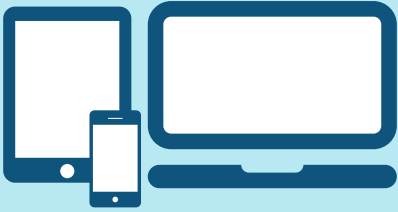


RADIUM ONE™
WE KNOW YOUR NEXT CUSTOMER.

SOLVING MARKETERS' cross-channel digital conundrum

a strategic guide to real-time marketing





SOLVING MARKETERS' CROSS-CHANNEL DIGITAL CONUNDRUM

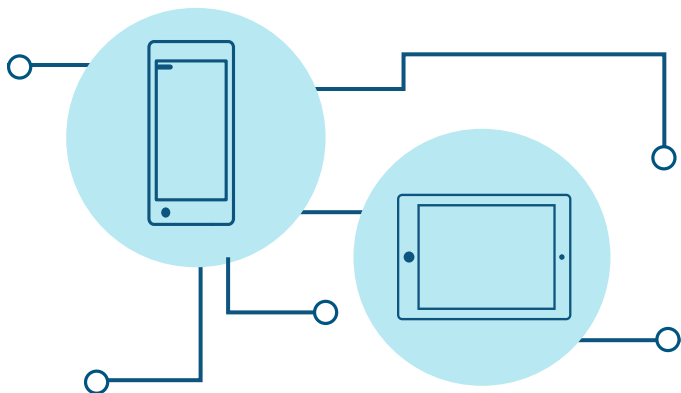
A strategic guide to real-time marketing

Marketers have a cross-channel digital conundrum because the consumers they want to connect with distribute their attention across devices and channels. They use the regular web, the mobile web, and mobile apps. Anywhere they can engage with social media and digital video, they do. Plus, for many marketers, the same consumers they're connecting with online and in-app, they're also connecting with through email, marketing automation and customer service.

When marketers pursue cross-channel digital marketing, they're pursuing the ability to engage with consumers on any device or through any display, social, video or mobile channel based on the same set of information. Today, technology can help marketers in this endeavor to stop operating in silos and start engaging based on a holistic view of the consumer. Done right, cross-channel digital marketing helps marketers focus their efforts on what's really important: intelligently and profitably connecting with audiences at every moment of opportunity.

This requires a cross-channel approach to digital advertising whereby each engagement with a consumer builds upon prior engagements. Such an approach can serve the crucial role of recognizing the same people as they engage with social media, video, display and mobile ads from screen to screen to screen.





The cross-channel approach minimizes the disconnect that can happen every time a person engages with a brand from multiple digital touch points that do not share the same unique identifier. For example, if a person browses an ecommerce site on a tablet, buys from the same ecommerce site on a desktop and takes no action with the ecommerce site from a smartphone, a marketer with a siloed approach will see this person as three different people. The person will look like a customer from their desktop, like a visitor from their tablet and like a new user on their smartphone.

This leads to very disconnected messaging. Ads reaching the person's desktop may promote 10% off the next purchase, ads reaching the person's tablet may show products the person already bought, and ads reaching the person's smartphone may incorrectly be oriented toward acquiring new customers. This broken view of the customer is bad for the customer experience and a wasteful use of ad spend.

The goals of a cross-channel approach are two-fold. The first goal is to recognize the same people as they engage with social media, video, display and mobile ads from screen to screen to screen. The second

goal is to use the information from the interactions on any one screen, in real-time, to improve the interactions on all other screens. Achieving these goals will improve advertising results, eliminate waste, decrease advertising costs and drive greater return on ad spend.

To tackle the cross-channel digital conundrum, marketing leaders should do these five things:

- 1 **COLLECT**
audience data
- 2 **UNIFY**
the data into anonymous digital personas
- 3 **ACTIVATE**
persona-based campaigns
- 4 **ENHANCE**
CRM and DSP data bi-directionally
- 5 **EMPOWER**
marketing teams to pursue best practices



LET'S EXPLORE EACH ONE OF THESE FIVE RECOMMENDATIONS IN DETAIL.

