The Digital Age of Data Intelligence

Gain Market Insights and Improve Operational Execution

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The Age of Data Intelligence

The age of data is here, and the value of all that data to organizations continues to increase. Data has, in fact, become integral to an organization's ability to grow and thrive. So, it is essential that organizations tap into every available source of information that might help gain insight into operations. This includes data from all sources, everything from physical or digital activity, and including the identity of the consumer and any customer interactions. This is the basis of what is known as "data intelligence," and properly deployed, data intelligence can be used to innovate and optimize business processes on a continuous basis.

Data itself should be at the core of that information base, including device-based data that reflects where consumers and customers live, travel, shop and visit. This location data provides the organization not only with the opportunity to understand consumers' activities based on geography, but it offers a window into <u>why</u> consumers are making the choices they do. To develop this level of data intelligence, however, the information collected should represent both the physical (offline) and digital (online) activity of an individual, which can then be linked to location, actions, mobility and transactions. This requires the technological ability to first identify the consumer, and then to correlate a universe of third-party data to that identity. That unified data then can help an organization meet a range of marketing and operational requirements.

Organizations must be agile and effective in their operations, too. Data intelligence allows this, but decades of digital transformation have not necessarily helped organizations fully advance the process. In fact, we assert that by 2025, over one-half of organizations will determine the chaos of digital technology usage requires a rationalization of vendors to ensure operational excellence. Information must be readily and reliably available, but still, it is too often not at the fingertips of those who need it the most. The absence of data intelligence can be felt most keenly in marketing, where teams are looking for every possible tool to optimize their efforts.

Digital Transformation
Market Assertion

By 2025, over one-half of organizations will determine the chaos of digital technology usage requires a rationalization of vendors to ensure operational excellence.

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Mark Smith
CEO & Chief Research Officer

Even when the data about people and places seems simple enough, the process of getting that data to those in the organization who need it is not simple at all. While it is possible to identify consumer activity, potential routes to locations, and related digital activity while relying on first-party data, doing so requires sophisticated technology and data collection, the kind of tech most organizations operate without. The technology needed for establishing advanced data intelligence requires specialized systems and data science, systems that are outside the practical scope of internal resources for most organizations. Access to data

outside the enterprise, especially, requires a context that is beyond the skills of most organizations, too, so these services are most often provided by third parties. But even for those whose business is data acquisition, third-party data is not always easy to collect or secure. This will only become more difficult as we face a cookie-less future, and as further consumer protections and privacy advancements become standard on devices and social platforms.

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Everything is in motion when it comes to data intelligence. Digital advertising events can change consumer behavior, including how and where people shop, where they visit, and where they work. This makes it more challenging for organizations to use even first-party data across the touchpoints that would allow them to be effective in their marketing and operations, much less to unify first-party with third-party data. But it is this unification of marketing and operational data that enables the range of improvements in segmentation and the targeting that can help drive marketing engagement.

Data Science and Ingredients for Success

All of that said, there are certain data science and technological ingredients for success in today's world. Just having a data science team as part of an organization is not sufficient, because even they would not have the technology and data that is required to reach the full potential of data intelligence. However, when marketing teams have well-defined intentions for targeting, segmenting, and servicing audiences of consumers, the organization will have greater success. Use of a next-generation identity profile of a consumer provides this ability to target advertising, which can influence consumer behavior through enriched digital activity.

However, having only first-party data integrated with basic audience data will not maximize targeted marketing. True impact requires the ability to further enrich the data set through collection of information that reflects consumer behavior at locations and along routes. Establishing such next-generation data intelligence requires the blending of insights from customer and market data, both internal and external. This enriched data intelligence helps ensure that an organization can be effective all the way from initial decision making to operational execution. In particular, this will enable an organization to make effective decisions on ad spend that are aligned with growth strategy, which supports ROI. It also extracts much greater gain from existing marketing investments.

Empowering an organization to use data intelligence also requires software that supports these possibilities, systems that are designed for everyone to work collaboratively, including analysts and planning professionals. If organizations are left without the ability to extract the

business value from data in marketing and operational activities, that can lead to unnecessary spending that hamstrings any potentially positive revenue impact of data gathering.

The range of data sets now available for use in marketing is significant. It comprises mobility data from devices, offline data about households, online data from social media and applications, more traditional transactional data on purchases, as well as external geospatial data from maps, locations, points of interest and travel routes. Data science ensures the accuracy and quality of data that is required for organizations to properly harvest the greatest value for intelligence in decision making. These vast volumes of data have the potential to personalize marketing as never before, from info about where individuals live—in the physical world and the digital world—to the routes they take every day, time and activity of visits at locations, what is influenced, to purchasing behavior. But both data and its analysis become more complicated when individual behavior is digitally influenced by mobile devices that can not only determine the route, the stops, and potential purchases, but can also track how an individual is influenced through social media.

So, where consumer touchpoints that span the digital and physical are blended together, the need for identities is essential, not just for correlation, but as a means to enrich the data for marketing and operations. Even so, it is insufficient to simply have an "identity and resolution" approach to data that includes access to external data. In order to process data effectively for marketing intelligence, organizations must be able to apply data preparation and aggregation along with analytics and machine learning.

