INTRODUCTION

Marketing Intelligence is the information needed to drive business outcomes, elevating insights to fuel brand strategy rather than just using them to optimize tactics. Creating Marketing Intelligence requires applying data science and analytics across multiple data sources to understand trends and the customers that create them.

In our April 2018 study, MiQ partnered with Advertiser Perceptions to understand how marketers in the U.S. and UK think about the key components of Marketing Intelligence, and how they’ve adapted their strategies to today’s data-driven focus. In this paper we’ll examine the results of that study, and how the attitudes and challenges outlined by respondents showcase the need for a third-party partner to help marketers of every level of savviness and all types of data infrastructure turn their data into Marketing Intelligence.

MARKETERS RECOGNIZE THE VALUE OF MARKETING INTELLIGENCE

Almost every one of the marketers surveyed in our April 2018 study (93%) agreed that the use of data science and analytics for gaining deeper audience or customer insights on their marketing efforts is either “very important” or “somewhat important.” While marketers in the U.S. were more likely to deem data science and analytics important for developing insights than those in the UK, marketer response was similar at every level of experience, underlining how data science has completely transformed the role of the modern marketer.

IMPORTANCE OF DATA SCIENCE AND ANALYTICS

Q: How important is the use of data science and analytics for gaining deeper audience/customer insights on your [company’s/clients’] marketing initiatives?

IMPLEMENTATION OF DATA SCIENCE/ANALYTICS

Q: Advanced, Beginner, Exploring, Never Used, Tried & Didn’t Work
While almost all marketers polled believed in the importance of data science and analytics, fewer than half (45%) characterized their current implementation of data science and analytics solutions as “advanced,” and nearly one fourth (22%) characterized themselves as still being in the exploratory stage.

For marketers who hadn’t yet built out their data science and analytics infrastructure, the challenges were varied. For marketers in the U.S., an inability to build accurate measures of business impact, cost, and a lack of resources and talent all acted as major barriers to further investment. In the UK, difficulty interpreting data, a lack of necessary technology and infrastructure, and cost were the largest barriers to further investment.

In their 2017 State of the Data report, the IAB estimated that in 2017 U.S. firms invested a total of $20.19 Bn on third-party audience data and activation solutions to support their advertising, marketing, and media-related data initiatives. More than half of that investment - $10.13 Bn - went to third-party solutions that support the activation of data, including hosting and management, hygiene, data processing, and analytics. U.S. data users frequently spent more on managing, processing, and analyzing data than they did on the data itself.

**CHALLENGES PREVENTING INVESTMENT IN DATA SCIENCE/ANALYTICS**

Percent Ranking 1-3

<table>
<thead>
<tr>
<th>Challenge</th>
<th>US</th>
<th>UK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack accurate measures of business impacts</td>
<td>50%</td>
<td></td>
</tr>
<tr>
<td>Cost prohibitive</td>
<td>45%</td>
<td>42%</td>
</tr>
<tr>
<td>Lack resources/talent to interpret/analyze data</td>
<td>40%</td>
<td>40%</td>
</tr>
<tr>
<td>Hard to interpret data</td>
<td>37%</td>
<td></td>
</tr>
<tr>
<td>Complicated dashboard/tools</td>
<td>31%</td>
<td>38%</td>
</tr>
<tr>
<td>Lack necessary technology/infrastructure</td>
<td>28%</td>
<td>38%</td>
</tr>
<tr>
<td>Lack of relevant organizational expertise</td>
<td>22%</td>
<td>33%</td>
</tr>
<tr>
<td>Convincing stakeholders of value</td>
<td>21%</td>
<td>33%</td>
</tr>
<tr>
<td>No evaluation, insights or recommendations</td>
<td>19%</td>
<td>29%</td>
</tr>
</tbody>
</table>

**SPENDING ON DATA ACTIVATION SOLUTIONS SUPPORTING MARKETING RELATED EFFORTS IN THE UNITED STATES IN 2017, BY FUNCTION (IN BILLION U.S. DOLLARS)**

Yet even for those marketers who have made the investment, many felt that their current solutions fell short of expectations: On the whole, fewer than one third of marketers who had adopted data science and analytics tools felt that those tools were very effective (scoring them a 9 or 10 on a 0 to 10 scale) at processing data from multiple sources, translating customer data into insights, or driving business outcomes. Marketers in the US were particularly unhappy with their existing solutions, especially when compared to their more optimistic UK counterparts.