1

COLLECT

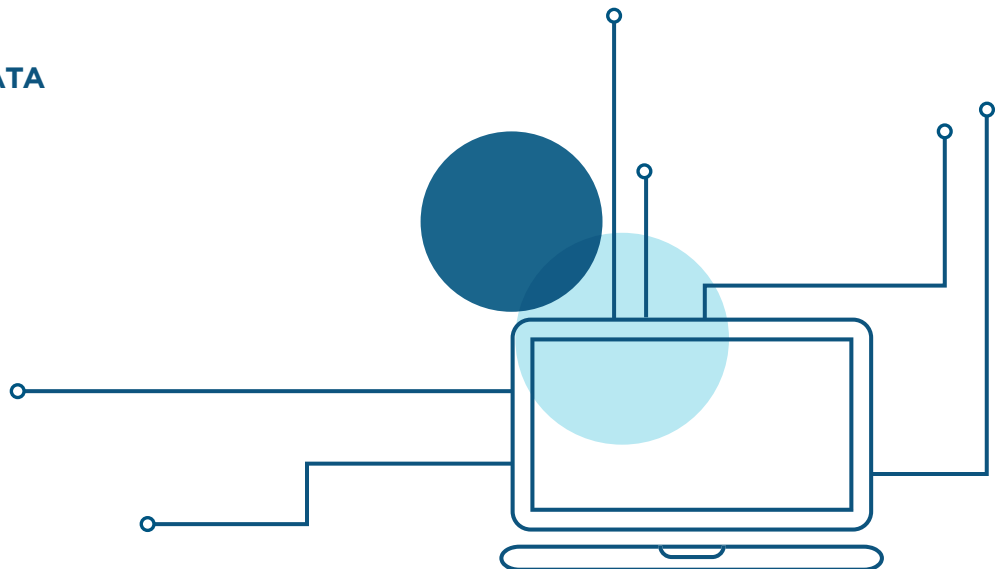
all audience data

For starters, marketers need one place where they can collect all their usable, anonymous data in real-time. At a minimum, this involves using a Data Management Platform (DMP) to pull in first-party regular website data, mobile website data and in-app data. Savvy marketers will build on the minimum data sets with other data such as:

- **ANONYMIZED CUSTOMER DATA FROM CRM SYSTEMS**
- **ADVERTISING PERFORMANCE DATA**
- **SOCIAL SHARING AND ENGAGEMENT DATA**
- **PHYSICAL WORLD DATA**

Some of this data can be organized in a DMP using the web's most popular anonymous unique identifier, the cookie ID. However, today's digital world has other unique identifiers to account for. For example, in-app data comes with resettable, anonymous identifiers including Google's advertising ID (Advertising ID) and Apple's Identifier for Advertisers (IDFA) and Safari browsers come with cookie-less identifiers. Advertisers should actually expect their DMP to collect user data connected to all unique identifiers, not just cookie IDs.

Then, to reach individuals regardless of what device or channel they're using at a moment of opportunity, marketers need the next step. They need to unify the data into personas.



2

UNIFY

The data into anonymous digital personas

Marketers need a way to link each individual person's multiple anonymous identifiers to just one anonymous identifier, an anonymous digital persona ID. In a marketers' DMP, a single anonymous digital persona ID should link together all the relevant identifiers and associated data for a single person. Ideally, every person in the marketers' target audience will be represented in their DMP by an anonymous digital persona ID. It takes a combination of two methods to map identifiers together: deterministic and probabilistic matching.

To do matching at scale, advertisers will need a small set of deterministic matches that enhance and validate a wide-scale set of probabilistic matches. Together, the two methods can consolidate the unique identifiers for a large majority of consumers.

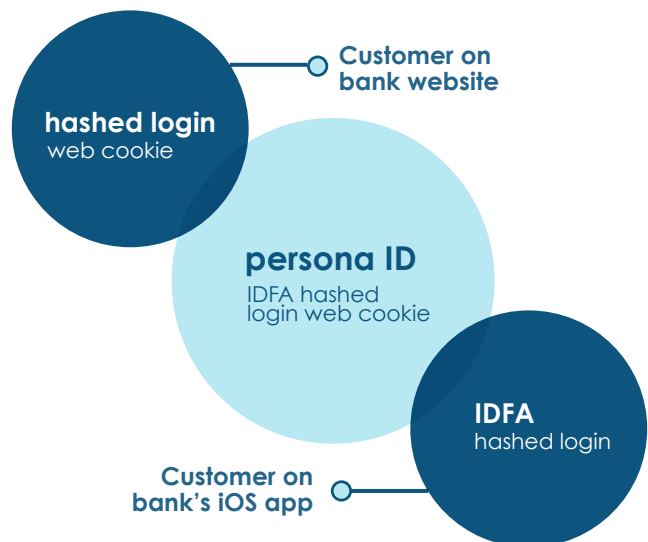
Deterministic matching works at a small-scale because it requires a shared key to determine an exact link between two or more unique identifiers. With deterministic matching, a marketer has near 100% certainty that different unique identifiers belong to the same person.

Probabilistic matching works at a wide-scale because it uses a collection of signals to determine an approximate link between two or more unique identifiers. Probabilistic matching requires three

key ingredients: a small-scale set of deterministic matches, powerful machine learning algorithms and a large volume of source data. Source data can include numerous signals such as IP and timestamp.

