Marketing attribution: Giving credit where credit is due
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By Suneel Grover, Principal Solutions Architect, SAS
Marketing must meet the needs of tech-savvy customers knowledgeable of brands and product information due to the rapid growth of connectivity, available information and expansion of channels. Before making a purchase decision, customers often consult more than 10 sources including social media, user reviews, online stores and brand comparisons.

And, customers want to be recognized across all the platforms through which they interact with you – whether speaking to your employees on a mobile phone, tweeting at the brand or creating a shopping cart online. Similarly, you want to recognize every step of these journeys and understand the significance of each one.

Marketing attribution: The challenges

Consider the many ways that a customer encounters your brand – organic results on a search engine, display media campaigns, social media links, re-targeting on external sites, etc.

One thing is certain – consumer journeys are far from linear. They can occur across multiple platforms, devices and browsers. The problem is that organizations are often constrained to channel-limiting decisions regarding their media investment allocations.

Marketing attribution helps you analyze the impact and business value of company-generated marketing interactions to help make the best marketing investment decisions. The challenge is to interpret the massive volumes of customer data that continues to expand day by day. There are three hurdles in optimizing your marketing attribution efforts:

- **Subjective influences.** Channel-related silos and incentives leads to a lack of objectivity when deciding on the attribution methodology to adopt because each team will want to choose the methodology that shows their efforts in the best light. Deciding between different rules-based approaches often comes down to opinion and compromise, which is not the best way to manage large marketing budgets.

- **Too much exposure.** Customers are constantly connected and use multiple devices to interact with you. There can be a temptation to over-contact customers, which leads to perceptions of irrelevance and contact fatigue. This dilution of effectiveness also has the effect of increasing the noise and hiding sought-after signals in the data.

- **Misaligned data.** Different levels of data aggregation (across offsite impression data, mobile app interactions and HIT-level website visitor data) form an incomplete view of marketing performance and the customer purchase path. Marketers are left missing, crucial information such as purchase intent or motivations, which would strengthen the analysis and aid in developing a robust marketing strategy.

These have been longstanding problems. For years, marketers have heard about how complicated multichannel attribution modeling can be. Why is it challenging?

We are experiencing a pivotal moment within data science. Marketers are being enabled with approachable, scalable analytic capabilities, and this trend positively affects an organization’s choice of approach for attribution measurement.
Choosing the best methods

Although a large number of marketers use rule-based attribution methods, a single weighting system cannot precisely attribute the correct credit for any given sequence of campaigns. Subsequently, there's every reason to think that the credit should vary depending on the order, time and nature of the individual interactions.

Today, SAS is working with numerous organizations to use algorithmic attribution for analyzing the effects of their marketing efforts. Before explaining the unique benefits of algorithmic attribution, here are several rule-based methods:

- **Last-touch and first-touch attribution**
  This method allocates 100 percent of the credit to either the last or first touchpoint in the customer journey. This approach has a fundamental weakness in that it ignores all other interactions with your brand across a multi-touch journey. Generally speaking, web analytic technologies have traditionally defaulted to this approach for performing attribution analysis. This is because last- or first-touch attribution is easy, and simplistically identifies ownership of the converting visit (although that is only partially true). Thankfully, times are changing for the better, and marketers are abandoning this approach for more intelligent methods.

- **Linear attribution**
  If the answer isn’t to give all the credit to a single interaction, then we should give every touchpoint equal credit, right? Wrong. While linear attribution arbitrarily allocates an equal credit weighting to every interaction along the customer journey, it’s only slightly better than the last- and first-touch approaches. Linear attribution will under credit or over credit specific interactions. In a nutshell, it, too, over-simplifies the complex customer journey.

- **Time decay and position-based attribution**
  Time decay attribution arbitrarily biases the channel weighting toward the most recent channel touches across the customer journey. If you subscribe to the concept of recency within RFM (recency, frequency, monetary) analysis, there is some merit to this approach, but only when comparing it with other rules-based methods. Position-based attribution is another example of arbitrary biasing, but this method places more weight on the first and last touches and less to the interactions in between.

There are other variations to these rules-based methods, but these are the most often used approaches that we see in the early stages of our new client engagements.
Making the case for algorithmic attribution

In contrast, algorithmic attribution assigns data-driven conversion credit across all touch points preceding the conversion, and uses data science to identify where credit is due. It analyzes both converting and non-converting consumer paths across all channels. Most importantly, it uses data to uncover the correlations and success factors within marketing efforts.

Algorithmic attribution analysis enables you to better understand how your analytic approaches are influencing your marketing strategies. The business opportunity to intelligently manage customer journeys across their life cycle has never been greater. How to improve the customer experience is a hot topic for leaders. Marketing’s ability to clearly explain and defend its strategies and decisions using statistical, data-driven evidence is critical.

Analytically speaking, this approach is exciting because marketers have an opportunity to better understand the value of channel touches, click activity, media impressions, creative content, ad formats and more.

Why doesn’t everyone use algorithmic attribution?

Although many marketers recognize the value and importance of algorithmic attribution, adopting it hasn’t been easy. There are several reasons:

- **Much-needed modernization.** The volume of data that you can collect is massive and may overwhelm outdated data management and analytical platforms. Especially when you’ll need to integrate multiple data sources. Organizations have a decision to make regarding modernization.

- **Scarcity of expertise.** Some believe the talent required to unlock the marketing value in data is scarce. However, there are more than 150 universities offering business analytic and data science programs. Talent is flooding into industry. The synergy between analysts and strategically minded marketers is the key to unlock this door.

- **Effective use of data.** Organizations are rethinking how they collect, analyze and act on important data sources. Are you using all your crucial marketing data? How do you merge website and mobile app visitor data with email and display campaign data? If you accomplish all of this, how do you take prescriptive action between data, analytics and your media delivery end points? There are a number of approaches, but by doing this analysis in house, you will have flexibility to choose from a variety of downstream process options.

- **Getting business buy-in.** Algorithmic attribution is often perceived as a black box, which vested interest groups can use as a reason to maintain the status quo. The key to overcoming resistance is by explaining why the algorithmic approach is making the allocations it does. In the future, using algorithmic attribution models to help predict future performance will provide evidence of its effectiveness and help it gain greater acceptance.

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The ongoing challenge with many current marketing attribution approaches is inaccurate insights, and the antidote is to treat the challenge as a predictive modeling problem. Algorithmic attribution represents this strategic shift in approach to enable practical, customer-obsessed analytical insight.

Marketing spending continues to grow at a tenacious pace, cementing the importance of digital channels in directing the customer journey. In today's multichannel landscape, how we manage and allocate our limited marketing budgets through data science can be a competitive advantage for years to come.

How SAS can help

Hopefully this approach will help you get a little closer to your ideal attribution scenario. SAS® Customer Intelligence 360 provides embedded marketing analytics. And SAS is unique in that we can integrate separate and disparate channels. This allows for deeper insight into how marketing is performed across every channel versus performing single-channel analysis. This allows for more confident marketing attribution. Being able to combine digital and traditional data to create a complete customer profile allows you to perform the cross-channel engagement and attribution that provides clarity in today's complex and fragmented digital environment.