**EFFECTIVENESS OF EXISTING DATA SCIENCE/ANALYTICS SOLUTIONS**

*(TOP-2 BOX SCORE)*

- Ability to apply learnings directly to media/targeting strategies: 39%
- Ability to incorporate/process data from multiple sources: 31%
- Consultative approach to solving business challenges: 31%
- Translate customer data into insights and business outcomes: 31%
- Ability to tie/sync performance and delivery to broader trends or events (e.g., social, activity, weather): 30%
- Analytics dashboard: 29%
- Ability to drive business outcomes: 30%

**Q:** How effective are the current data science/analytics solution(s) your company currently has in place on the following? (10-point scale, 10=Very effective, 1=Not at all effective)

**BARRIERS TO FURTHER INVESTMENT IN DATA SCIENCE/ANALYTICS**

- Lack accurate measures of actual business impacts (sales, growth): 49%
- Lack resources/talent to interpret/analyze data: 43%
- Cost prohibitive: 49%
- Hard to interpret data: 35%
- Complicated dashboard/tools: 34%
- Lack necessary technology/infrastructure: 31%
- No evaluation, insights or recommendations provided by data partner(s): 21%
- Lack of relevant organizational expertise: 19%
- Convincing stakeholders of value: 19%
- Other: 2%

**Q:** What are the biggest challenges that may be preventing further investment in data science/analytics? (Percentage of respondents ranking a challenge 1 to 3 shown)
Marketers Can’t Afford to Stay in the Dark

The result of these challenges is that many marketers find themselves sitting on gold mines of data, but aren’t able to make good use of it. The data sits in systems that are often considered to be the “exhaust” of a marketing campaign, collected and analyzed for simple tracking and ad-hoc reporting. And so marketers - even those who consider themselves “advanced” with regard to the use of data science and analytics - have fallen back on measuring the same KPIs they did prior to the data and tool explosion, using flat, tired metrics such as clicks, conversions, and interaction rates to gauge success. These metrics, which treat all interactions and customers the same, are easy to measure but hurt marketers in the long run.

The reality is that all customers and their interactions aren’t the same. Rather than measure something meaningless like clicks, or even raw conversions, marketers can focus on more meaningful measures of success. For some, these may be purchase-based measures such as new customer acquisition, order size, customer lifetime value, or customer retention. For others, there may be broader business outcomes that require data solutions to achieve, such as bringing in a younger audience, reducing cancellations, or driving interest among a specific type of customer.

As the landscape has become more competitive, marketers who don’t adjust their strategies risk being left behind. More than twenty high-profile U.S. retailers filed for Chapter 11 bankruptcy protection in 2017, with many more at risk moving into 2018. As marketers face increasing pressure to deliver not just on sales but long-term business growth, they will have to choose between adaptation and decline.

The largest actors in the online marketing space are out to eat everyone else’s lunch, and they’re doing an incredibly good job of it. These firms are equipped with the technology to identify their customers and those customers’ preferences, and the capital to continually re-invest in that technology and analysis. They’ve got long-term, big-picture goals for customer adoption which go beyond any one campaign and aim to position their businesses at the center of each customer’s universe, such that they’ll be involved in every customer transaction or purchase. By comparison, they’re competing with brands whose strategies in many cases boil down to counting clicks and whose digital marketing budgets are scaled to the size of their smaller eCommerce business, rather than their total business.

The expanding marketplace itself offers a wide array of fundamental - and fundamentally new - challenges as well. There are so many more providers in the modern landscape than there were even five years ago, let alone ten, making it incredibly difficult to combine data across multiple sources to get the full picture and draw meaningful insights. Even when data can be compared across providers, different vendors use different metrics, many of them proprietary - the definition of something as basic as a video view can change drastically depending on the platform, to say nothing of the attribution models being used to track where that view came from. And once metrics are aligned, it takes a lot of work to keep them that way, as brands, agencies, and other third parties are constantly onboarding new technologies as the marketplace evolves.

In the face of this onslaught, marketers need to adapt quickly, whether through the construction of in-house technological infrastructure and investment in data science or a partnership with a third-party that can provide Marketing Intelligence. While most marketers may prefer in-house solutions, building these solutions takes a massive investment of time and resources, and requires expertise that marketers often lack. Even those marketers who succeed in building these solutions may often find their teams unable to fully make use of what they’ve built – silos (both organizational and tool-created), walled garden systems, team expertise, and a host of other challenges make it difficult to interpret the collected data and apply that to driving real business outcomes.