To illustrate probabilistic matching, assume that one person uses the same Comcast IP to frequently browse the mobile web on their smartphone and

A bank uses deterministic data to create an anonymous, unified view of their customer across online and iOS engagements

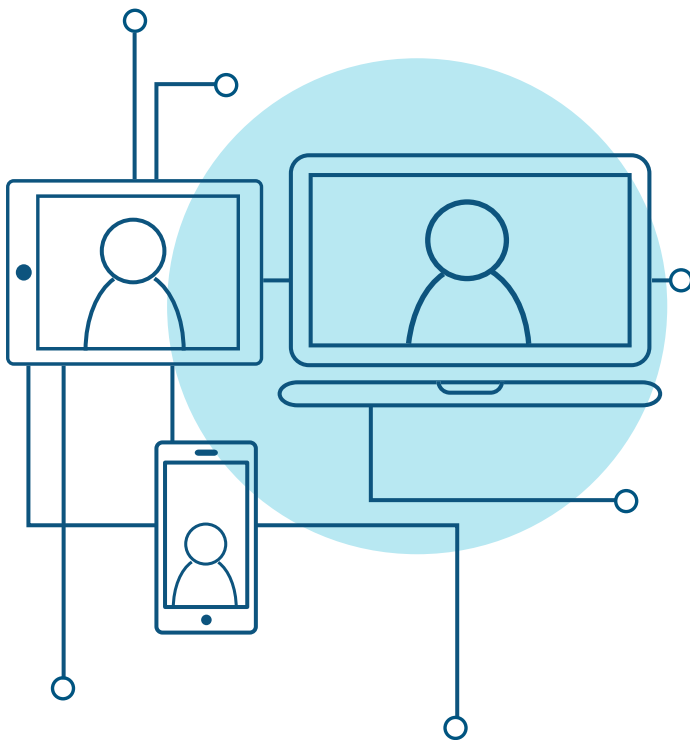


watch videos on their laptop around the same time at home in the evening. A machine learning algorithm infers that the mobile cookie and the web cookie from the Comcast IP should be linked together under the same anonymous digital persona ID. This machine learning algorithm also estimates the certainty of such a match at 80%. Depending on the balance between certainty and coverage that an advertiser aims to achieve in its campaign, this match either would or would not be included in a set of matches used in the campaign. For example, if the advertiser aims to target cookies matched with certainty 60% and above, these two cookies would be a part of the set of matches used in the campaign. However, if the advertiser aims at a higher accuracy, targeting cookies matched with certainty

90% and above, these two cookies would not be a part of the set of matches used in the campaign.

Together, probabilistic and deterministic matching solves one of the biggest problems with the cross-channel digital conundrum, which is that of mistaking one person for multiple people. It allows the DMP to organize data by anonymous digital persona ID and therefore recognize the same people as they engage from screen to screen to screen. This offers a consolidated view of the marketers' actual audience. With this, the marketer can plan and buy media to connect with actual people.

Furthermore, in bidding for advertising inventory on a real-time bidding exchange, a marketer can bid low prices for low certainty links to the anonymous digital persona they are trying to reach and higher prices for high certainty links. Returning to the matching example, when an advertiser runs a campaign that includes only matches with certainty 60% and above, the advertiser might bid a \$5 CPM for a cookie linked to the targeted anonymous digital persona with an 80% certainty, and only \$1 CPM for a cookie linked to the targeted anonymous digital persona with a 60% certainty.

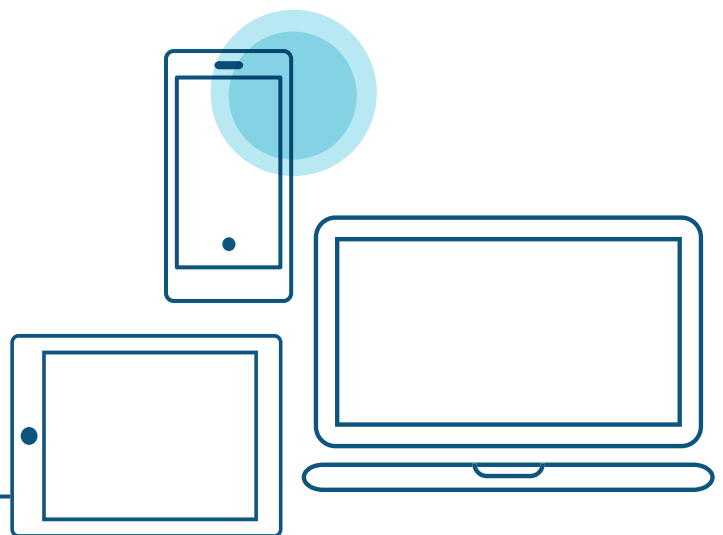


3 ACTIVATE persona-based campaigns

Once a DMP can recognize the same people from screen to screen to screen, a DMP's segments become far more useful and powerful. It's a huge step forward for segments to target anonymous digital persona IDs because the segments are more descriptive and consider more data from more digital touchpoints. For example, anonymous digital persona-based segments take information from the data-rich web environment and make it actionable on the data-limited mobile app environment. Similarly, anonymous digital persona-based segments take geo-location information from the mobile app environment and make it actionable on the web environment.