> **Technology and data are converging, and this will enable the next generation of market insights that will help marketing be more effective.**

Technology and data are converging, and this will enable the next generation of market insights that will help marketing be more effective. The technological advancements of cloud computing have provided more locations for the required data processing. The evolution of data lakes and application of data science in the cloud allow organizations to bring vast volumes of data together, and to further apply unique identity graphing that employs statistical correlations. This makes it possible for companies to harness insights from the broadest range of physical and digital behavioral data, unified both from and for marketing and operations standpoints.

The ability to collect and process data in these ways is available to anyone, but the science of modeling, correlation and enrichment is a business unto itself, especially in terms of staying on top of the advancements in the methods of collection and the evolving limitations on third-party data. So, the computational process is not just about the technology itself; it is about knowing how to do it. The current generation of customer data platforms (CDPs) is functional with first-party data, but the technologies do not include the data science and methods

required to model and correlate second- and third-party data in a way that is valuable to organizations that wish to segment and target. Because of this, we assert that through 2023, consolidation of the CDP technology market will be the catalyst for marketing organizations to adopt new digital engagement and experience platforms.

Identity graphing of online digital activity with offline locations, transactions, and consumer and customer demographics, makes it possible for organizations to establish a consumer identifier. The technology of data intelligence also requires distribution and integration of marketing and operational data, blending it into the processes and applications that are used across the entire organization.

Digital Experience Platform
Market Assertion

Through 2023, consolidation of the CDP technology market will be the catalyst for marketing organizations to adopt new digital engagement and experience platforms.

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Keith Dawson
VP & Research Director

Combining data science and technological advancements introduces the opportunity to establish data intelligence that is unified, sophisticated and impactful. To improve operations and marketing, there are five steps the organization can take to advance data intelligence for teams:

- The first step is to truly understand the potential of the latest technological advancements in data, science and software, those that are specifically designed to allow an organization to take advantage of new opportunities.

- The second step is to understand that a universal identifier is required in order to unify the online and offline data and merge first-, second- and third-party data through graphing and modeling.

- The third step is to ensure the effective enrichment of all the data that is generated and harvested daily.

- The fourth step is to allow for the effective segmentation of the data using the power of a CDP's current capacities, but then applying data science and machine learning to determine the potential activation of data through any channel of interaction, usually called omnichannel.

- The last step is to have software in place that can be accessed by all relevant parties, which will empower data intelligence for all, from the data science and analyst teams all the way to the operations and planning teams, across marketing, brand, category and customer teams, all of whom are looking to further exploit market opportunities. Increased outcomes for the organization, then, require having a platform that is easily managed, that can address these five steps together, and that can ensure that the unified operational and marketing data from first- to third-parties is fully enabled.

The Right Digital Investment

There is great potential in the right digital investment. Today's market opportunities are being empowered by a generation of intelligence that enables businesses to explore what is digitally possible. Competitors can now ask vital questions about how to precisely pinpoint consumers and their activity as related to location and brand, leading that organization to competitive marketing opportunities. What is the impact on the organization that cannot do the same?

Significant digital experimentation and investments continue, by way of consultants and technology. But in the end, organizations need to remember which business they are in, where their strengths are, and focus on where they can best allocate resources and financial investments. The goal should be to then find software that can streamline their marketing efforts and increase engagement.

Numerous categories of data and technology exist, certainly, but ensuring that they are unified using the latest digital innovation is not something an organization should be worried about. What should matter to the organization is the usage of and benefits from resulting data intelligence and the outcomes that can be derived. Therefore, companies will need to realign marketing investments to meet the new potential in a simplified data and technology infrastructure that empowers a focus on opportunity and engagement. We believe that by the end of 2023, one-third of organizations will deem existing marketing technologies ineffective to intelligently engage buyers in personalized digital experiences.

Marketing
Market Assertion

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Mark Smith
CEO & Chief Research Officer

The state of digital business is fundamentally different today from what it was in recent years, and the future will most certainly introduce more changes to how people live and work, rendering past knowledge and assumptions obsolete. With the range of possible black swan events—pandemics, geopolitical crises, climate change, the resulting interruptions to supply chains, and more— how and where people live will continue to change.

One would think that organizations have unlimited access to data about people, the places they visit, and what they do in the digital and physical worlds. But that is changing, and access to comprehensive data sets is not expanding, but contracting. Evolving privacy regulations and the significant impact of greater protections to the devices people use will create new barriers and will significantly affect availability of digital data. These realities concurrently change the requirements for the type of data and insights that organizations will need to effectively market to and engage with consumers.

The environment is not static, but continually changing. There are insights now available as a result of blending the unified marketing and operational data, and these can introduce new opportunity for organizations to gain market advantage. Intelligence about consumers and their behavior now makes it possible to identify and target those more-personalized segments that best represent new opportunities for market engagement.

The ability to identify active segments that are not just geo-targeted but have a higher confidence interval on intent and behavior also enables organizations to operate at a much more rapid pace. This offers the confidence to be more precise and agile in taking action and making decisions related to marketing strategies and operational executions across any channel, and empowers a new generation of business potential.

Data intelligence enables an organization to capitalize on its revenue potential and outcomes. But it also offers the opportunity to monetize its own data. That can create a revenue-generating asset, and offers competitive advantage by shortening the time-to-action, which can help advance the expected outcomes. The digital age of data intelligence has not been possible until now, but science and technological advancements, blended with market knowledge and continuous investment, can now empower organizations to maximize their potential.

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