This is a challenge that extends to all marketers, regardless of infrastructure or size. Marketers running the gamut from those at large brands with massive budgets and advanced tech stacks at their disposal, struggling to turn data into insight to marketers at small brands with niche audiences who need access to external data sets. Each can benefit from the help of a partner who can take their data and develop it into Marketing Intelligence.
Building Marketing Intelligence Infrastructure

Just over two-thirds of marketers surveyed in our study (66%) said they preferred in-house data science and analytics solutions to working with third parties, but even among advanced users of data science and analytics, only half (54%) felt that their existing technology solutions gave them a good ability to drive business outcomes, and nearly half (43%) listed a lack of resources and analytical talent as a major barrier to further investment.

These struggles underline the massive difficulty in building in-house solutions, and the “hidden” resource costs that emerge after marketers have already started building their in-house technology. Building any intelligence driven technology is complicated enough as it is; when it comes to building a “marketing” specific intelligence technology, things get even more complex.

This complexity comes from how marketing has changed. A decade ago, marketing was not considered a very tech-savvy space; the industry mainly focused on the content, communication and creative spheres. However, over the last 10 years (and most specifically over the last four) we have seen the marketing technology landscape grow exponentially. This growth has been most notable in the fields of marketing automation, content management, and data and analytics. In 2014 there were about 1,000 companies in the marketing technology sphere; by 2015, there were about 2,000, and there were 5,000 by 2017. By mid-2019, this number is expected to double.

It’s important, then, to be able to tell a good Marketing Intelligence partner from a bad one. Marketing Intelligence, like any other kind of intelligence, is only as good as the data on which it is founded - and that data is only as good as the infrastructure that interprets it. So what does the core infrastructure for a good Marketing Intelligence partner look like?

First and foremost, good infrastructure needs to be able to handle any kind of data from any kind of vendor, regardless of size or format. It needs to be able to then collate that data in a way that both connects like information to like and demonstrates outcomes - allowing the user to not just tell a story with their data, but also paint in the details along the way. The infrastructure also needs to be able to morph and change on demand as new data is added to the model, responsively updating the story being told and the way the story is described. It needs to be able to deliver these insights across every tier of business, from an individual customer interaction to an entire continental business model. Finally, it needs to be able to tie all of these data relationships and the stories they tell together into actionable, tangible recommendations and strategies that can then be pushed to any buying or marketing automation program.

Taken altogether, the philosophy behind the kind of infrastructure is called “scalable agility,” and it is the sign of a premier Marketing Intelligence provider in 2018.

At MiQ, scalable agility is at the foundation of the work we do. We break our development down into four key teams: the Connect team, the Discover team, the Action team, and the Platform team. Each team is composed of project managers, engineers, data engineers, data scientists and analysts, and each plays a valuable role in developing Marketing Intelligence. Our Connect team begins by creating modules to handle and manipulate every possible permutation of the data we receive, while our Design team approaches campaigns from the other end, creating modules to answer every question a marketer might ask about that data. The Action team takes the data from the Connect team and the insights from the Discover team and builds modules that translate them into specific actions in a campaign, such as changing the messaging on creative in real time, or changing the buying strategy in a DSP. The Platform team, meanwhile, builds and manages the interfaces and project infrastructure that make sure anyone on the project can access, connect to, and manipulate all of the modules designed by the other three teams.

It’s this modular system that is the heart of our scalable agility: the modules we design can all be reused, resized, and repurposed to meet the demands of any new campaign, large or small. We can think of these modules as building blocks that sit on top of the platform. Adding new blocks to the structure is a never-ending process as we accommodate new technologies, data sources, and challenges, but they may take a significant amount of time to build. In these cases, having people and technology which complement each other means that teams of specialists can jump in to fill gaps where modules are still in production.

THE INFRASTRUCTURE OF MIQ

Over the last seven years, we’ve worked tirelessly to build world-class Marketing Intelligence infrastructure. One of the most important lessons we’ve learned over that time is to not try and build a “one-size-fits-all” solution that standardizes insights and analytics—it’s very important to create an infrastructure that allows for exploration and innovation.