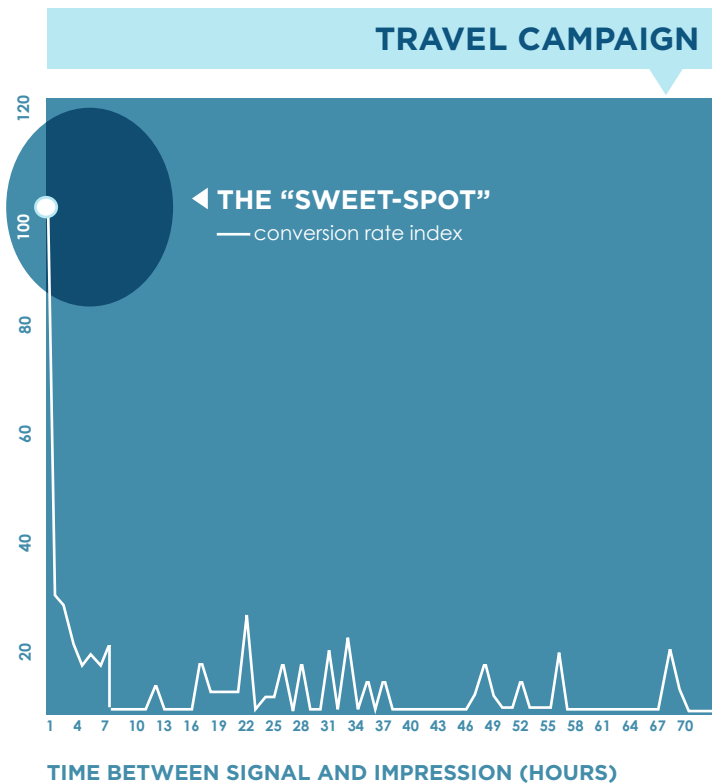
Marketers that get this far in solving the digital conundrum will find it much easier to plan and buy media that targets the audiences they want to reach. However, to take full advantage of audience segments in a DMP, marketers need the DMP to connect in real-time with a Demand-Side Platform (DSP). In addition, the DSP needs to reach all major real-time channels: display RTB, mobile RTB, video RTB and social RTB.

Marketers should expect no less than a real-time link between their DSP and DMP. When there's latency between the moment that a consumer signals intent and the moment that an advertiser responds with an ad, advertising performance suffers. The greater the latency, the bigger the hit on performance. Campaign data from advertisers in the travel and financial services verticals illustrate the importance of acting on intent as immediately as possible. They found the first-hour after a consumer signals intent to be the "sweet spot" in terms of campaign responsiveness and willingness to convert.



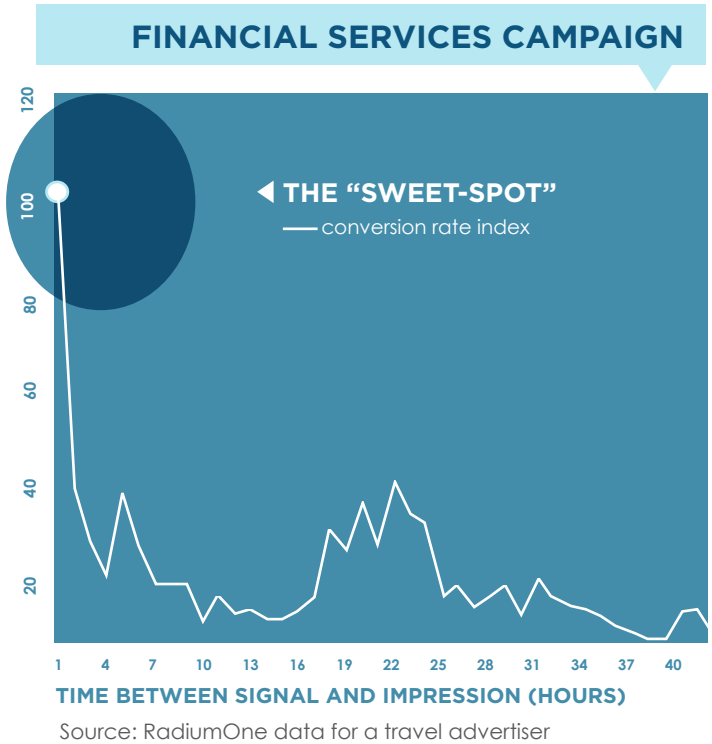
Recently, a travel advertiser delivered 13% of ad impressions during the “sweet spot” to drive 81% of conversions. Thus, reaching people in the first hour after they signaled intent achieved the highest conversion rates. By the second hour, conversion rates for the travel campaign dropped seven times lower.

