



Quantifying the Impact - *of* - Multi-touch Attribution

SPOTLIGHT ON FACEBOOK
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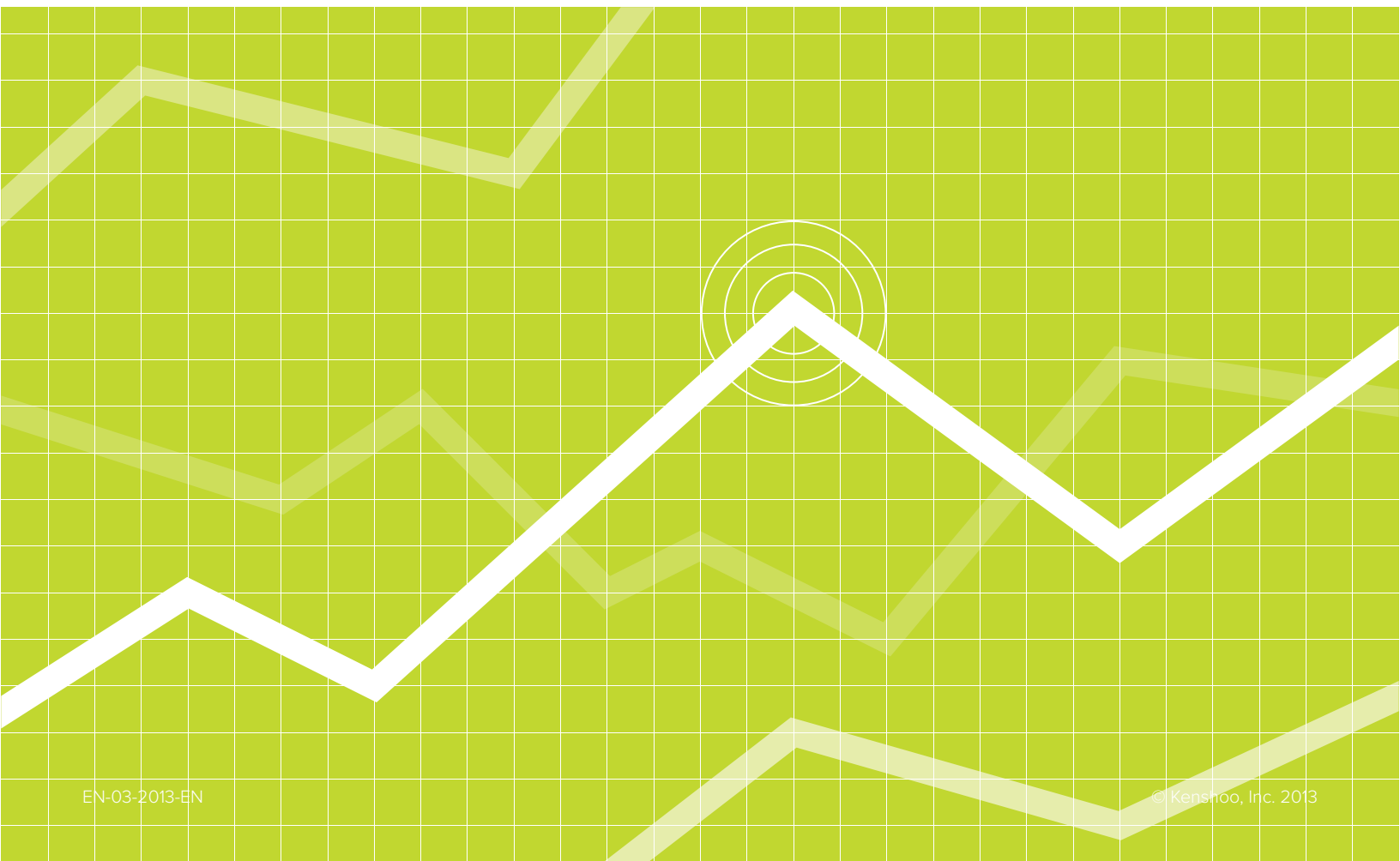


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Executive Summary

The following research makes the case that the true value of multi-faceted advertising campaigns cannot be properly evaluated by single-point measurement techniques such as Last Ad, which credits the entire value of a conversion against the last ad exposed to the consumer. To analyze the impact of these misallocations, millions of converting click-paths across a wide breadth of Kenshoo clients were measured via Last Ad measurement and then run through several standard multi-touch attribution (MTA) models. The data show that certain channels, such as Facebook, can be undervalued by as much as 30% when all of the conversion value is solely credited to the last touch-point in the customer journey.