As a result, one of our biggest advantages in the space—and a big part of why we’re able to help marketers turn data into Marketing Intelligence—is experience. We have first-class institutional knowledge in connecting and analyzing data, where the core of our technology was built around intelligently joining different types of data to be able to optimize campaigns and report on how we did it, and then in actioning, where our tech was built to take that insight and immediately apply it to a marketer’s campaigns.
Taking the Next Step

Adapting to these challenges to build true Marketing Intelligence is a multi-step process. It’s not just a challenge for marketers just getting started on the path to Marketing Intelligence; even marketers with their own in-house infrastructure or existing marketing tech stacks can benefit from partnering with a third-party Marketing Intelligence provider. Specifically, marketers need a partner who can:

**UNDERSTAND YOUR DATA POTENTIAL**
The road to Marketing Intelligence often starts with an audit of your data potential - mapping out all your systems, what data they gather and how that data is currently processed. Rather than work with a partner who merely asks for specific data sets up-front, the wisest marketers will find a partner who wants to take inventory of all of the data they have and use it to build a plan that connects that data to business outcomes.

**STRUCTURE UNSTRUCTURED DATA**
In its raw form, collected across multiple touch points and different systems, customer data can lack structure, making it difficult to parse and analyze. Turning information into insight and building true Marketing Intelligence requires structuring these data sets, organizing them so they can be added to databases, combined with other data sets, and searched as needed.

**COMBINE DATA ACROSS DIFFERENT SILOS, SYSTEMS, AND ORGS TO CREATE A UNIFIED VIEW OF THE CUSTOMER**
From the ad server to the CRM database to the ESP to the brand website and loyalty programs, marketers often have access to several powerful data sources whose only common feature is that they aren't connected. Marketers looking to build real Marketing Intelligence need to find a way to connect the data from these silos in a way that will make it possible to both build a holistic view of the customer, and measure key business outcomes.
USE BUSINESS DATA TO IDENTIFY AND MEASURE THE KPIS THAT MATTER
By structuring and linking these datasets, marketers can start to identify how their customers and their actions are different in terms of their impact on the business, and develop KPIS that align with important business outcomes. Incremental customer acquisition, order size, increasing customer lifetime value, or reducing churn can all be made a focus. The only limit is what is measurable, and even some less measurable outcomes can be predicted or identified with the right proxy metrics.

LINK CUSTOMER DATA TO MEDIA AND TARGETING/DELIVERY DECISIONS
Once a marketer has identified the KPIS that align with business outcomes, the next step is adjusting the marketing strategy to reach customers who will drive those outcomes, and message accordingly. Connected customer data and new KPIS only provide value if a marketer can put them to use on a campaign, improving their decision making when it comes to targeting and delivering media.

MEASURE PERFORMANCE AGAINST THE ABILITY TO DRIVE BUSINESS OUTCOMES AND OPTIMIZE ACCORDINGLY
Once the targeting strategy is in place, the next step is to regularly measure performance against the new KPIS that align with business outcomes and optimize delivery and audience accordingly. Marketers need to have partners that can develop true Marketing Intelligence from this process, identifying who responds and who does, why they do so or don’t, and future opportunities to read them.
BUILDING MODELS TO UNDERSTAND AND REDUCE CUSTOMER CHURN

GOALS

A cruise line partnering with MiQ wanted to understand where it was losing customers during the booking process (referred to as a “drop-off”) and what elements of the process and the product (such as destination, room type, service, and price) had the greatest impact on customer churn.

THE CHALLENGE

Using a series of tags and pixels to capture information about customers’ purchases and marrying that data to masked offline CRM data provided by the cruise line, the MiQ Data Science team analyzed the cruise line’s customer purchase journeys. Using this data, the MiQ Data Science team built a decision tree model to identify the key drop-off points in the booking process and the likelihood of losing a customer based on specific criteria, such as the availability of an ocean-view room (versus an interior-view room, for example). Armed with data on customer drop-off, MiQ created a series of custom segments to target with different messaging and offers.

RESULT

The Cruise line was keen to immediately employ the recommendations of the MiQ data science team based on the decision tree model and agreed to make available an even larger store of CRM data for analysis. The analysis was also shared with the cruise line’s parent company, who saw the value of the data and asked MiQ to replicate the process for its other lines of business.
The transition to digital began for many companies as the process of creating great experiences for their consumers. Now it means placing data science and real-time data-driven decisions at the heart of their operations, and using this data to build true Marketing Intelligence to drive business outcomes. For many businesses this is far removed from their heritage and core competencies. How to avoid being left behind the digital-first companies investing billions into data science is the biggest challenge out there.

Regardless of their brand’s size, position, or marketing budget, there’s a clear need among digital marketers to find a third-party Marketing Intelligence partner who can help them connect disparate data sets, interpret results, and make the most of their existing tech stacks.

Conclusion