Conversion rates the highest for a travel advertiser within one hour after a signal of intent



Source: RadiumOne data for a travel advertiser

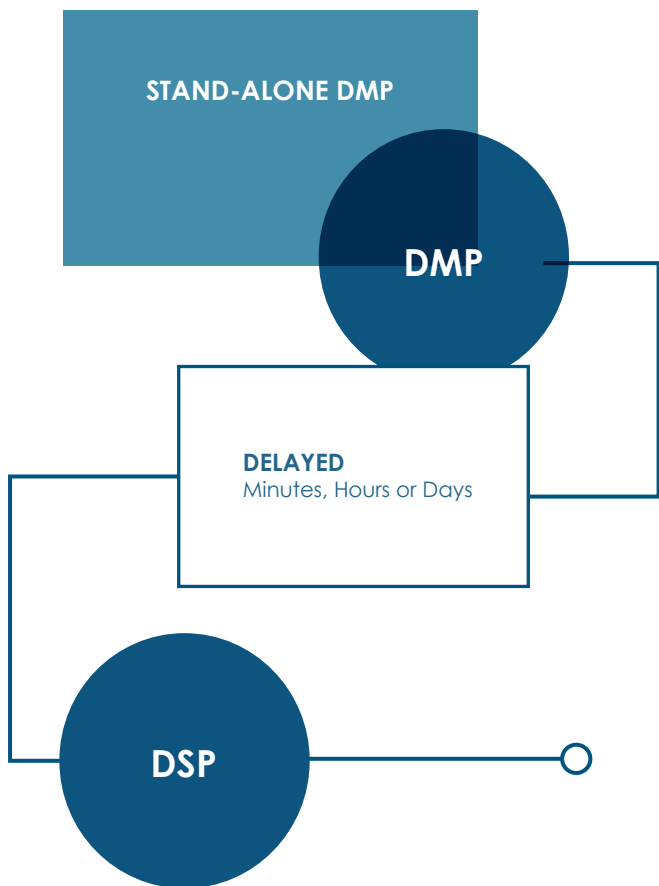
Conversion rates the highest for a financial services campaign within one hour after a signal of intent



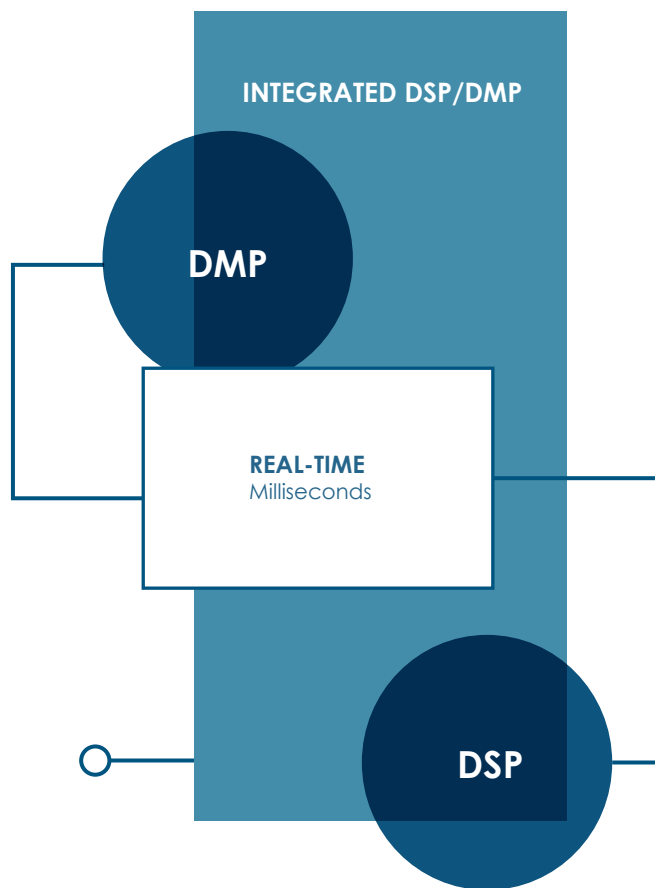
The same power of acting immediately holds true even for advertisers with longer sales cycles. A financial services advertiser delivered 7% of impressions during the “sweet spot” to drive 29% of conversions. Like the travel advertiser, the financial services advertiser achieved the highest conversion rates by reaching people in the first hour after they signaled intent. By the second hour, conversion rates for the financial services campaign dropped 2.5 times lower.

Since conversions happen so close to intent signals, marketers need systems that activate real-time data about consumers in milliseconds, not minutes or even hours. Some marketers make the mistake of separating their data from its delivery by separating their DMP from their DSP. A stand-alone DMP leads to delayed delivery between the time of an intent signal and the time an ad is served. This results in lost opportunities. To capture the most opportunities from a DMP and DSP, marketers should look for an integrated solution where the DMP and DSP work together in real-time.