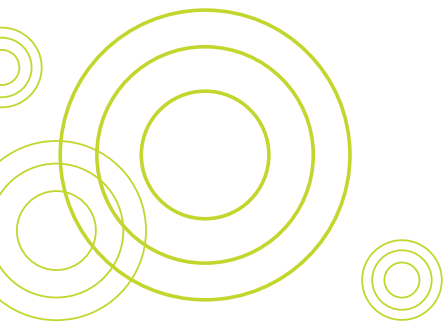
Although the flaw of Last Ad attribution has been widely discussed for the last several years, there has been a lack of hard data to quantify this problem. This research finally places a number on this issue and shows just how inefficient marketing spend under a single-point model can be for digital marketers.

Introduction

The digital marketing industry is evolving away from crediting the entire value of a conversion against the last ad exposed to the consumer to a MTA approach where all, not just the final, touch-points are valued as influencers to action. Many advertisers have expressed an interest to apply these advanced attribution models to their campaign performance data to gain better insight into what's truly driving consumers to engage and convert.

Facebook advertising has become a very important channel for marketers and provides a unique measurement challenge due to the fact that it reaches consumers at many key apertures in the buying process with a wide-variety of creative formats. For these reasons, Facebook was an ideal candidate to help demonstrate the shortcomings of Last Ad.

In this paper, we will examine performance from recent advertising campaigns which were measured by Last Ad and then compared to five standard attribution models. We will also provide examples to better understand how these models work and when they are typically applied in various marketing situations. Finally, we'll look into how a new, advanced model of dynamic attribution can benefit marketers even further than single-point or even basic MTA models.



Methodology

This research reflects an analysis of live campaign performance data for Kenshoo clients managing ads across multiple digital marketing channels during March, April, and May, 2013.

The large brands included in this study span a wide range of industries including retail, home improvement, and financial services. The total data set covers hundreds of millions of clicks and millions of direct online sales conversions. Even though MTA models are able to recognize the value of ad impressions and their positive impact in driving conversions, for the purposes of this study, only clicks were analyzed across customer journeys.

In order to determine the value of each advertising channel, we looked at the Cost-Per-Acquisition (CPA) metric across all advertisers in our sample. It's important to note that not all marketers define conversions the same way. For some brands, a conversion may be an online sale. For others, it may be filling out a form or downloading an app. Regardless, conversions serve as a good proxy for marketers to assess the efficiency of a channel in generating a desired consumer action. By aggregating all conversions recorded from these advertisers and dividing that number into the total media cost for the ads that drove those conversions, we are able to generate an aggregate CPA.

$$[\text{CPA} = \text{Total Media Cost} / \text{Total Conversions}]$$

To understand how individual channel performance would be valued via Last Ad versus other standard attribution models, the CPA was first run through a Last Ad model and then those *same customer paths* were analyzed under various MTA models. For example, if the Last Ad CPA for a campaign was \$10, and the multi-touch attribution model being compared reported the CPA as \$9, it means the channel was being undervalued by 10% versus Last Ad. In other words, that channel was getting 10% less credit than it should have received for its role in driving conversions.

Key Takeaway

Last Ad measurement undervalued Facebook advertising by 12-30% relative to each of the five alternate attribution models.

The data from this study clearly show that, under any attribution model, Facebook has 12-30% more value than what is being reported by Last Ad measurement. For many marketers who already acknowledge that only crediting the last touch-point of a consumer's path to conversion is flawed, this research should be a strong motivating factor to explore new, more accurate models for measuring campaign performance.

