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A Hybrid Marketing Odyssey

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ABSTRACT

Hybrid vehicles let you use the best technology for a given scenario, blending fuel efficiency with long driving range, and low emissions with quick refueling. It's like two cars in one—two motors magically complementing each other under the hood, invisible to the driver. And as the driver, you have just one control panel that chooses the best engine for the circumstances, adjusting to changes in real time. We marketers face a similar dilemma: we have different engines with separate controls for different scenarios. Not only do we have to learn how to drive multiple systems to address the diversity of interactions we have with our customers, we must make them work together seamlessly to deliver delightful customer experiences.

Sounds more like Marketing: Impossible! Are you thinking what I'm thinking? Yes! What the world needs now is a revolutionary approach—hybrid marketing! The good news is that SAS has been working hard on this and already has an answer for you.

In this session, you learn what hybrid marketing is and why it's important to your marketing success. You learn how you can leverage your existing investment in SAS® and keep your secret sauce—your analytics—and your data safe, all while staying in compliance with privacy-related regulations. We share our unique approach to this need, showcase a few built-in analytic tricks we've added for marketers, and describe in both business and technical terms how hybrid marketing can work for you.

INTRODUCTION

Hopefully, the theme from *2001: A Space Odyssey* is now fading in your brain and you are ready to learn. 2019 is an exciting time for marketers. Despite the challenges of complex data privacy regulations, rising consumer expectations, and always-on competition, marketing technology (MarTech) is now starting to deliver on many long-time promises such as one-to-one marketing and customer journey management.

But there are still hurdles to address. As consumers, we want businesses to consistently treat us as if they know us, regardless of the time, circumstances, or place. As marketing technologists, we want to leverage the flexibility afforded by Software as a Service (SaaS) and cloud computing, but we don't want to be the next business to be in the news for a data breach or a General Data Protection Regulation (GDPR) violation. Hybrid marketing addresses these critical dissonances.

Before we look at the here and now, let's take a step back for some important context.

The roots of hybrid marketing are grounded in two closely related yet usually siloed areas of marketing—direct (also known as database) marketing, a practice that began in earnest in the 1970s, and digital marketing, which grew with the explosion of the internet and CRM in the late 1990s. Strangely, these two disciplines stand to learn a lot from each other, but it's rare that we see this happen in the wild. Along the way, we marketers have heard many siren songs—one-to-one marketing, marketing at the speed of light, dynamic pricing,

precision targeting, customer journey optimization. Who wouldn't want that?! But despite occasional successes, most of the hype failed to live up to reality.

Modern direct marketing emerged in the days when you and everyone else could count the number of video streams (formerly known as television stations) they could access on both hands, and when you and your cousin five states away got the same Montgomery Ward catalog every year. Aside from MSA-level advertising, there was no meaningful concept of personalization in marketing. In the early 1980s, as computing and database technologies improved, direct marketing took off. At about the same time, retail and media specialization accelerated. If you were around when you wanted your MTV, you might remember offerings like 12 free cassettes or CDs for $1 that were personalized to your taste or the shift from two to three department store catalogs arriving once a year to 10 specialized catalogs gracing your mailbox every week.

Data process was all done in batch, and often the data was messy or simply not available. You couldn't be certain if your intended audience actually received your offer, let alone if they acted on it. But these challenges begat certain skills and a lot of creativity from marketers to deliver results. Direct marketers became masters at SQL and database operations. They learned how to handle messy data and infer results from the observations, how to validate the effectiveness of campaigns using testing, and how to iteratively improve results and reduce costs over time. With the introduction of Hotmail and other early consumer email services, email became a primary direct marketing channel in the early 1990s, allowing for more precise personalization and better tracking of results. As the discipline evolved, sophisticated direct marketers applied optimizations to get closer to the right person, right message, right time ideal, and the lift in results from these efforts were and are still impressive.

Digital marketing came into being with the dawn of the internet in the 1990s. The first of gazillions of banner ads was placed on hotwired.com in 1994, and in the late 1990s, website personalization became mainstream thanks to the emergence of eCommerce and web personalization technologies like Broadvision and ATG.

While direct marketers would have data-envy of their digital marketing counterparts, digital marketers faced their own set of challenges. Yes, more data is usually good, but the explosive growth of digital media made it difficult to keep up with, and to make sense of. While you could usually get to information like whether a person received a message, sorting through the millions of web logs—often of dubious consistency and interpretability—to find this knowledge usually just wasn't worth the effort.

