worldwide.

For more information, please visit www.turn.com