Breakdown by Attribution Model

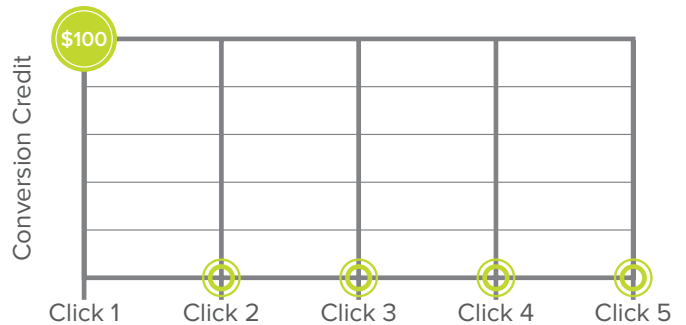
The following section describes the five attribution models that have become accepted as industry standards and provides a sample use case for why a particular model would be appropriate for certain marketing environments.

FIRST ONLY

The First Only attribution model credits just the first interaction (click) a customer has with an advertiser. Even if customers interact with multiple keywords and/or channels, only the original placement will receive credit.

Sample use case for First Only attribution:

For advertisers delivering new products and services to the market, insights into which media options best make the first introduction to someone who eventually converts are highly valuable to consider. The logical reasoning here is that once consumers are engaged and interested in the offering, they will find their own path to research and ultimately convert on their own and, thus, subsequent media impressions have little to no incremental value. First Only attribution values media interactions at the top of the funnel to make sure the most people are aware that the product/service exists.



For example: In a conversion worth \$100 (a sale, form completion, etc.) that had 5 touch-points with the consumer, only the initial placement would receive the entire \$100 credit for the conversion. All other touch-points would receive zero credit.

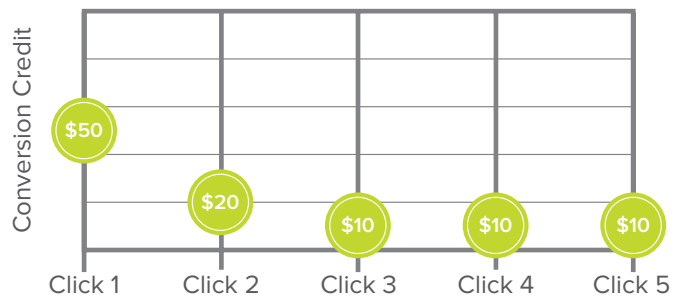
Result: the First Ad model attributed 30% more value to Facebook than the Last Ad model.

PREFER FIRST

Under Prefer First attribution, the first ad in the customer journey receives a majority of the credit and each following touch receives credit in a rules-based, linearly decaying fashion.

Sample use case for Prefer First attribution:

Similarly to First Only, for brands that believe that generating awareness and filling the top of the funnel are the key ingredients to success, Prefer First is a way to track this level of influence. However, whereas First Only relies on gathering all of the insights from the first touch, Prefer First allows subsequent touches to gain incremental credit as they help push consumers down the funnel to the eventual conversion.



For example: In a conversion worth \$100 (a sale, a form completion, etc.) that had 5 touch-points with the converter, the first placement might receive \$50 of the credit, the second placement could receive \$20, the third may garner \$10, and so forth.

Result: the Prefer First model attributed 20% more value to Facebook than the Last Ad model.

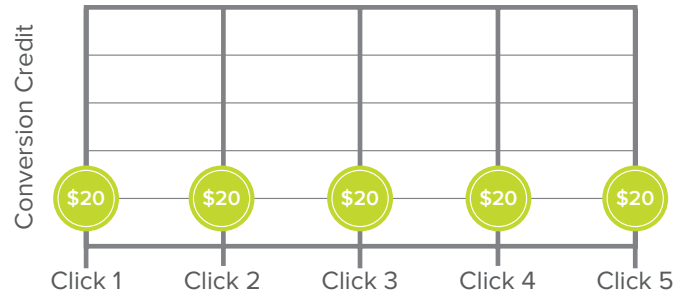
DIVIDE EQUALLY

In this model, all interactions are attributed equally against the value of the conversion.