Instead, digital marketers relied on techniques that were better suited to the high velocity and relatively consistent nature of their customer experience (CX) environment—A|B testing, collaborative filtering, and black box product recommenders are some of the key methods used by digital marketers to improve results. The launch of Facebook, YouTube, and a myriad of new media platforms in the mid-2000s further challenged marketers to provide a meaningful and consistent experience for their customers.

While dealing with most of this complexity is beyond the scope of this paper, a few points are worth noting. First, while digital marketers had an apparent edge on their direct marketing counterparts in terms of understanding the receipt of messages and the completion of transactions, the truth is that web crawlers, fraud, walled garden social media, and returns and interactions in other channels meaningfully muddies their view of the consumer.

Second, the sheer number of different media with which companies interact with their customers makes meaningful attribution a daunting challenge; first click/last click types of approaches are clearly lacking in this environment.* Third, message saturation is a real issue for marketing in aggregate.

While there are, of course, exceptions, direct mail, email, and digital ads (and now, apparently, some mainstream social media platforms) have all been tuned out by consumers. This lack of respect by marketing in aggregate has most recently led to personal privacy legislation, such as GDPR, which puts much more onus on corporations to protect their customers' data. So against this backdrop, how can marketers interact with their customers and prospects in a respectful yet personal manner? We believe that the hybrid marketing solution from SAS represents a step-change forward to this goal.

WHAT IS HYBRID MARKETING?

Simply put, *hybrid marketing* combines the key capabilities of both direct and digital marketing in a single unified system. In doing so, hybrid marketing breaks down the traditional organizational siloes described here, making it easy for digital marketers to leverage customer knowledge and other corporate knowledge (including analytics and information from other systems) to improve their customers' experience and the efficacy of their marketing efforts. Likewise, those in charge of other channels gain consistent, accurate insight into digital interactions. In addition to improving the customer experience today, a clearer view of the digital world provides a cleaner feedback loop by improving the quality of the source data for analytics, and thereby the utility of modeling efforts.
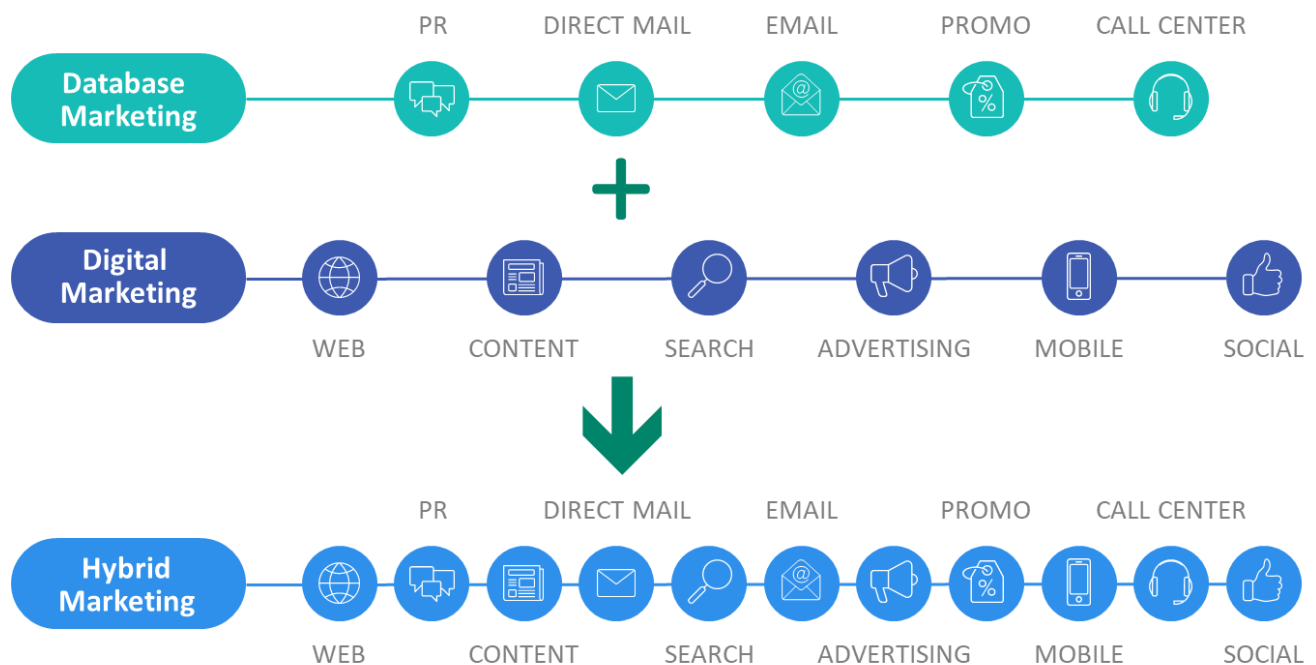
Figure 1. Hybrid Marketing

*To learn more about the SAS approach to attribution, please see "Algorithmic marketing attribution and conversion journey analysis…" by Malcolm Lightbody and Suneel Grover at https://blogs.sas.com/content/customeranalytics/2017/09/13/algorithmic-marketing-attribution-and-conversion-journey-analysis-part-1/.