Stand-alone DMP leads to delayed delivery and lost opportunities

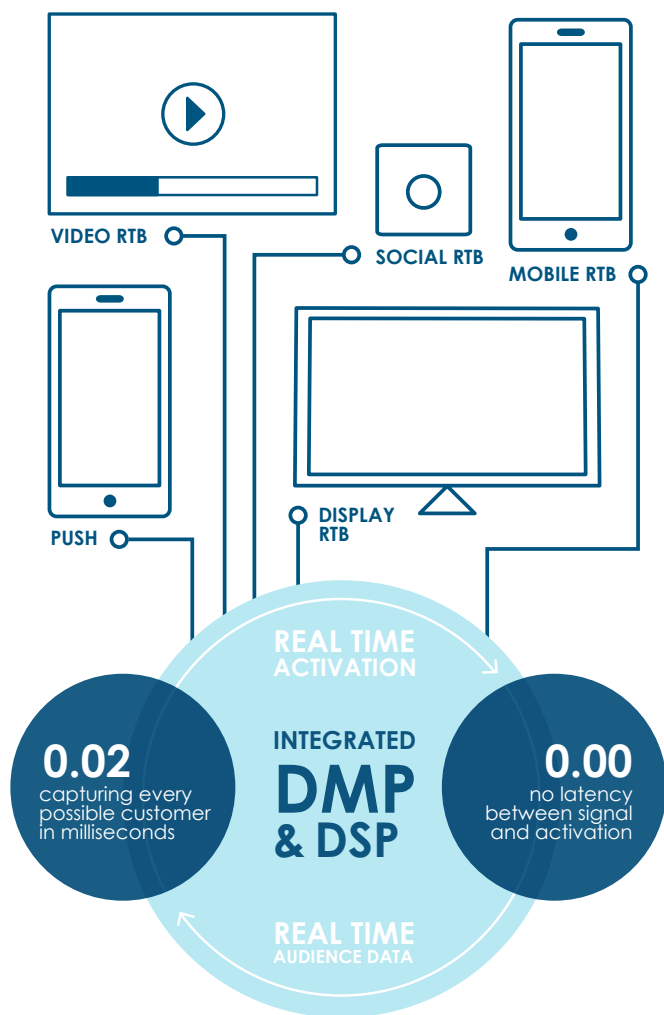


Integrated DSP/DMP powers real-time delivery and high performance advertising



The real-time connection between DMP and DSP makes it easy to connect with individuals wherever they consume digital content. The integrated DMP/DSP can see an intent signal, match it to an anonymous digital persona ID in real-time, and act on it by serving the individual an ad, regardless of device. For the most flexibility in activation, the integrated DMP/DSP should be able to reach individuals via display RTB, mobile RTB, video RTB, social RTB and mobile push. With this, the integrated DMP/DSP can find and reach consumers with great flexibility on many devices and within many channels.

The ideal real-time digital marketing stack has an integrated DMP/DSP and RTB activation on many devices and within many channels



Returning to an earlier scenario, what would a retail marketer want to happen when a person browses their ecommerce site on a tablet and then leaves?

Naturally, the marketer would want their digital marketing stack to quickly reach the person with an ad that brings them back to the ecommerce site to purchase. It would work like this. The DMP will use first-party website data in real-time to see that a person left the ecommerce site from their tablet without buying.

The DMP will have an anonymous digital persona ID for this person and so it will add the anonymous digital persona ID to a retargeting segment. The anonymous digital persona ID in the segment will tell the DSP how to retarget the individual regardless of device. By operating in real-time with no latency between signal and activation, the DSP finds the next possible opportunity to reach the individual within an hour through an ad served to the person's Facebook news feed on the person's laptop. The person clicks the ad in the news feed, returns to the ecommerce site from their laptop, not their tablet, and converts. The integrated DMP/DSP scores a conversion.

Excellent, the integrated system did its job. However, it could also amplify the intent signal to a social graph. With retargeting, one intent signal can only drive a maximum of one conversion. With the right amplification, one intent signal can drive many conversions.

What if the person in the last example is a college student looking for camping gear for an upcoming fraternity camping trip? When the college student leaves the tablet site, instead of just triggering retargeting, the integrated DMP/DSP could amplify the intent signal to retarget the college student and target other likely campers in his ShareGraph™. The ShareGraph™ should be a dynamic graph of true connections based on sharing activity between users such as amount of sharing, frequency of sharing, recency of sharing, directionality of sharing, type of sharing and more. With the ShareGraph™, the camping website has turned one conversion opportunity into many conversion opportunities. Marketers should look for technology partners with proprietary data and experience with amplifying intent signals.