Sample use case for Divide Equally attribution:

For marketers with complex media engagements and long sales cycles, Divide Equally is a safe option to value all media exposed to consumers and not introduce any presumed bias into the attribution equation. With each touch earning a bit of credit for assisting conversions, it becomes very easy to see which placements are not driving any value at all. In a sense, the Divide Equally model can be a useful way to weed out non-impactful placements so that they can be pruned away to optimize towards the touch-points that are providing value.

This model is often deployed by marketers who are new to attribution, but aren't yet sure which points in the customer journey to value more than others.



For example: In a conversion worth \$100 (a sale, a form completion, etc.) that had 5 touch-points with the converter, each touch-point would receive \$20 in credit.

Result: the Divide Equally model attributed 16% more value to Facebook than the Last Ad model.



Even distribution can depict the path to conversion and consequently the data can be considered in the optimization of conversions.”

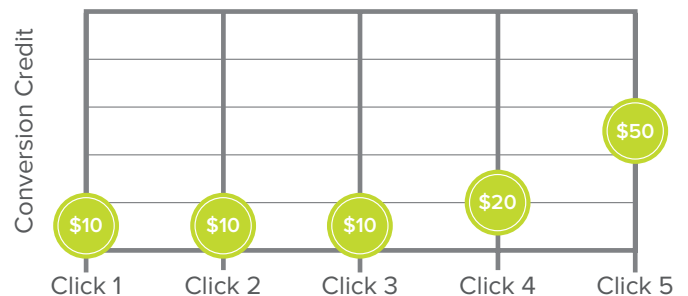
Ulrich Vergas | Senior Performance Marketing Manager, Resolution Media

PREFER LAST

Under Prefer Last attribution, the last ad in the customer journey receives a majority of the credit and each preceding touch receives credit in a rules-based, linearly decaying fashion.

Sample use case for Prefer Last attribution:

In highly competitive markets, consumers are constantly bombarded with advertising and information. In this environment, advertisers can give more credit to the final touches that helped push the sale the last mile to the finish line. Unlike Last Ad, where only the final touch-point is credited value, the initial placements of the customer's journey still receive some credit so that their value isn't completely blinded to the marketer. Prefer Last is a way for marketers to test multi-touch attribution models without moving away too much from Last Ad.



For example: In a conversion worth \$100 (a sale, a form completion, etc.) that had 5 touch-points with the converter, the last placement may receive \$50 of the credit while the second to last placement could receive \$20, the third to last placement \$10, and so forth.

Result: the Prefer Last model attributed 12% more value to Facebook than the Last Ad model.

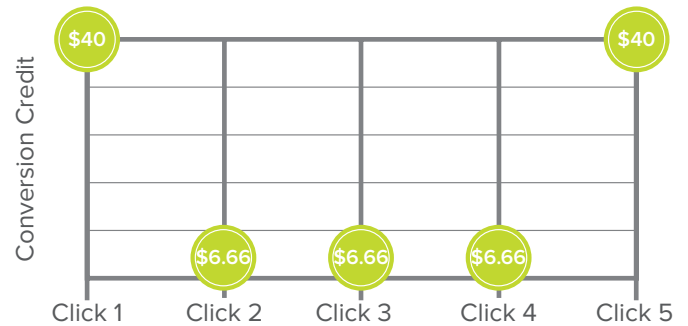
U-SHAPED

This model uses an 80-20 rule to emphasize the first and last clicks in the path, while giving middle clicks in long path-to-conversion less credit. U-shaped attribution assumes that an ad that kicked off a converting path and the ad that secured the action should be highly valued, while giving less recognition to interim interactions. Unlike most other models, with U-shaped attribution, both “starter” and “closer” ads will get the same credit regardless of the path length. In other words, if an ad starts a path, it will not lose attributed value if the path grows over time to 4 clicks, 6 clicks or any other length until the conversion takes place.