Even without analytics, the value of uniting digital and direct marketing can be illustrated with a simple example. Sam Shopper visits a department store website and purchases five new tops and four new pairs of shoes for $800. A few things were purchased on sale, but most were full-price items, indicating Sam isn't a bargain hunter. She signs in as a new customer, and, since this is a larger-than-average purchase for this retailer, Sam gets a $75 coupon for her next purchase. This is definitely great for Sam, and at first blush it appears to be good for the retailer, too.

But is it? The retailer would be a lot more confident in the value of this exchange if they had a broader view of their relationship with Sam. If this is the sum of their relationship, then yes, they could chalk this up as a win-win. But in this case, Sam made a similar purchase just a month ago (she used her boyfriend's address for that one) and then returned all but one of the items in store the day before she made this purchase. The digital-only picture shows Sam being a valuable customer; a broader view, informed by other systems used by the retailer, reveals that Sam is probably a *wardrober*—someone who might not be able to afford their purchases and who wears them a few times and then returns them. Clearly this relationship is a "lose" for the seller. Industry estimates show that more than 20% of all online purchases are returned (Orendorff, 2019), with this figure being much higher for online clothing purchases. While many such returns are legitimate, cases like Sam's are not. And with hybrid marketing, they are avoidable.

SO HOW DOES HYBRID MARKETING WORK?

For most software vendors, the answer goes something like this: "You just upload all of your customer data and all of your marketing IP to our cloud and leave the rest to us." One obvious challenge with this approach is data duplication and synchronization. Unless you're moving all of your operational and marketing systems to a single location, this will always be a headache. We'll get to more of the challenges associated with that approach in a bit.

Let's instead turn our focus to the SAS approach to hybrid marketing. Conceptually, it's really simple.

First, SAS provides a secure, Websocket-based connection between your chosen data environment and SAS® Customer Intelligence 360 (also known as 360, the SAS marketing cloud offering). We call these connections agents and provide a plug-in and SDK framework that allows you create integrations with any system. While not the focus of this paper, if you'd like to learn more about the agent framework, please see "Using the SAS® Customer Intelligence 360 Hybrid Cloud Capabilities for True Omnichannel Marketing" (https://support.sas.com/resources/papers/proceedings17/SAS0198-2017.pdf) by Toshi Tsuboi and Stephen Cuppett.

Second, rather than have you move any customer data to 360, SAS® 360 Engage: Direct, part of 360, simply maps a customer ID from your customer database to an anonymous, hashed ID in the SAS 360 marketing cloud. For clarity, your database can be on your premises, hosted by another company, or stored in a cloud system. It's your choice and you control your data. Importantly, no data duplication is required.

Third, 360 Engage: Direct acts as a marketer's remote control and provides the ability to manage any number of activities in your on-premises* system, including data querying for targeting and segmentation, exports for marketing execution, contact and response capture, and scoring, all from the same cloud-based UI that is used to manage your web and mobile properties.

What is going on behind the scenes is depicted in Figure 2 and will be very familiar to any organization that currently uses SAS® Marketing Automation or SAS® Campaign Management.