4

ENHANCE

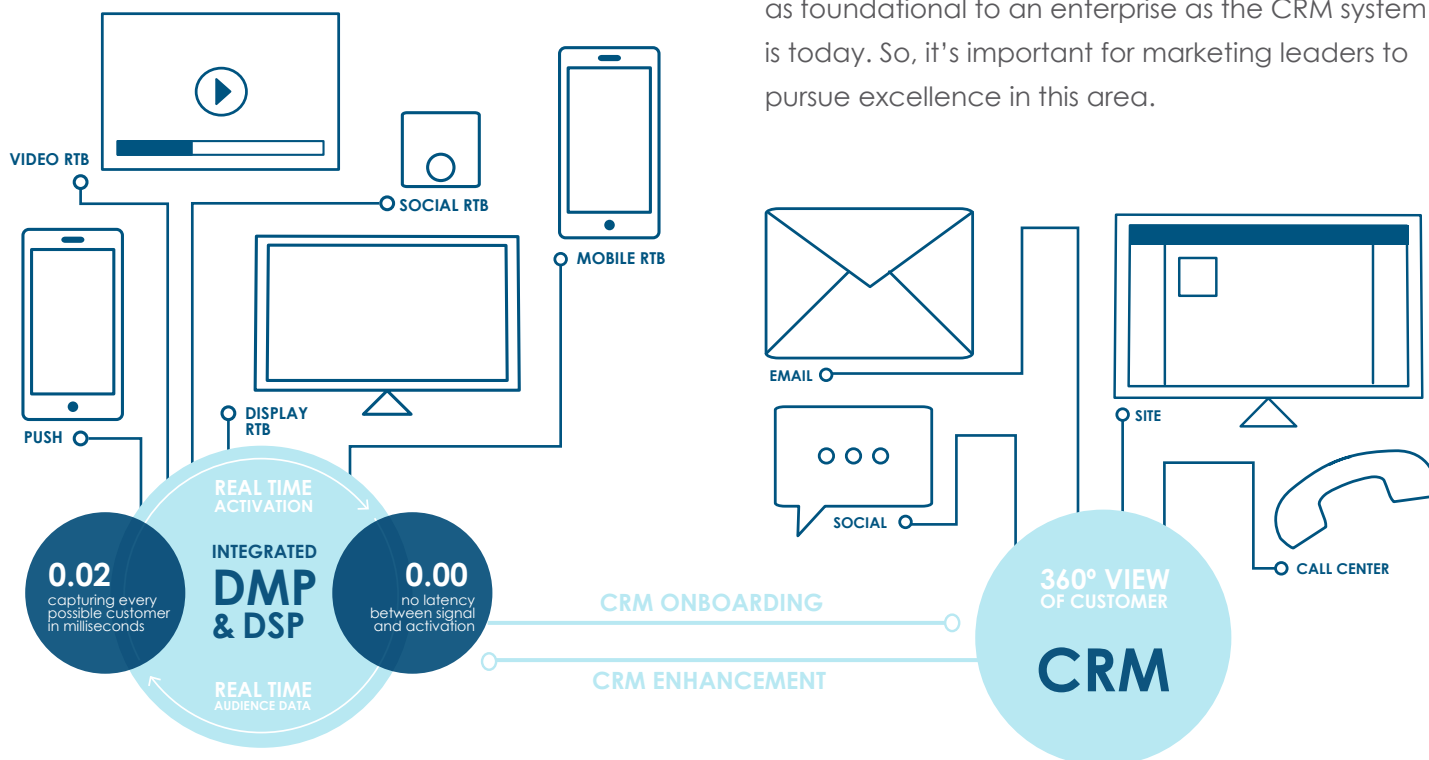
The CRM and DSP data bi-directionally

From ShareGraph™ data and beyond, the DMP is a powerful aggregator of customer insights. Marketers commonly enhance their DMP with CRM data. However, marketers can also expect the reverse, to enhance their CRM with DMP data. Ideally, marketers will have a vehicle through which the CRM and DMP systems can mutually enrich the dataset of the other. This helps marketers personalize the customer experience and get deeper customer insights.

In addition, when marketers use their DMP to enhance CRM, they enhance all the channels that CRM influences. This includes email, website, social and call center activities. For example, DMP data can enrich the decisions made to customize content on websites, email newsletters or even on call center interactions.

Clearly, a comprehensive cross-channel approach to digital advertising empowers more personalized and effective marketing beyond RTB execution channels. Trends point toward the DMP becoming as foundational to an enterprise as the CRM system is today. So, it's important for marketing leaders to pursue excellence in this area.

The ideal real-time digital marketing stack does CRM onboarding and CRM enhancement



5

EMPOWER

Marketing teams to pursue best practices

Marketing leaders can pursue cross-channel excellence by empowering their teams to pursue best practices. The following three best practices are a good place to start:

Dedicate resources for a successful implementation of the DMP and DSP. A marketer's technology partner for their DMP/DSP will do most of the implementation work. However, there are a few things that must be facilitated by the marketer. They should implement the data collection tools necessary to capture the richest set of first party data possible, such as tools that collect data on how their audience uses their site and shares their site content. They should also collect how users shorten and share site URLs. If the marketer has an app, they'll want technology that contributes first-party data from app usage to their DMP. This will involve implementing an SDK and onboarding in-app deterministic data to the DMP. Then, they'll want to onboard their CRM data. Finally, they should implement any necessary policy updates.