Sample use case for U-Shaped Attribution:

Marketers tend to highly-prize the media placement that first engaged a consumer and the last touch-point that helped to drive the conversion. By crediting both the start and the end touches, U-shaped models can help bring clarity to advertisers who experience a wide variety of types of conversion paths. For example, some customer groups may only require a few hours or a few media exposures to convert while others may take weeks or months with dozens of touch-points to help facilitate conversions. With this model, the data become a bit more normalized and the clutter of the middle engagement exposures is less distracting.

Result: the U-Shaped model attributed 15% more value to Facebook than the Last Ad model.



For example: In a conversion worth \$100 (a sale, a form completion, etc.) that had 5 touch-points with the converter, the initial and last placements would receive \$40 each, while the middle 3 placements would each receive \$6.66 (as they split the remaining \$20).

“U-Shaped attribution enables marketers to assign credit to all contributing channels while placing additional emphasis on the acquiring channel (first click) and the closing channel (last click). To use an analogy, the entire team is rewarded for the win, not just the player who made the winning shot.”

Ben Culbert | Digital Media Manager, Ovative/Group

DYNAMIC ATTRIBUTION

No single off-the-shelf attribution model works for every advertiser in every scenario. Each path to conversion is distinctive and original, built from various touch-points throughout the funnel and, as such, a proper attribution model must be adaptive, account for these activities and assign value accordingly.

The five standard models we have just reviewed are considered passive in that they retroactively apply a certain predisposed, rules-based distribution of attribution credit to all conversion paths. As a result, even though they are considered superior methodologies than Last Ad, they should all be considered somewhat limited when trying to build a complete measurement picture of a complex, digital marketing ecosystem.

Kenshoo SmartPath™ is the first form of attribution that applies sophisticated mathematical modeling combined with machine-learning and algorithmic decisioning to drive optimized digital media bidding. By creating a unique value allocation for each interaction in any given conversion path, Kenshoo SmartPath provides an understanding of the true contribution of all interactions and delivers unprecedented accuracy in value-based digital media optimization.

 KENSHOO
SMARTPATH

The benefits of a dynamic attribution solution, such as Kenshoo SmartPath, over rules-based attribution models include:

- **No guesswork:** SmartPath determines the probability of a conversion for a given path, based on the interactions that have occurred
- **Fewer errors:** SmartPath continuously measures the prediction accuracy of its models and uses a closed feedback approach to increase accuracy
- **Less manual analysis:** SmartPath is an automated, closed-loop system so marketers are not required to pull reports, develop insights, and optimize manually.

Automated bid optimization: SmartPath connects to the Kenshoo Search and Kenshoo Social platforms to automatically bid the right amount for each ad based on its unique value.

By taking into account factors like causality, synergy, and customer loyalty, Kenshoo SmartPath assesses the role of each ad in the conversion funnel and redistributes the attribution weight accordingly. In the case of Drs. Foster and Smith, a leading pet supply retailer, SmartPath determined that certain keywords and channels were receiving too much credit for their contributions to online purchase. As a result, SmartPath adjusted the model to reflect the actual impact of each ad and optimize for incrementality. The full Drs. Foster and Smith case study and more information on Kenshoo SmartPath can be found at [Kenshoo.com/SmartPathWhitepaper](https://www.kenshoo.com/SmartPathWhitepaper).

Summary

Although many marketers agree in principle that there is a flaw in Last Ad attribution, the research in this study quantifies just how imperfect this methodology can be. With Last Ad showing an alarming 12-30% variance from five different MTA models with respect to the value of Facebook advertising, marketers should feel highly motivated to move away from a Last Ad methodology and find a better model that can deliver more precise insights and optimization.

As a digital marketing channel, Facebook advertising reaches consumers throughout the buying cycle from awareness and consideration to intent and purchase. Giving credit to Facebook, or any other channel, solely when it is the last ad clicked does not properly reflect its value. Furthermore, retroactively applying any rules-based attribution model across all conversions will not properly illuminate the path to purchase.

Armed with a more dynamic view of the value of each channel using MTA, marketers can make more effective decisions regarding budget allocation and, ultimately, improve campaign performance and achieve desired business goals.