For reference, a standard Campaign Management on-premises deployment is depicted on the left, and the hybrid marketing deployment using Customer Intelligence 360 is shown on the right. For an organization that is new to SAS, the SAS footprint required in your environment for this approach is relatively small.
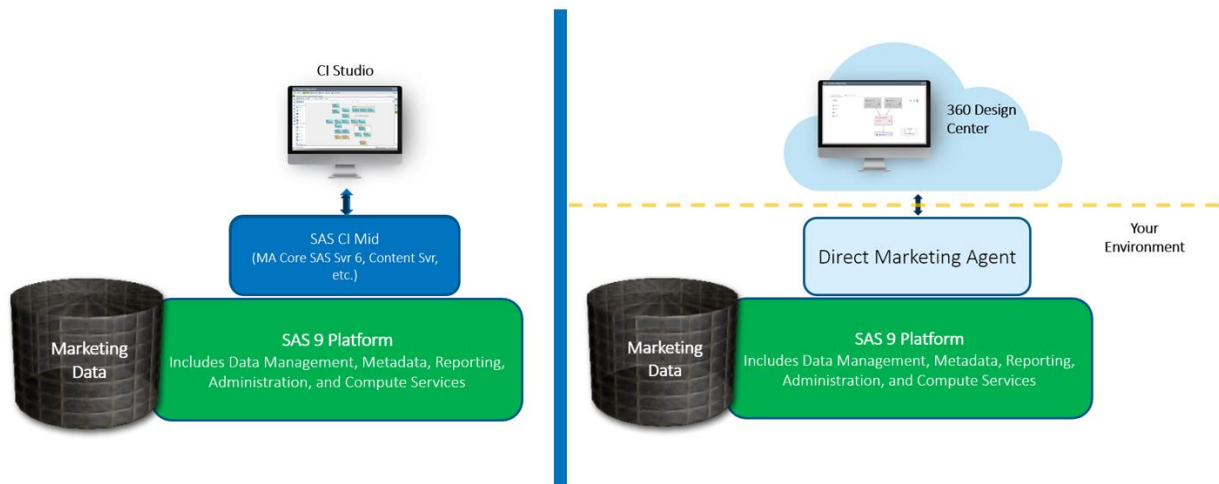
**Figure 2. Campaign Management and 360 Engage: Direct high-level architecture**

The direct marketing agent, which is downloaded from the 360 system, also has a small footprint. For current SAS Customer Intelligence 6.5 customers who want to modernize to Customer Intelligence 360, the transition is even easier. As with the new scenario, all your data stays where it was—no lift and shift required. In addition, you can use your existing SAS infrastructure as well as your existing information map (a metadata map that describes and provides access to the marketing data) and SAS® Stored Processes used for analytics and other processes unique to your organization.

New customers will need to create an information map during the initial deployment and add SAS Stored Processes over time as needed. All customers benefit from the included digital asset management component as well as other capabilities built into 360.

*Note that on-premises is used generically to represent an organization's IT environment, a hosted deployment, or another cloud deployment that is managed by an organization and is not part of the SAS Customer Intelligence 360 cloud environment.

Let's look at a simple segmentation example. A US-based financial services organization has tens of millions of customers in their customer data mart, including Steve H and Andy B., both males who are over 40 years of age and who live in North Carolina. As with all the bank's customers, the database includes a lot of information about Steve and Andy, including address, income range, household data, product information, purchase data, credit scores, and so on. Some 500 unique descriptors per customer are common in this scenario.

As depicted here, there is no personal identifier for Steve or Andy in 360. Instead, Steve is represented by an anonymous ID, ABC123, and Andy by XYZ789. If a marketer wants to target men over 40 who live in North Carolina, the system queries the bank's database just as it would a traditional campaign management system. But instead of pulling data into 360, the individuals who meet these criteria are simply mapped to this segment in 360. No Steve, no Andy, nor any other personal information about them—just ABC123 and XYZ789, along with thousands of other IDs that are now associated with a segment in the cloud. If the marketer wanted to further segment this group into those who like football and those who still collect Cabbage Patch Kids, XYZ789 would be in the first grouping, and ABC123, well…
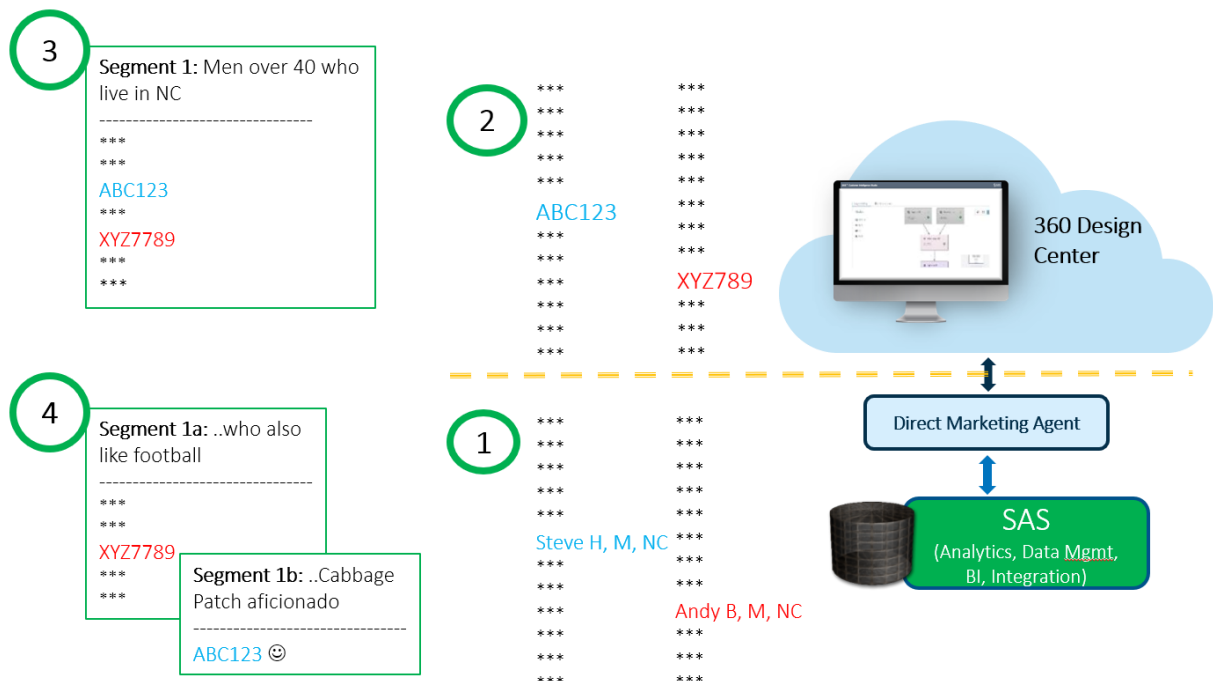