Execute cross-channel digital planning and buying. Once an integrated DMP/DSP makes it possible for marketers to recognize and engage the same person from screen to screen to screen, all the teams that were operating in silos need to come back together and execute cross-channel digital campaigns. As a best practice, marketing teams should embrace integrated planning and buying as they adopt

the integrated DMP/DSP. It will take some time for marketers to re-orient their processes. Marketing leaders can support their teams by growing the team's experience with cross-channel advertising and encouraging ongoing learning.

Invest in creative units for all channels Finally, marketers need to fully appreciate that the individuals they want to reach could pop up anywhere. Marketers will need high-impact, dynamic creative units for display RTB, mobile RTB, video RTB and social RTB to fully capitalize on cross-channel capabilities.

The solution to marketers' digital conundrum is close at hand. One way to get there fast is to work with a technology partner with extensive cross-channel capabilities.

THE RADIUMONE RECIPE FOR BETTER PERFORMANCE

RadiumOne helps marketers solve the cross-channel digital conundrum with its integrated DMP/ DSP, proprietary data, algorithms and patented ShareGraph™ technology. Here's five ways that RadiumOne provides a differentiated impact:

1 **Marketers access better data to power more productive segments.** The RadiumOne Enterprise Platform aggregates all typical audience data sources and onboards CRM data. In addition, it enhances customer segmentation capabilities by generating rich first party data on behalf of marketers. For example, RadiumOne offers brands its free Po.st sharing tools, which turn social sharing and engagement activities into audience data. The Po.st sharing tools include the Po.st brand URL link shortener, which turns activity related to a brand's shortened URLs into



audience data, and the Po.st sharing platform, which turns activity related to a brand's on-site content sharing into audience data. RadiumOne helps marketer capture mobile app activity with the RadiumOne Connect mobile SDK. Any brand can use this SDK for free to contribute in-app activity to their holistic store of audience data. Finally, RadiumOne brings all the social sharing and engagement activity together into dynamic, targetable segments with its patented ShareGraph™ technology. Brands can use ShareGraph™ to dynamically target the close social connections of a seed audience on the open web.

2 **Marketers get a unified view of each individual in their target audience, which allows them to profitably and purposefully engage with audiences.** RadiumOne uses its proprietary data and machine learning to unify all audience data into anonymous personas using a combination of deterministic and probabilistic matching. With RadiumOne, marketers build persona-based segments that combine the best of the data-rich web cookie environment with the best of the location-rich mobile app environment.

THE RADIUMONE RECIPE FOR BETTER PERFORMANCE (cont.)

3

Marketers will find their next customer.

The RadiumOne Enterprise Platform produces high conversion rates by reaching members of a target audience, one by one, rapidly after they signal intent. The platform can respond to a signal of intent within milliseconds. Plus, the platform has a high likelihood of reaching those who signal intent since it can reach the same intender across multiple devices via display RTB, mobile RTB, video RTB, social RTB or mobile push. This ability to respond within milliseconds, across channels and across devices, produces high conversion rates during the one-hour “sweet spot” immediately following each signal of intent. In addition, the platform amplifies seed audiences with patented ShareGraph™ technology. This provides marketers with fresh, unique audience data; thereby making multi-channel media buying with high performance attainable.

4

Marketers can enhance their CRM. RadiumOne facilitates CRM onboarding and CRM enhancement through the Audience Activation Platform (AAP). This is a platform that sits outside the RadiumOne Enterprise Platform. When data needs to move from a CRM system to the DMP, the AAP is responsible for anonymizing the CRM data. When data needs to move from the DMP to the CRM system, the AAP is responsible for linking advertising performance data back to the appropriate customer in the CRM system. Thus, the Audience Activation Platform ensures that no personally identifiable data from the CRM system ever touches the Enterprise Platform.

5

Marketers can engage a full-service team. With RadiumOne, marketers may opt to have all the above benefits, plus an expert team to manage their real-time digital marketing stack.

CONCLUSION

The cross-channel device conundrum has reached a point where inactivity is not an option and where the rewards are close at hand. Marketers can quickly improve advertising results, eliminate waste, decrease advertising costs and drive greater return on ad spend. They simply need the ability to recognize the same people as they engage with social media, video and other forms of content from screen to screen and use the information from the interactions on any one screen, in real-time, to improve the interactions on all other screens.



Luckily, marketers have a clear path to action. Marketing leaders should invest in doing these five things:

- 1 COLLECT**
audience data
- 2 UNIFY**
the data into anonymous digital personas
- 3 ACTIVATE**
persona-based campaigns
- 4 ENHANCE**
the CRM and DSP data bi-directionally
- 5 EMPOWER**
marketing teams to pursue best practices

Marketers who want to capitalize on the expertise of a differentiated partner and solve the cross-channel digital conundrum should contact RadiumOne today.