

## Defining 'Attribution'

These definitions are designed to help bring clarity to the term 'attribution'. Depending on the context, it could refer to the process of assigning value to a channel in digital only, or it could refer to assigning value across different media. There are terms that are used within these different contexts, and these definitions - whilst not exhaustive - help to bring clarity to the area.

Defining

### **Definitions:**

**Attribution (general definition):** The action of assigning a value to a particular marketing activity that a consumer is exposed to is referred to as 'attribution'. Both causal and probabilistic techniques are used in attribution models, assigning value to either a single marketing engagement with a consumer (single touch attribution), or to give a value to multiple engagements with a consumer (multi-touch attribution). Attribution models offer a way of more closely estimating what an ad does in terms of outcomes than just measuring impressions or clicks alone; however as all attribution techniques have limitations, consideration of these is always required before solely relying upon one method over another.

**Single Touch Attribution (STA):** Assigning the entire credit of a single consumer touchpoint to a single entity. This could be, for example, the first place an advertiser saw or interacted with an ad or last place they saw or interacted with an ad, even if they have seen it more than once. For instance, an advertiser with an online retail website may deliver an ad to a consumer who clicks on the ad then purchases from their website (a click-through conversion). A single touch attribution model would assign the credit to the site on which the consumer last clicked before they purchased. This 'last click' model would not assign a value to other touchpoints with the consumer prior to the last click that may have added to the consumer's propensity to act.

**Multi-Touch Attribution (MTA):** A statistical modeling approach to assign the value of a consumer interaction to all digital touchpoints of a consumer's journey that led to a measurable conversion, such as a sale, download or signup. As such modeling assesses the value of each touchpoint in relation to the conversion and allows for optimisation of different channels and approach to audiences in relation to the conversion. MTA offers a more sophisticated alternative to methods such as first and last touch. MTA allows for time decay curves or weighting of an exposure by recency to be assigned different credit.

Attribution techniques such as Single Touch and Multi touch are often heavily reliant on approaches that use third party cookies (information generated by a website and stored on a consumer's browser, to help understand users' online behaviors) and as such dependent on these for accuracy.

**Attribution 'window':** The 'lookback' period for consideration when a conversion on an advert happens is called the attribution or lookback window. The time between a conversion event and a prior engagement event, such as an ad click or view. For example, a lookback window of 14 days means that any ad a user is exposed to in the 14 days before they convert should be considered in the allocation of that conversion's credit.

### **Other Techniques for Attributing Value**

**Logistic regression:** This can be used to calculate the probability of a particular touchpoint having influenced a consumer's behaviour.

**Linear regression:** Used to estimate the impact of different variables in the outcome of advertising activity.

**Media Mix or Marketing Mix Modeling (MMM):** A commonly used technique employing linear regression. This is a form of attributing value to different marketing activities in relation to outcomes such as sales or market share, based on statistical regression. Whilst it generally refers to sales impact, it can be adapted for measuring Awareness, Earned Media, Web Visits, Browser Search, etc. It can be complicated when trying to account for all external influences and all marketing exposures that a consumer may be influenced by. It may also be limited by the granularity of the data that may be available, and is reliant on historical datasets that may span long periods.

### **Validating Attribution Techniques**

Each system of attributing value has inherent bias brought about by how complete the data set is on which the model is being built. Whether incomplete due to not capturing all touchpoints, or to the accuracy or degradation of 3rd party cookies, any attribution model needs a process of verification for accuracy. Methods that can account for direct exposure through random controlled trials (RCTs) are generally considered as the gold standard in the approach to validation. RCTs rely on comparing groups of consumers who are exposed and not exposed to an ad to assess the difference in the effects from the baseline.