Figure 3. Data flow view of segmentation in 360 Engage: Direct

The marketer's experience is familiar; as shown here, it is a drag-and-drop UI with a rich tool palette containing the functionality that is used for targeting and segmentation using your company's on-premises data and IP. The audience that is visually created by the marketer—in this case, men over 40 in NC—is translated behind the scenes to SQL that is sent using the agent to the on-premises SAS components, which, in turn, optimize the query for the database used by the organization. The resulting population of the query is then mapped back to anonymous IDs in 360, as shown previously. The marketer can see counts and visually manipulate audiences, but they cannot see any personal information in the cloud-based 360 UI.

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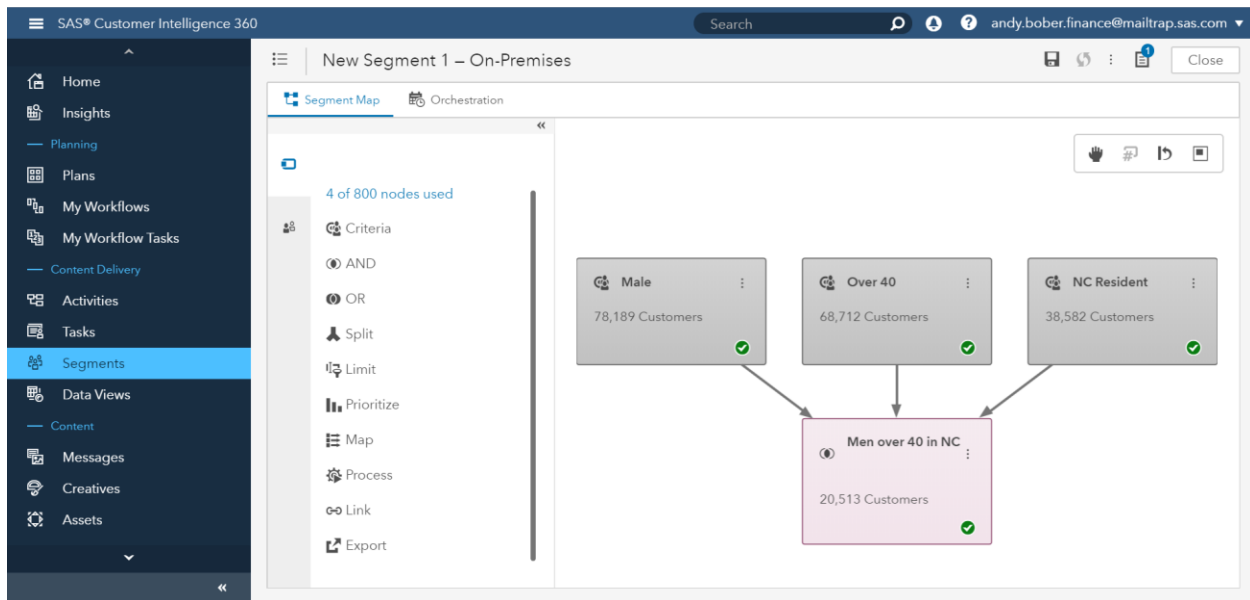
**Figure 4. 360 Engage: Direct segment map user interface**

As shown in Figure 5, householding (for example, viewing account, customer, household, and business membership) is supported, and marketers can choose which nodes to designate as segments or audiences. They can even link segments from different diagrams together for consistency and efficiency.
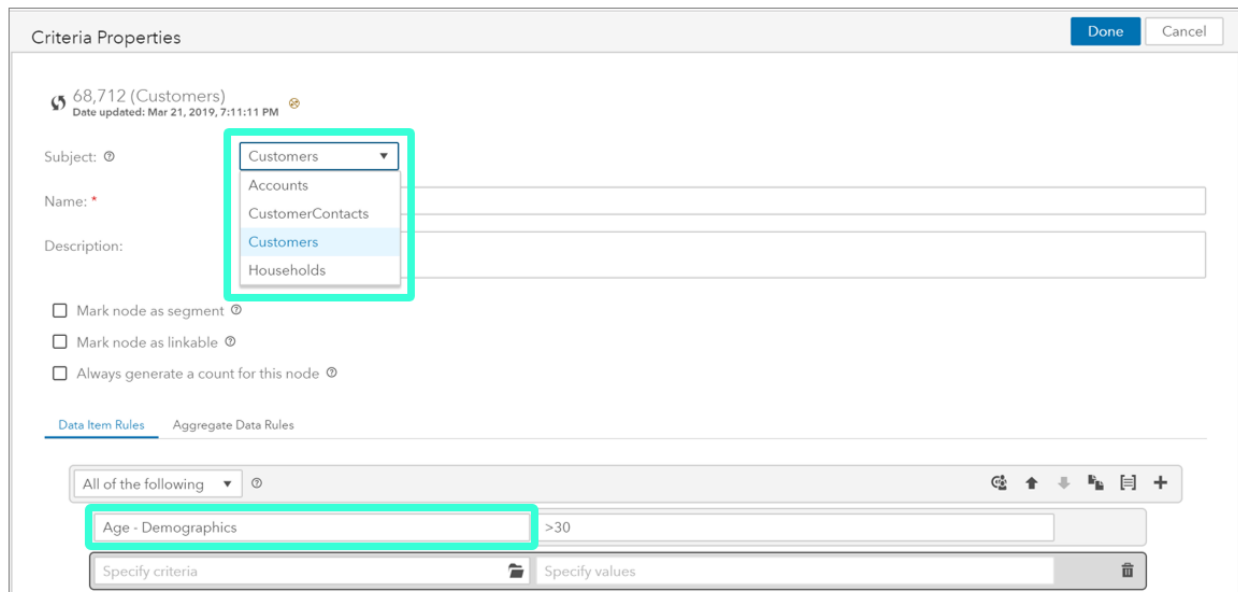
Figure 5. Creating a segment in 360 Engage: Direct

If we continue down a direct marketing path, once the marketer has finished their targeting, they can schedule segments to run once (or on a recurring basis) from the 360 UI. If they are using a third party (for example, a mail house, print shop, or third-party email vendor) for execution and delivery, the proper export template can be chosen, and the output files with names, physical and email addresses, and other personalized information can be sent directly from their environment. None of that data ever enters the cloud portion of SAS Customer Intelligence 360. Likewise, responses and replies can be captured and collected directly without requiring a pass-through in the cloud.

For email marketing, of course, an email address must be used by the sender (what happens to the rest of the data can vary). When SAS Customer Intelligence 360 is used for email, a file that contains email addresses, along with any personalization parameters (for example, first name, gender, and so on) required by that email template, is uploaded to the cloud. Once the email is sent, the file is automatically deleted so that no personal data persists. SAS Customer Intelligence 360 captures contacts and responses for the emails sent and passes them on to the on-premises data mart, if desired.
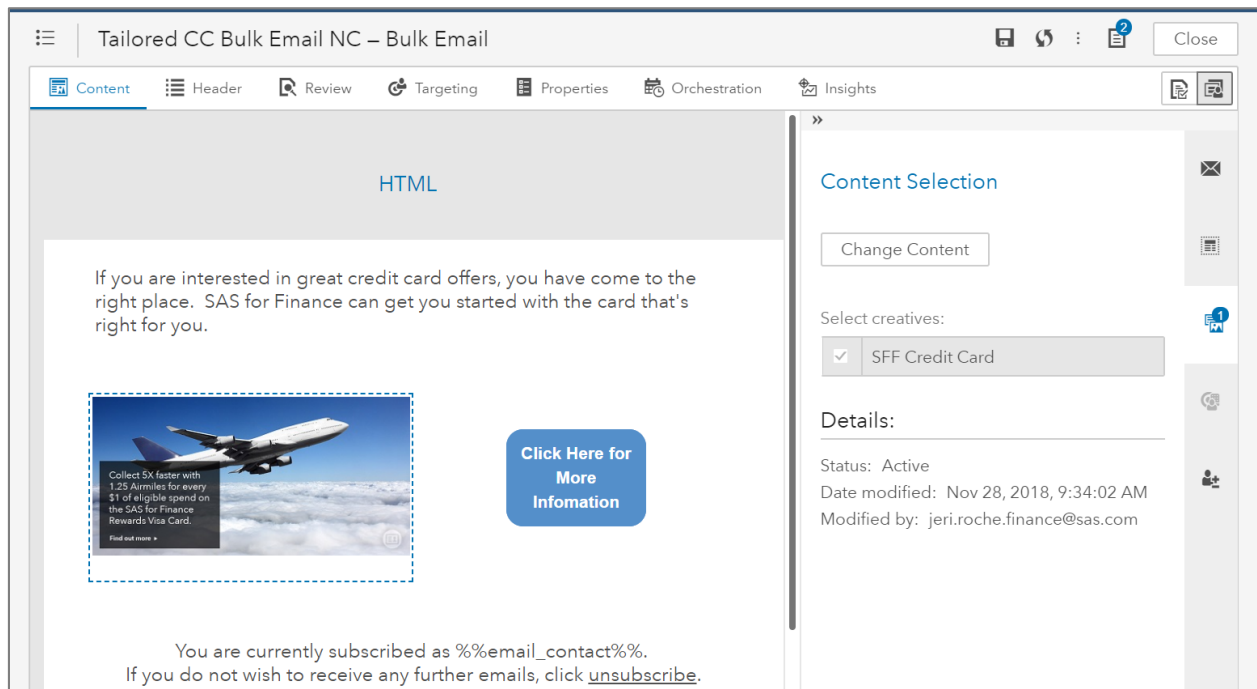

Figure 6. Creating an email campaign in Customer Intelligence 360

From a digital marketer's perspective, the additional customer insight that hybrid marketing provides is a gold mine in terms of improving personalization and overall customer experience. In the financial services scenario, in addition to incorporating recent digital interactions, insights about the customer can be easily added to provide a much more personalized experience.

Figure 7 depicts a simple journey for customers who click on an unsecured lending offer on a bank's website. As you can see, content and journey (or path) testing is provided, and there's a lot of personalization that can be done within the confines of digital marketing. Hybrid marketing takes this further. Now, in addition to adjusting the CX based on in-

session information, knowledge of the customer (including gender, age range, home town, and even credit worthiness) can be referenced without having any of that data in the cloud.
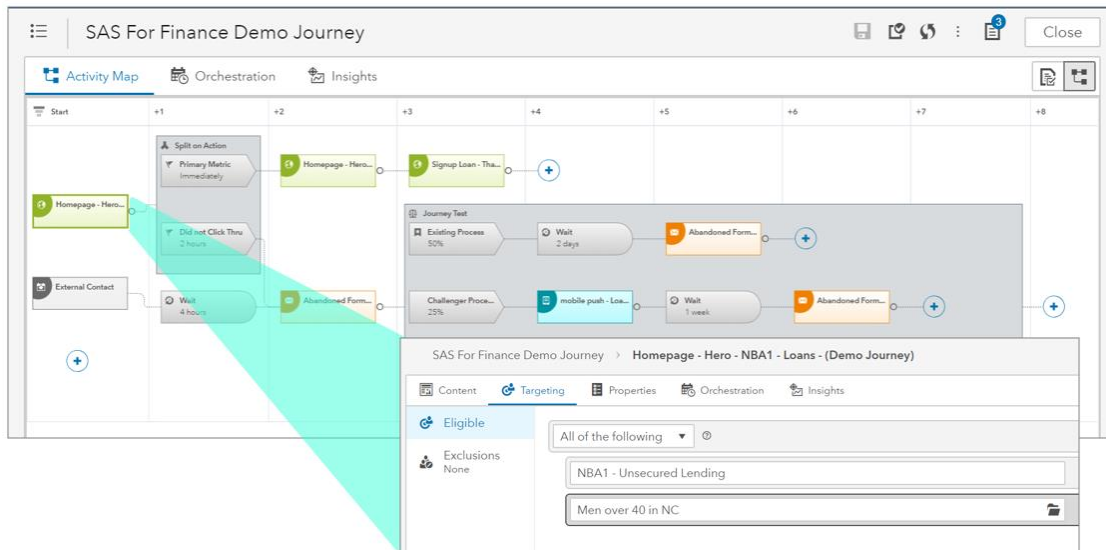
Figure 7. A customer journey in Customer Intelligence 360

In the same manner—and from the same UI—a marketer can improve targeting for non-digital channels by incorporating insights from digital interactions. If Steve H. and Andy B. both signed up for an unsecured credit line today online, the record of these interactions can be used to remove them from a similar direct mail offer that's scheduled to go out tomorrow, saving money and improving their CX.

Importantly, SAS Customer Intelligence 360 isn't a direct-only or a digital-only offering—it's a hybrid marketing application that allows marketers to create omni-channel scenarios that span traditional direct and digital channels, along with other customer experience interactions.

Let's look at how this can benefit organizations from a consumer perspective.

Michele is a high-value, elite platinum member of a global, multi-brand hotel hospitality chain's loyalty program. She's the president of a boutique consulting company, and her business has a preferred relationship with this hotel chain as well. She just used up most of her points to take her family to her niece's high school graduation. She's between flights and is starting to look for a place to stay for her next vacation. She's never been to Punta Cana and sees that the company has a five-star resort that fits the bill. She chooses her dates but then gets interrupted by a phone call and doesn't finish her reservation. Unfortunately, at her next layover, Michele's hotel room wasn't ready on time and she left unsatisfied with the hotel manager's handling of the situation.

The hotel chain has a modern digital marketing system and other MarTech as well. What happens without hybrid marketing? First, because the hotel knows they don't have any great options for a highly personalized CX, they use a retargeting firm to plaster ads for their chain on nearly every website Michele visits. Has this ever made you want to buy? Ever? Even worse, this continues long after Michele has booked her vacation, even if it's with this company. They can also send a follow-up email and customize her web experience based on her demonstrated interest in Punta Cana, but without having more profile

information in the cloud, that's about as far as the hotel company can go. In this case, given that Michele's last experience was a bad one, this might come across as tone deaf to her relationship with the hotel and create further dissatisfaction.

How can this scenario be improved with hybrid marketing? The short answer is in a lot of ways. The key point is that with hybrid marketing, all the media and touchpoints that Michele interacts with can improve her CX in any subsequent interactions and increase her value to the hotel chain as well.

In this case, rather than risk annoying Michele with stock vacation content after a bad hotel experience, that bad experience could trigger a concierge to proactively call Michele to offer some good will or remuneration. The hotel knows what's valuable to Michele—points, a trip to Punta Cana—and they know how much Michele's business is worth to them and how much it costs to provide what Michele wants. After a short conversation with Michele, the concierge upgrades Michele to uber elite platinum, gives her 20,000 points and a free upgrade for her regrettable last hotel stay, and points out an all-inclusive vacation package at a sister resort that's a better fit for Michele and her family. Michele doesn't think again about taking her business elsewhere, and the hotel chain not only keeps a valuable customer, they book a profitable vacation to boot—a happy ending for everyone.

CONCLUSION

Against a backdrop of accelerating media and technology complexity, evolving privacy regulations, and increasing consumer expectations, hybrid marketing from SAS Customer Intelligence 360 provides a simple but powerful approach to address the first principle—the have cake and eat too needs of key stakeholders in the MarTech ecosystem.

First, consumer expectations are met because their CX reflects all of their recent interactions and needs. At the same time, their privacy is respected because their data isn't exposed in a public cloud or shared with a third party.

Second, IT is happy because governance and control of data, IP, and critical systems remains in their hands, and they can extend regulatory (for example, GDPR) management to 360 through the provided APIs. Feature requests and updates for their business partners in marketing and sales can now be delivered on a regular cadence from SAS because 360 is updated monthly. In addition, they benefit from cloud computing advantages such as scaling and bursting, as well as the integration framework provided by SAS Customer Intelligence 360 that allows them to unify disparate systems like contact centers and POS systems in addition to their web, mobile, and email channels.

Last, marketers win by finally achieving true omni-channel marketing. With SAS, they can manage and inform all customer interactions, regardless of whether they are batch or real-time or whether they're provided directly by SAS or by another provider, from a single user interface. In addition to improving personalization, this approach reduces process duplication, thereby improving the consistency of CX, simplifying governance, and reducing marketing operation costs.

SAS Customer Intelligence 360 provides a rich set of functionality beyond the focus of this paper, including digital analytics, digital asset management, marketing resource management, and integration with other SAS solutions including SAS® Intelligent Decisioning, SAS® Event Stream Processing, and SAS® Visual Data Mining and Machine

Learning, all of which complement 360 by providing access to advanced analytic and decisioning capabilities.

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